# Stemming the Nuclear Tide:

Coercive Diplomacy and U.S. Nonproliferation Efforts, 1964-Present

by

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# 1. Introduction

The proliferation of nuclear weapons on the international stage has been a challenging security issue for the United States ever since it became the first state to develop and use a nuclear bomb in the summer of 1945. By 1949, the Soviet Union had tested its first nuclear weapon, raising the specter of nuclear holocaust that lingered throughout the Cold War. While the U.S. was not overly concerned when NATO allies Great Britain and France joined the nuclear club in 1952 and 1960, respectively, the successful Chinese nuclear test in October of 1964 was far more threatening, so much so that President Lyndon Johnson and military officials contemplated a pre-emptive attack on the PRC. In the wake of the Chinese test, Johnson established the Gilpatric Committee, which he tasked "to explore the widest range of measures that the United States might undertake in conjunction with other governments or by itself" to prevent further proliferation.<sup>2</sup> Although President Kennedy had been personally concerned about nuclear proliferation, from this point onward nuclear nonproliferation became a central pillar of U.S. foreign policy, as American leaders recalibrated their goals and strategies in an effort to prevent the potentially dangerous and destabilizing effects of additional nuclear-armed states.

Utilizing multilateral agreements such as the Nuclear Non-Proliferation Treaty (NPT) and various export control instruments, the U.S. and its allies have sought to dissuade states from initiating nuclear weapons programs in the first place—building norms against nuclear proliferation and making proliferation practically more

<sup>&</sup>lt;sup>1</sup> Francis J. Gavin, "Blasts from the Past," *International Security* 29, No. 3 (Winter 2004/2005): 101.

<sup>&</sup>lt;sup>2</sup> Ibid, 108.

difficult. In spite of these efforts, however, the intervening four and half decades have seen numerous states pursue nuclear weapons to varying degrees of success.

Since China's entry to the nuclear club, five additional states have successfully developed the bomb (India, Pakistan, Israel, South Africa, North Korea), although one (South Africa) subsequently made the decision to dismantle its nuclear weapons capability. An additional three states (Belarus, Kazakhstan, Ukraine) chanced into the possession of nuclear weapons after the collapse of the Soviet Union and decided to relinquish them. Many more states have initiated nuclear weapons programs and then reversed their decisions, one state has lost their nuclear program through military force (Iraq), and at least one other is currently believed to be developing nuclear weapons (Iran).

In the majority of these cases, the United States has played an important role, making an effort to halt the proliferator's program. Yet despite the policy relevance and the multitude of examples to work from, little work has been done to identify the general conditions and strategies that promote the success of such efforts. Rather, most work in the field has focused on how and why states pursue the bomb<sup>3</sup>, why they restrain their ambitions<sup>4</sup>, and the broader non-proliferation regime and

<sup>&</sup>lt;sup>3</sup> See, for example: Scott D. Sagan, "Why Do States Build Nuclear Weapons?" *International Security* 21, No. 3 (Winter 1996/1997) 54-86; Stephen M. Meyer, *The Dynamics of Nuclear Proliferation* (Chicago: The University of Chicago Press, 1984); Dong-Joon Jo and Erik Gartzke, "Determinants of Nuclear Weapons Proliferation," *Journal of Conflict Resolution* 51, No. 1 (2007): 167-194; Etel Solingen, *Nuclear Logics* (Princeton: Princeton University Press, 2007);

and Jacques Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge: Cambridge University Press, 2006).

<sup>&</sup>lt;sup>4</sup> See T.V. Paul, *Power Versus Prudence: Why Nations Forgo Nuclear Weapons* (Montreal: McGill-Queen's University Press, 2000); Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation* (New York: Columbia University Press, 1988); Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities* (Washington:

consequences of nuclear proliferation.<sup>5</sup> Studies of U.S. non-proliferation efforts vis a vis individual states have tended to focus on the particularities of one or a few cases<sup>6</sup>, making it difficult to generalize findings and policy prescriptions. This study seeks to fill this void. By examining the universe of cases since the Chinese test where the U.S. has made an effort to halt a state's nuclear weapons program, and analyzing these cases within the broader theory of coercive diplomacy, this work seeks to explain why the U.S. has succeeded in certain non-proliferation efforts and failed in others. The measure of success will be what Ariel Levite terms nuclear reversal, defined as "the phenomenon in which states embark on a path leading to nuclear weapons acquisition but subsequently reverse course, though not necessarily abandoning altogether their nuclear ambitions." The ultimate aim of this study is to generate policy implications that ideally can help U.S. officials shape their non-

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The Woodrow Wilson Center Press, 1995); and Ariel E. Levite, "Never Say Never Again: Nuclear Reversal Revisited," *International Security* 27, No. 3 (Winter, 2002/2003): 59-88.

<sup>&</sup>lt;sup>5</sup> Examples include Scott Sagan and Kenneth Waltz, *The Spread of Nuclear Weapons: a Debate* (New York: WW Norton and Company, 1995); Scott Sagan, "The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons," *International Security* 18, No. 4 (Spring 1994): 66-107; David Karl, "Proliferation Pessimism and Emerging Nuclear Powers," *International Security* 21, No. 3 (Winter 1996-1997): 87-119; Robert Rauchhaus, "Evaluating the Nuclear Peace Hypothesis: a Quantitative Approach," *Journal of Conflict Resolution* 53, No. 2 (April 2009): 258-277; and Erik Gartzke and Dong-Joon Jo, "Bargaining, Nuclear Proliferation, and Interstate Disputes," *Journal of Conflict Resolution* 53, No. 2 (April 2009): 209-233.

<sup>&</sup>lt;sup>6</sup> Useful case studies include Bruce Jentleson and Christopher Whytock, "Who 'Won' Libya? The Force-Diplomacy Debate and Its Implications for Theory and Policy," *International Security* 30, No. 3 (Winter 2005/2006): 47-86; Michael Mazarr, "Going Just a Little Nuclear: Nonproliferation Lessons from North Korea," *International Security* 20, No. 2 (Autumn 1995): 92-122; Avner Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy: The Critical Decade (1958-1968)," *Nonproliferation Review* 5, No. 2 (Winter 1998): 1-4; Rebecca Hersman and Robert Peters, "Nuclear U-Turns: Learning from South Korean and Taiwanese Rollback," *Nonproliferation Review* 13, No. 3 (Nov. 2006), 539-553; Joel Wit, Daniel Poneman, and Robert Gallucci, *Going Critical: The First North Korean Nuclear Crisis* (Washington: Brookings Institution Press, 2004); and David Armstrong and Joseph Trento, *America and the Islamic Bomb: The Deadly Compromise* (Hanover, NH: Steerforth Press, 2007).

<sup>&</sup>lt;sup>7</sup> Levite, 61.

proliferation efforts. First, however, it is necessary to review the existing literature and theory on nuclear proliferation—specifically, why states pursue the bomb and what nonproliferation efforts are best suited to achieve reversal.

This chapter will proceed in five sections. The first two sections will review the literature on motives for proliferation and nonproliferation policies; the third and fourth will introduce and explain Alexander George's theory of coercive diplomacy as an analytical framework; and the fifth will explain the structure, methodology, and case selection for the remainder of the study.

#### **Motivations for Pursuing the Bomb**

Explanations for why states pursue nuclear weapons largely fall into three categories, as Scott Sagan noted in a 1997 article: security, domestic politics, and normative values of status and prestige. Similarly, Mitchell Reiss identifies as possible motives "the desire to intimidate and coerce rivals, the search for enhanced security against regional or international rivals, the status and prestige associated with mastering nuclear technology, and domestic politics and bureaucratic self-aggrandizement." While the security model remains the dominant paradigm for understanding motives for nuclear proliferation, in recent years scholars have increasingly promoted the importance of normative and domestic explanations.

Working from Sagan's classifications, the most basic formulation of the security model is that states without the shelter of an ally's nuclear umbrella seek to

<sup>&</sup>lt;sup>8</sup> Sagan, "Why Do States Build Nuclear Weapons," 54-86

<sup>&</sup>lt;sup>9</sup> Mitchell B. Reiss, "The Nuclear Tipping Point: Prospects for a World of Many Nuclear Weapons States," in *The Nuclear Tipping Point*, ed. Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss (Washington: Brookings Institution Press, 2004): 12.

build nuclear weapons as a means of ensuring their security in response to a nuclear threat from a rival state. <sup>10</sup> Thus, for example, the Soviet Union and China both proliferated in response to the U.S. A more expansive version of the security model holds that nuclear weapons can serve as a balance against an adversary with an overwhelming conventional military advantage. <sup>11</sup> This explanation is better suited to the case of Israeli proliferation. Either way, the underlying motive is the same: the provision of security. T.V. Paul argues in favor of the primacy of security considerations as well, coining the term "prudential realism" to describe the way states approach nuclear proliferation. As he describes the concept,

"The nuclear choices of technologically capable non-great power states are the result of their situations and regional contexts, their security interdependence, and their prudential calculations regarding the utility of unilateral acquisition of nuclear arms. The prudential calculations derive from anticipated losses to national security resulting from nuclear proliferation. States, especially in zones of low and moderate conflict, choose to forgo nuclear weapons to avoid generating negative security externalities and costly arms races, which may trap them in a condition of security dilemma. They also seek not to incite proliferation by other states." 12

In other words, the desire for security can lead to nuclear restraint as well nuclear proliferation, depending on the environment.

Richard Betts distinguishes between three types of states that pursue nuclear weapons for security reasons: pygmies, paranoids, and pariahs. According to Betts, "pygmies" (e.g. Pakistan, Taiwan) pursue nuclear weapons in response to nuclear or massive conventional threats; "paranoids" (e.g. South Korea) seek nuclear weapons in response to an overblown fear of a regional adversary; and "pariahs" (e.g. Israel,

<sup>&</sup>lt;sup>10</sup> Sagan, "Why Do States Build Nuclear Weapons," 57.

<sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Paul, 33.

South Africa) seek nuclear weapons in response to security threats compounded by a large degree of international isolation and scorn. 13 Robert Harkavy expanded on this concept of the "pariah" in a 1981 article, identifying a number of common characteristics of such states; for example, pariahs are often "small and weak" compared to their adversaries, who often have great power backing; they are often subject to questions over their territorial or moral legitimacy; they generally lack diplomatic leverage over other states; and their conventional arms supply is often limited, or at the very least "precarious." <sup>14</sup>

According to Sagan's description of the domestic politics model, some states are driven to pursue nuclear weapons by domestic actors and organizations (generally the military, politicians, or nuclear scientists) that "create the conditions that favor weapons acquisition by encouraging extreme perceptions of foreign threats, promoting supportive politicians, and actively lobbying for increased defense spending."15 Sagan argues that India, South Africa, Argentina, and Brazil all fall into this category to a large extent. Etel Solingen argues in favor of a slightly different version of the domestic politics model, one that focuses on the importance of regime orientation and the imperative of political survival. As she puts it,

"Leaders and ruling coalitions interpret security issues through the prism of their own efforts to accumulate and retain power at home. Internationalizing leaders define economic growth and global access as crucial for advancing state security, rejecting nuclear weapons if the latter endanger those core objectives. Conversely, inward-oriented leaders thrive by defining as 'self-help' while protecting and promoting constituencies that variously favor economic, political, strategic, religious, or cultural

<sup>&</sup>lt;sup>13</sup> Richard K. Betts, "Paranoids, Pygmies, Pariahs, & Nonproliferation," Foreign Policy 26 (Spring 1977): 165-166.

<sup>&</sup>lt;sup>14</sup> Robert E. Harkavy, "Pariah States and Nuclear Proliferation," *International* Organization 35, No. 1 (Winter 1981): 136.

15 Ibid, 64.

autonomy. Indigenous nuclear weapons are compatible with—albeit not necessarily a requirement of—such models. Put differently, domestic survival models may be seen as filters through which security is defined."<sup>16</sup>

Finally, the norms model argues that states may pursue nuclear weapons not based on pure security calculations, "but rather by the deeper norms and shared beliefs about what actions are legitimate and appropriate in international relations."

This model emphasizes the importance of the prestige factor of possessing nuclear weapons, as well as the growing norms against proliferation embodied in the NPT.

Sagan cites France and Ukraine as cases that are best explained by this model.

Several quantitative studies have been published that test the various models of nuclear proliferation, generally finding support for the security and prestige/status-based explanations. In 1984, for example, Stephen Meyer published a rigorous statistical study on motivations for nuclear proliferation, and found strong statistical evidence that states with a nuclear threat from an adversary, an overwhelming conventional threat, regional power status or pretensions, and/or pariah status are significantly more likely to pursue nuclear weapons. <sup>18</sup> In line with the security model, Meyer also found that a state with a nuclear ally was far less likely to pursue nuclear weapons. <sup>19</sup> In a more contemporary study (2004), Sonali Singh and Christopher Way found that participation in an enduring rivalry and a higher frequency of recent militarized disputes had a significant and positive correlation with a state's decision

<sup>16</sup> Solingen, *Nuclear Logics*, 52-3.

<sup>&</sup>lt;sup>17</sup> Sagan, "Why Do States Build Nuclear Weapons," 73.

<sup>&</sup>lt;sup>18</sup> Meyer, 103.

<sup>&</sup>lt;sup>19</sup> Ibid.

to pursue nuclear weapons. <sup>20</sup> Calling into question the salience of prestige and domestic politics motives, Singh and Way noted "there are no cases of the determined pursuit of nuclear weapons by countries not experiencing a subjectively threatening security environment." <sup>21</sup> More recently, Jo and Gartzke published a statistical study that concluded that a conventional threat increases the chances of proliferation, while having a nuclear ally reduces the chances of successful proliferation (although not the chances of *initiating* a nuclear weapons program). <sup>22</sup> The study found no support for domestic politics models, and interestingly found that states facing threats from nuclear threats were actually *less* likely to proliferate, perhaps due to the fear of preemption, the authors hypothesize.<sup>23</sup> The authors concluded that normative factors (for example, NPT membership) reduced the chances of a state starting a nuclear weapons program, but did not reduce the likelihood of actually developing nuclear weapons.<sup>24</sup> Pariahs were no more likely to pursue or develop nuclear weapons than the average state, while regional and major powers were significantly more likely to do both, perhaps indicating the importance of status and prestige in driving proliferation.<sup>25</sup> As the authors note, however, "we do not yet know whether this is the result of realist or identity theories."<sup>26</sup>

In sum, while domestic politics and norms/prestige may help explain the actions of specific states, all of these states also perceived themselves to be facing a

<sup>&</sup>lt;sup>20</sup>Sonali Singh and Christopher R. Way, "The Correlates of Nuclear Proliferation," *The Journal of Conflict Resolution* 48, No. 6 (December 2004): 874.

<sup>&</sup>lt;sup>21</sup> Ibid, 882.

<sup>&</sup>lt;sup>22</sup> Jo and Gartzke, 176.

<sup>&</sup>lt;sup>23</sup> Ibid, 181-186.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Ibid, 179.

significant security threat. Thus, while France may have desired nuclear weapons as a symbol of prestige in the era before the NPT, they also clearly felt threatened by the Soviet Union and uncomfortable entrusting their security solely to the United States' nuclear umbrella. Similarly, Argentina and Brazil's decisions to pursue nuclear weapons may have been affected by their political leadership, but they clearly also viewed each other as significant military threats and rivals for regional dominance. Similar arguments can be made for India (threat from China), Ukraine (threat from Russia), and South Africa (threats from Angola, Mozambique, and the U.S.S.R. compounded by international ostracism). Another way of interpreting this would be to propose that a subjective security threat is a necessary, but not necessarily sufficient condition for the decision to develop nuclear weapons. Thus, domestic factors or the desire for prestige may compound a state's security threat and tip the balance of their decision-making calculus toward initiating a weapons program. As a result, despite the dominance of security explanations, it is worthwhile to note the other factors that may play complementary roles in explaining a state's decision to pursue nuclear weapons, and thus may also be relevant to non-proliferation efforts.

### The Mechanics of Nonproliferation: Achieving Nuclear Reversal

Once a state has initiated a nuclear weapons program, how can the U.S. influence a state's decision to halt its program? In the nuclear proliferation literature, there are two main approaches to this question: supply-side approaches, which focus on preventing states from acquiring the technology and resources necessary for developing nuclear weapons, and demand-side approaches, which focus on reducing

states' motivations to develop nuclear weapons. For the purposes of this study, demand-side efforts will be the focus, since coercive diplomacy is inherently about *convincing* a state to change its behavior, rather than simply limiting the state's capabilities. According to most scholars, the key to demand-side efforts is tailoring policies to the specific motives of the state in question. As Campbell and Einhorn put it, there is no "cookie-cutter approach" for halting a state's nuclear weapons program; policies must be designed based on each individual state's circumstances.<sup>27</sup>

Sagan echoes this viewpoint, and argues that for states pursuing nuclear weapons for security reasons, the maintenance of credible U.S. security guarantees (specifically nuclear guarantees) is critical.<sup>28</sup> Campbell and Einhorn echo this view. Although expanding security commitments may be impractical in many cases, the U.S. should make a concerted effort to bolster and relieve stresses in pre-existing security relationships in states' considering or pursuing nuclear weapons. This can include "conventional arms transfers, training, exercises, and contingency planning," and it also requires closely consulting with allies on changes in the U.S. force structure that may affect the state's perception of the U.S. commitment.<sup>29</sup> This, of course, is less applicable to states that are U.S. adversaries. For determined adversaries such as North Korea and Iran, pressure and coercion are necessary components of a nonproliferation strategy, but they are not sufficient; a successful outcome requires "not just the threat of very harmful consequences if they persist but

<sup>&</sup>lt;sup>27</sup> Kurt M. Campbell and Robert J. Einhorn, "Avoiding the Tipping Point: Concluding Observations," in *The Nuclear Tipping Point*, ed. Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss (Washington: Brookings Institution Press, 2004), 332.

<sup>&</sup>lt;sup>28</sup> Sagan, "Why Do States Build Nuclear Weapons," 61.

<sup>&</sup>lt;sup>29</sup> Campbell and Einhorn, *The Nuclear Tipping Point*, 334-335.

also the prospect of a much brighter future if they reverse course."<sup>30</sup> Echoing this security-centered perspective, Paul argues that "The key to non-proliferation lies in resolving regional conflicts, especially protracted ones...economic and technical sanctions can constrain a nuclear aspirant and delay weapons programs, but again they may not resolve the fundamental reasons for nuclearization... any non-proliferation policy that does not acknowledge the underlying conflict dynamics of a region is bound to fail."<sup>31</sup> Similarly, Joseph Pilat recommends seeking "to improve regional and global stability, to strengthen alliance systems, and to promote the legitimate security interests of states through economic and security assistance"<sup>32</sup>

Taking a more expansive demand-side approach, Braun and Chyba identify security guarantees and the manipulation of economic sanctions as key tools to use on a case-by-case basis, and also mention ameliorating regional security issues and the provision of energy assistance as useful options; the key point is that there must be incentives to go along with disincentives.<sup>33</sup> Reiss discusses economic incentives as a potentially successful tool for influencing a state's nuclear pursuit given the right conditions, a strategy he terms "dollar nonproliferation diplomacy."<sup>34</sup> Schneider mentions the expansion of alliances, nonaggression pacts, conventional arms transfers, peace agreements, and the threatened withdrawal of an alliance as demand-

<sup>&</sup>lt;sup>30</sup> Ibid, 332.

<sup>&</sup>lt;sup>31</sup> Paul, 152-3.

<sup>&</sup>lt;sup>32</sup> Joseph F. Pilat, "Responding to Proliferation: a Role for Nonlethal Defense?" in *Nuclear Proliferation After the Cold War*, ed. Mitchell Reiss and Robert S. Litwak (Washington: The Woodrow Wilson Center Press, 1994), 280.

<sup>&</sup>lt;sup>33</sup> Chaim Braun and Christopher F. Chyba, "Proliferation Rings," *International Security* 29, No. 2 (Fall 2004): 43-45.

<sup>&</sup>lt;sup>34</sup> Reiss, Bridled Ambition, 326-328.

Montgomery, "proliferation pragmatism" is the right approach; this means "using a full range of incentives and disincentives" and abandoning the threats of war and regime change.<sup>36</sup> Montgomery goes so far as to argue, "through the use of targeted incentives…even the most seemingly determined proliferants can be slowed without resorting to extreme measures."<sup>37</sup> These incentives include, among other things, economic and other aid, removal of sanctions, and diplomatic agreements.<sup>38</sup>

According to Sagan, the policy options are far more limited for states proliferating for domestic reasons since it is much more difficult to influence a state's domestic politics than its foreign affairs. Potential policies, however, include linking nuclear restraint to U.S. aid or funding of domestic programs and seeking to promote other forms of prestige for the nuclear and military establishments (perhaps through joint training, exercises, or scientific assistance on non-nuclear projects).<sup>39</sup> In order to reduce the domestic pressures that can encourage proliferation, Solingen recommends "rewarding natural constituencies of internationalizing models...stripping autarkic or inward-looking regimes of their means to concentrate power...crafting packages of sanctions and inducements that are sensitive to differences between energy-rich and energy-poor targets...[and] using democracy—where available—as an ally to denuclearization."<sup>40</sup> If norms are motivating a state to pursue nuclear weapons, the

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<sup>&</sup>lt;sup>35</sup> Barry Schneider, "Nuclear Proliferation and Counter-Proliferation: Policy Issues and Debates," *Mershon International Studies Review* 38 (1994): 222.

<sup>&</sup>lt;sup>36</sup> Alexander Montgomery, "Ringing In Proliferation: How to Dismantle an Atomic Bomb Network," *International Security* 30, No. 2 (Fall 2005): 154.

<sup>&</sup>lt;sup>37</sup> Ibid, 156.

<sup>&</sup>lt;sup>38</sup> Ibid, 181.

<sup>&</sup>lt;sup>39</sup> Sagan, "Why Do States Build Nuclear Weapons," 72.

<sup>&</sup>lt;sup>40</sup> Solingen, Nuclear Logics, 289-299.

best U.S. policy option according to Sagan is reinforcing the nonproliferation regime, perhaps through drawing down U.S. stockpiles or ratifying the CTBT; another option is to provide states with alternate forms of prestige such as a permanent seat on the U.N. Security Council.<sup>41</sup>

Synthesizing many of these views, Ariel Levite offers a comprehensive view of potential nonproliferation policies in his discussion of nuclear reversal. According to Levite, there is no one explanation for the phenomenon of nuclear reversal. An improved security environment appears to be a necessary but insufficient factor explaining nuclear reversal; because discontinuing a nuclear weapons program is such a crucial decision, it generally requires "the sophisticated use of offsets and incentives" that "address the security, prestige, and bureaucratic appeal of a nuclear program." This often involves assistance in peaceful nuclear energy, and ties into Levite's observation that removing the original motives for developing nuclear weapons is usually not enough to stop or reverse the program. As he puts it, "the rationale for developing (or for that matter retaining) nuclear weapons may change over time, with new rationales for doing so emerging to replace older ones that have lost some of their luster." This fact combined with the typical inertia of government policies, means that "to bring about nuclear reversal, it is not enough merely to remove a state's original motivations for obtaining nuclear weapons." Possible U.S. strategies include security guarantees, the threat, imposition, or lifting of economic sanctions, and the provision of technological and economic assistance. According to Levite's analysis, however, U.S. influence has never been sufficient on its own to bring about nuclear reversal. Levite concludes that there are three main factors

<sup>&</sup>lt;sup>41</sup> Sagan, "Why Do States Build Nuclear Weapons," 81-83.

influencing the success of efforts to bring about nuclear reversal: "a change in the domestic perceptions of the nuclear aspirants of the utility of acquiring nuclear weapons; sustained U.S. encouragement of such perceptions, made possible by tracking, understanding, and ultimately addressing the nuclear aspirant's concerns and requirements; and a conscious U.S.-led effort to complicate the road to nuclear weapons acquisition for those who embark on it." Thus, while the U.S. certainly can play an influential role, certain domestic perceptions in the proliferating state are largely outside of U.S. control. 42

A final element of nonproliferation strategy that must be addressed is the role that military force can play in bringing about nuclear reversal. In recent years, the use of military force as a nonproliferation tool—often referred to as counterproliferation—has been increasingly discussed due to the central role the Bush Administration has placed on it in its national security strategy. According to scholars like Jason Ellis, counterproliferation is of "central importance" in any overall strategy since traditional nonproliferation efforts have proven ineffective in many cases. <sup>43</sup> Yet to most scholars of nuclear proliferation, military intervention makes sense only in very limited cases. As Campbell and Einhorn note, "in the absence of timely and accurate intelligence, proximately deployed military assets, and the support (or at least acquiescence) of key neighboring states, the preemptive use of force will usually be military impractical." <sup>44</sup> In a similar vein, Pilat emphasizes the high intelligence requirements for an effective military strike, and also the dangers of collateral

<sup>42</sup> Levite, 64-87.

<sup>44</sup> Campbell and Einhorn, 331.

<sup>&</sup>lt;sup>43</sup> Jason Ellis, "The Best Defense: Counterproliferation and U.S. National Security," *The Washington Quarterly* 26, No. 2 (Spring 2003): 116.

damage, environmental disaster, and political backlash. 45 As Schneider argues, military force must be a last resort; even then, it is only prudent under a very special set of circumstances. For example, there must be "adequate domestic and international political support;" the proliferating state "would have to be approaching the nuclear weapons threshold and be led by a hostile government that appears ready take extreme risks;" and perhaps most importantly, "the developing scenario would have to directly and immediately threaten a vital interest of the country considering the preemptive strike."<sup>46</sup> Despite the limited support amongst scholars, however, the U.S.-led invasion of Iraq in 2003 was largely premised on the justification of preemptive counterproliferation. Moreover, Israel has repeatedly threatened military force to halt the Iranian nuclear program, and in fact did carry out a successful air strike against an Iraqi nuclear reactor in 1981.

Now that the literature on nuclear proliferation and nonproliferation has been addressed, this study turns to the conceptual framework that will be used to analyze the individual cases—a framework based on the theory of coercive diplomacy, a strategy that seeks to solve international conflicts short of the use of force.

### Coercive Diplomacy as a Frame for U.S. Nonproliferation Efforts

In his classic work *Arms and Influence*, Thomas Schelling introduced the concept of coercive diplomacy, a strategy he differentiated from the "brute force" application of military power. As he famously stated it:

"There is a difference between taking what you want and making someone give it to you, between fending off assault and making

<sup>&</sup>lt;sup>45</sup> Pilat, 276-84.

<sup>&</sup>lt;sup>46</sup> Schneider, 225.

someone afraid to assault you, between holding what people are trying to take and making them afraid to take it, between losing what someone can forcibly take and giving it up to avoid risk or damage. It is the difference between defense and deterrence, between brute force and intimidation, between conquest and blackmail, between action and threats. It is the difference between the unilateral, 'undiplomatic' recourse to strength, and coercive diplomacy based on the power to hurt." <sup>47</sup>

As the above quotation implies, the key feature of coercive diplomacy (or coercion, as Schelling commonly refers to it for short) is the strategic manipulation of the "power to hurt" as a means of achieving a desired end. Rather than simply using brute military force to achieve the desired result, however, the goal is to employ a "threat of pain" that "tries to structure someone motives." Coercive diplomacy seeks to achieve a desired result through a bargain rather than through a costly war; thus, the idea is to employ threats that make the adversary "better off doing what we want—worse off not doing what we want—when he takes the threatened penalty into account." In order for such a strategy to succeed, of course, the coercer must make it clear to the adversary what is desired, what will bring punishment, and what is needed to avoid punishment. It is critical that carrying out the threat of pain is understood to be *contingent* upon the adversary's actions. Within coercive diplomacy, according to Schelling, lie both compellence and deterrence.

Using Robert Art's distinctions, deterrence is "the deployment of military power so as to be able to prevent an adversary from doing something that one does not want him to do and that he might otherwise be tempted to do by threatening him

<sup>&</sup>lt;sup>47</sup> Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1967), 2.

<sup>&</sup>lt;sup>48</sup> Ibid, 3.

<sup>&</sup>lt;sup>49</sup> Ibid, 4.

<sup>&</sup>lt;sup>50</sup> Ibid.

with unacceptable punishment if he does do it," whereas compellence is "the deployment of military power so as to be able either to stop an adversary from doing something that he has already undertaken or to get him to do something that he has not yet undertaken."51 Critically, however, Art points out that compellence does not necessarily involve the "physical" use of force; it can also involve "actions against another that do not cause physical harm but that require the latter to pay some type of significant price until it changes its behavior."52 For the purposes of this study, the focus will be on the compellent side of coercive diplomacy. This is because convincing a state to halt or reverse its nuclear weapons program is inherently a compellent act (it seeks to "stop an adversary from doing something that he has already undertaken"), and also because for Alexander George—the man who most fully and articulately developed the theory of coercive diplomacy—compellence and coercive diplomacy were synonyms, while deterrence was a distinct concept of its own. 53 Echoing Art's description of compellence, George describes coercive diplomacy as the utilization of threats and punishment designed to make an adversary undertake a desired act.<sup>54</sup> In contrast to deterrence, coercive diplomacy seeks to "reverse actions that are already occurring or have been undertaken by an adversary."<sup>55</sup> It is a strategy that "seeks to persuade the opponent to do something, or to stop doing something, instead of bludgeoning him into doing it, or physically

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<sup>&</sup>lt;sup>51</sup> Robert J. Art, "To What Ends Military Power?" *International Security* 4, No. 4 (Spring 1980), 6-7.

<sup>&</sup>lt;sup>52</sup> Ibid, 8.

<sup>&</sup>lt;sup>53</sup> Paul Gordon Lauren, Gordon A. Craig, and Alexander L. George, *Force and Statecraft*, 4<sup>th</sup> ed. (New York: Oxford University Press, 2007), 200.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

preventing him from doing it."<sup>56</sup> While much of the coercive diplomacy literature focuses on cases where the threat of force was either implicitly or explicitly present, this study will follow in the footsteps of more recent works by applying the logic of coercive diplomacy to cases where the threats other than military force dominate.<sup>57</sup>

### George's Theory of Coercive Diplomacy

In his 1971 work *The Limits of Coercive Diplomacy* (co-authored with David Hall and William Simons), Alexander George set forth the first general theory of coercive diplomacy. The main benefit of the successful implementation of this strategy is that it achieves the desired objective while avoiding the costs and risks associated with war. However, as George notes, coercive diplomacy is "viable only under special conditions, and, moreover, is quite difficult to implement successfully."

The two key variables in a coercive diplomacy strategy, according to George, are the specific demand made of the adversary, and the strength of the adversary's motivation to resist the demand. Stopping an adversary from proceeding further in his actions is generally easier than reversing his actions, and more broadly, the greater the demand made of the adversary, the more difficult it is to achieve success in

<sup>58</sup> Ibid, 19.

<sup>&</sup>lt;sup>56</sup> Alexander L. George, "The Development of Doctrine and Strategy," in *The Limits of Coercive Diplomacy*, by Alexander George, David Hall, and William Simons (Boston: Little, Brown and Company, 1971), 18.

<sup>&</sup>lt;sup>57</sup> See, for example, A. Cooper Drury, "Sanctions as Coercive Diplomacy: The U.S. President's Decision to Initiate Economic Sanctions," *Political Research Quarterly* 54, No. 3 (2001): 485-508; Ka Zeng, *Trade Threats, Trade Wars: Bargaining, Retaliation, and American Coercive Diplomacy* (Ann Arbor: University of Michigan Press, 2004); and Fiona McGillivray and Allan Stam, "Political Institutions, Coercive Diplomacy, and the Duration of Economic Sanctions," *The Journal of Conflict Resolution* 48, No. 2 (2004): 154-172.

coercive diplomacy. After all, if the demand is too great, "it may be difficult for the coercing power to threaten sanctions sufficiently potent and sufficiently credible to overcome the opponent's strong disinclination to comply with what is demanded of him."<sup>59</sup> An effective way to reduce an adversary's disinclination is to couple threats and negative sanctions (sticks) with positive inducements (carrots)—in order to strike a bargain more amenable to the adversary. As George critically points out, coercive diplomacy involves not only threats, but also "bargains, negotiations, and compromises as well." In addition to the strength of the adversary's disinclination to comply with the demand, another key factor is the strength of the *coercer's* motivation to see that the demand is met. As George puts it, "the chances that coercive diplomacy will be successful will be appreciably greater if the objective selected—and the demand made—by the coercing power reflects only the most important of its interests that are at stake, for this is more likely to create an asymmetry of motivation favoring the coercing power."61

George divided the strategy of coercive diplomacy into two distinct approaches, the weaker "try and see approach" and the stronger "tacit-ultimatum approach." In the try and see approach, the coercer takes one small step at a time and waits to see whether previous step worked before trying something else—thus, there is little urgency for the adversary to comply with the stated demands. In the tacitultimatum approach, however, there three key elements: "a specific demand on the opponent...a time limit (explicit or implicit) for compliance," and a "threat of

<sup>59</sup> Ibid, 25. <sup>60</sup> Ibid.

<sup>&</sup>lt;sup>61</sup> Ibid. 26.

punishment for non-compliance that is sufficiently strong and credible." Because of the nature of coercive diplomacy, communication (both verbal and non-verbal) is critical to success; the coercer must be able to effectively communicate demands, threats, assurances, and resolve, otherwise there is little hope of a bargain.

After surveying several historical cases of American coercive diplomacy,
George enumerates a list of eight conditions that impact the success of a U.S.
coercive diplomacy strategy:

- 1. Strength of United States motivation
- 2. Asymmetry of motivation favoring the United States
- 3. Clarity of American objectives
- 4. Sense of urgency to achieve the American objective
- 5. Adequate domestic political support
- 6. Usable military options
- 7. Opponent's fear of unacceptable escalation
- 8. Clarity concerning the precise terms of settlement.<sup>63</sup>

Based on the cases surveyed, George concludes that the most salient factors affecting the outcome are an asymmetry of motivation favoring the U.S, a sense of urgency to achieve the American objective, and the opponent's fear of unacceptable escalation. In particular, the way each of these variables are perceived (or misperceived) by both sides is important; U.S. perceptions often determine whether and how the strategy is implemented, while the adversary's perceptions have a very strong bearing on whether the strategy succeeds.

Now that the literature on nonproliferation and coercive diplomacy has been reviewed, it is time to address how the rest of this study will proceed. In particular,

<sup>63</sup> Ibid. 216.

<sup>&</sup>lt;sup>62</sup> Ibid, 27-28.

the next section explains how cases were selected, and how each case will be analyzed within the framework of coercive diplomacy.

#### **Case Selection and Methodology**

In order to identify the universe of cases to analyze, five criteria were established: (1) the state initiated an indigenous program with the intent of building nuclear weapons; (2) the United States government was aware of the program; (3) the United States made an effort to employ coercive diplomacy in order to halt the program; (4) the program was in process but incomplete after the Chinese nuclear test of 1964; and (5) the program reached a definitive outcome—either the successful development of nuclear weapons or abandonment of an active program.

First, acknowledging that secrecy is always an issue with nuclear programs, this study will err on the side of caution: that is, in order for a state to be included as a case, there must be ample evidence that a political decision was made to pursue nuclear weapons. Suspicion alone is not sufficient, nor is considering or debating a nuclear weapons program, developing nuclear infrastructure, or seeking nuclear weapons from another state without actually initiating an indigenous program. States that inherited nuclear weapons (Belaraus, Kazakhstan, and Ukraine) are excluded. Secondly, there must be ample evidence that the United States was aware of a state's nuclear weapons program, and third, the United States must have made an effort to employ a coercive diplomacy strategy against the state. Fourth, the state's program must have been in progress after the 1964 Chinese test, which marked an important turning point in U.S. nonproliferation policy. Fifth, there must be an observable

outcome of the program—either successful development or an abandoned program.

Based on these five criteria, the following states were selected for study: Pakistan,

South Korea, Taiwan, Libya, South Africa, North Korea, Israel, and India. The tables

below detail the case selection process; states that were disqualified are listed under

the criterion that excluded them from the study.

| 1: States that debated but never initiated programs; or for which a program is unconfirmed |           |           |  |  |
|--|-----------|-----------|--|--|
| Germany  | Egypt     | Syria     |  |  |
| Italy  | Australia | Indonesia |  |  |
| Japan  | Argentina | Algeria   |  |  |
| Norway   | Spain     | Sweden    |  |  |

| 2: U.S. Unaware | 3: No Coercive     | 4: Pre-1964 Programs | 5: In Progress |
|-----------------|--------------------|----------------------|----------------|
|                 | Diplomacy Effort   |                      |                |
| Yugoslavia      | Iraq <sup>64</sup> | USSR                 | Iran           |
|                 |                    |                      |                |
| Romania         | Brazil             | Britain              |                |
|                 |                    |                      |                |
| Switzerland     |                    | France               |                |
|                 |                    |                      |                |
|                 |                    | China                |                |
|                 |                    |                      |                |

For each case discussed, there will be four sections. First will be a section exploring the state's motives for proliferation; second will be an overview and chronology of the state's nuclear weapons program, with special emphasis given to the U.S. role in the case. The third section will be an analysis of the case through the

<sup>&</sup>lt;sup>64</sup> Despite the longstanding publicity surrounding Iraq's nuclear ambitions, the U.S. never employed coercive diplomacy against Iraq in an effort to halt its program. Prior to the 1991 Gulf War, the U.S. made essentially no effort to coerce Iraq into halting its program; in 1991 the U.S dismantled the Iraqi program through brute force rather than coercive diplomacy; and from 1991-2003 the U.S. and IAEA successfully deterred Iraq from restarting its nuclear weapons program.

lens of George's coercive diplomacy framework, as each of the eight conditions affecting the success of coercive diplomacy will be analyzed in light of each case. The fourth section will offer concluding remarks on the analytical dynamics of the case. After all of the cases have been discussed, this study will close by discussing the conclusions and policy implications that can be drawn from U.S. coercive diplomacy efforts vis-à-vis proliferating states.

The primary argument of this study is that the U.S succeeds in its nonproliferation efforts when it utilizes carrots and sticks sufficiently potent to reduce the proliferating state's motivation for pursuing nuclear weapons and thereby shifts the asymmetry of motivation in the American favor. The asymmetry of motivation never favors the U.S. at the outset of the case; rather it must be fostered by strong measures that reduce the state's motivations for proliferating in the first place. States do not make the decision to pursue nuclear weapons lightly; they understand the potential costs involved and they often view the possession of nuclear weapons as essential to their national security. As a result, they are not convinced to halt their programs in the absence of significant changes to their underlying motivation.

When the U.S. fails, it is not primarily due to a lack of American leverage, but rather to the American perception of conflicting strategic and political objectives that constrain that carrots and sticks that policymakers are willing to employ. Despite its stated policy and public pronouncements, the fact is that the U.S. has rarely treated nonproliferation a top priority or an as end in itself, and as a result it has only employed strong nonproliferation measures when such measures have reinforced (rather than cut against) its broader political and strategic objectives.

# 2. Pakistan: Looking the Other Way

Spurred by the overwhelming Indian conventional (and later nuclear) threat, Pakistan initiated a nuclear weapons program in the early 1970s. The U.S. made several efforts to lower Pakistan's motivation by offering conventional arms and cutting off economic aid, but because of conflicting strategic objectives declined to take stronger steps such as security guarantees or broad economic sanctions. The 1979 Soviet Invasion of Afghanistan doomed U.S. efforts as policymakers jettisoned any concrete nonproliferation efforts and devoted their energy to the objective of preventing the Soviet advance in Asia.

## 1. Motives

One of the earliest and most persistent challengers to the nonproliferation regime, Pakistan initiated its nuclear weapons program in 1972. Broadly speaking, Pakistan's nuclear weapons program was motivated primarily by its desire for regional security, particularly in response to the perceived threat from India. Since the two states were partitioned by Britain in 1947, India and Pakistan had been bitter rivals, engaging in three separate wars—one immediately following the partition in 1947, one in 1965, and a third in 1971. Further complicating this rivalry for Pakistan was India's massive conventional military superiority, an imbalance that led Richard Betts to identify Pakistan as a prototypical "pygmy" state in a 1977 article. 65

Although Pakistan had signed a formal alliance with the United States in 1959 as part of the Central Treaty Organization, the treaty only committed the U.S. to come

<sup>&</sup>lt;sup>65</sup> Betts, 165.

to the aid of Pakistan in the event of an attack by Communist powers. <sup>66</sup> Moreover, the aftermath of the 1965 war with India undermined this relationship, as the United States banned the sale of weaponry to both states as punishment—a move that cut Pakistan off from its main arms supplier and threatened to lock in India's military superiority. <sup>67</sup> This led Pakistan to rely increasingly on China for its military needs, and it also led Pakistani Foreign Minister Zulfikar Ali Bhutto to promise in 1966 that if India developed nuclear weapons, Pakistan would follow suit even if it meant that "Pakistanis have to eat grass." <sup>68</sup> Pakistani leaders had been worriedly monitoring India's advancing nuclear program since as early as 1964. <sup>69</sup> Both India and Pakistan refused to sign to the NPT in 1968.

In 1971, East Pakistan declared its independence from the larger Western wing of the state and India took sides with the East Pakistanis, leading to a brief war in December that established Bangladesh as an independent state in the former place of East Pakistan. This defeat reinforced Pakistani fears of Indian military superiority, and again, Pakistan felt that its supposed allies (especially the United States) failed to provide sufficient or timely assistance while the Soviet Union supported India.

According to a variety of sources, this was the key turning point leading to Pakistan's initiation of a nuclear weapons program. As Cirincione et al. nicely summarize,

<sup>&</sup>lt;sup>66</sup> Virginia Foran and Leonard Spector, "The Application of Incentives to Nuclear Proliferation," in *The Price of Peace: Incentives and International Conflict Prevention*, ed. David Cortright (New York: Rowan and Littlefield, 1997): 44.

<sup>&</sup>lt;sup>67</sup> Samina Ahmed, "Pakistan's Nuclear Weapons Program: Turning Points and Nuclear Choices," *International Security* 23, No. 4 (Spring 1999), 182.

<sup>68</sup> Ibid 183

<sup>&</sup>lt;sup>69</sup> George Perkovich, *India's Nuclear Bomb: the Impact on Global Proliferation* (Berkeley: University of California Press, 1999): 108.

<sup>&</sup>lt;sup>70</sup> See, for example, Ahmed, 183; Paul, 133; Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar, *Deadly Arsenals* (Washington: Carnegie Endowment for International

domestic and bureaucratic pressures—along with the desire for prestige in the Islamic world—may have played minor roles in Pakistan's nuclear ambitions, but undoubtedly the greatest consideration for Pakistan was "fears of domination by India, whose population, economy, and military resources dwarf its own."<sup>71</sup>

#### 2. Case Overview

Although it was founded in 1956, Pakistan's nuclear establishment did not pick up steam until the mid 1960s, by which time Pakistan had built a small lightwater research reactor and had signed a deal to purchase a Canadian-built heavy water nuclear reactor, which would be named KANUPP. Almost immediately following the crushing defeat in the 1971 war with India, on January 20, 1972, Prime Minister Bhutto secretly initiated a Pakistani nuclear weapons program, supposedly telling the scientists at the meeting that he wanted a working weapon within three years. In March 1973, Pakistan reached a secret preliminary deal with the French firm Saint Gobain Nucleaire for the construction of a large reprocessing facility, to be located at Chashma. When completed, this facility would theoretically be able to extract plutonium for bombs from the spent fuel of the KANUPP reactor, which was finished in 1972. Although Pakistan had already initiated a nuclear weapons

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Peace, 2005), 240; and Farzana Shaikh, "Pakistan's Nuclear Bomb: Beyond the Non-Proliferation Regime," *International Affairs* 78, No. 1 (January 2002), 42.

<sup>&</sup>lt;sup>71</sup> Cirincione, 240.

<sup>&</sup>lt;sup>72</sup> Jeffrey Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: WW Norton and Company, 2007): 327.

<sup>&</sup>lt;sup>73</sup> Ibid, 328.

<sup>&</sup>lt;sup>74</sup> Ibid.

program, the Indian "peaceful" nuclear test in May 1974 increased the urgency of the program in the eyes of Pakistani leaders.<sup>75</sup>

#### Pakistan's Search for Greater Security

After the Indian nuclear test, Pakistani officials approached the United States, seeking greater security assurances and an end to the arms embargo that had existed since 1965. In May of 1974, Pakistani defense minister Aziz Ahmed specifically asked President Nixon for SAMs and anti-tank missiles, and also asked if "the nuclear powers [could] give a guarantee to the non-nuclear powers against nuclear attack," which he said "would rule out blackmail would reduce the incentive to get nuclear weapons."<sup>76</sup> Nixon refused to make any promises on these requests, but reminded Ahmed of U.S. support for Pakistan in the 1971 war and stated, "we will keep in close touch on what steps to take—publicly and privately—to ensure Pakistan's survival."<sup>77</sup> Ahmed continued to make such requests in June, but met with little success. As Secretary of State Kissinger told him in a meeting, "I'm not the obstacle. I've always believed in military supply for Pakistan. It's absurd that the Soviets can arm India while our hands are tied. It's a massive problem, but I don't believe the Congress would let us do it." <sup>78</sup> In regard to some sort of guarantee against the Indian nuclear threat, Kissinger noted that he was "strongly allergic to placing the full

<sup>&</sup>lt;sup>75</sup> Reiss, *Bridled Ambition*, 185.

<sup>&</sup>lt;sup>76</sup> Memorandum of Conversation, No. 164, Washington, May 24, 1974, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/96790.htm.

<sup>&</sup>lt;sup>77</sup> Ibid.

<sup>&</sup>lt;sup>78</sup> Memorandum of Conversation, No. 166, Washington, June 3, 1974, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/96793.htm.

weight of American prestige against an accomplished fact," but that "We'll make a statement supporting Pakistan's independence and territorial integrity."<sup>79</sup>

In the same month, the U.S. embassy in Pakistan sent Kissinger a memo, informing him that the "Indian nuclear blast has created profound shock in Pakistan, has greatly exacerbated chronic feeling of insecurity, and has led to all-out GOP [Government of Pakistan] efforts to seek urgent security guarantees and arms aid from major powers. For India to set off nuclear device despite world opposition is seen by Pakistan as proof evident of Indian intransigence and South Asian hegemonic ambition."80 In October of 1974, with military aid still not forthcoming, Ahmed informed the new President Ford and Kissinger that Pakistan was "desperate," noting, "For nine years we have been shut off. We can't even buy it from another country...We are at the mercy of India militarily, and also of Afghanistan if it is supported by the Soviet Union. The next war can come easily whenever the Soviet Union, India and Afghanistan want it—and we would be wiped out."81 After visiting India later that month, Kissinger continued to signal his sympathy for the Pakistani plight, jokingly informing Prime Minister Bhutto that "After seeing India, I am thinking about supplying nuclear weapons, not only conventional arms, to Pakistan and even Bangladesh!",82 Despite this expression of support however, and his

<sup>79</sup> Ibid.

<sup>&</sup>lt;sup>80</sup> Telegram 5623 From the Embassy in Pakistan to the Department of State, No. 167, June 12, 1974, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/96795.htm.

<sup>&</sup>lt;sup>81</sup> Memorandum of Conversation, No. 177, Washington, October 17, 1974, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/96991.htm

<sup>&</sup>lt;sup>82</sup> Memorandum of Conversation, No. 183, Islamabad, October 31, 1974, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97002.htm

reassurances that he had informed India of American support for Pakistan, Kissinger did not commit to resuming arms sales to Pakistan. 83 By December 1974, Pakistan had also begun pushing for a Nuclear Weapons-Free Zone in South Asia in the U.N. but India opposed these efforts, and the U.S. abstained from voting on the resolution because of reservations about clauses involving nuclear weapons states agreeing "not to use or threaten use of nuclear weapons."84

By early 1975, the U.S. government became aware of Pakistan's questionable nuclear ambitions. In January, Robert Gallucci drafted a memo on the Pakistani program, noting that Pakistan sought a "virtually independent nuclear fuel cycle and the opportunity to separate a sufficient amount of plutonium to build a nuclear weapon...Given their treaty status, their determination to purchase critical nuclear facilities, and their near declaratory policy of acquisition following the Indian detonation, they may well have already decided to produce a weapon, and they have clearly decided to have the capability to build one."85 Gallucci also made some policy recommendations in the memo, pointing out that:

"Bhutto may again suggest that Pakistan's decision of whether or not to acquire nuclear weapons is related to U.S. willingness to supply them with the necessary conventional weapons for their security. We should probably resist the connection of the two issues as suggested by Bhutto, indicating that U.S. policy on the supply of conventional weapons is dependent on a quite different set of well established criteria. We might also take the opportunity to turn the leverage about and say that although the issues are not specifically linked we would

83 Ibid.

<sup>&</sup>lt;sup>84</sup> Telegram 268984 From the Department of State to the Mission to the United Nations and the Embassy in Pakistan, No. 185, December 7, 1974, U.S. Department of State, Foreign Relations of the United States, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97006.htm

<sup>&</sup>lt;sup>85</sup> Pakistan and the Non-Proliferation Issue, January 22, 1975, State Department Background Paper, in "India and Pakistan—On the Nuclear Threshold," No. 20, The National Security Archive, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/ipn20 1.htm.

expect that if Pakistan behaves as though it is seeking a nuclear weapons capability, U.S. policy is likely to be sensitive to such an important and unfortunate turn of events."<sup>86</sup>

Nonetheless, by February 1975, the United States began to make just such a linkage, promising conventional arms as a carrot in exchange for nuclear restraint. In a involving Prime Minster Bhutto and President Ford, Secretary Kissinger informed Bhutto that "If we could say to the Congress that we had discussed your nuclear program, that would help much. If we could say we achieved some nuclear restraint for some help in conventional arms, that really would defuse the opposition."87 Bhutto responded by indicating that Pakistan was willing to restrain—although certainly not abandon—its nuclear weapons program in exchange for arms sales; as he put it, "You know where we are on this—you have your people there. We have made some progress. We have some good people and it is within reach...We come after India in capability. I am not enchanted by the grandiose notion that we must explode something, no matter how dirty, if our security needs are met. I want to spend the money on something else. We will have a nuclear program, but if our security is assured, we will be reasonable."88 Despite the apparent admission of a Pakistani nuclear weapons program, this seemed to satisfy Kissinger, who did not press Bhutto on the issue and responded, "If you could formulate something we can discuss it further this afternoon. Some sort of statement would really help. I think the Congress will consider it conclusive, and with all the other problems we have now, it would

86 Ibid

<sup>&</sup>lt;sup>87</sup> Memorandum of Conversation, No. 188, Washington, February 5, 1975, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97012.htm.
<sup>88</sup> Ibid.

help." The same day, Kissinger discussed a pledge with the Pakistani foreign minister whereby Pakistan would promise "to observe safeguards and...not undertake any experiments outside the scope of the safeguards" as a means of expediting the arms sales and appeasing Congress. 90 When the foreign minister raised the question of peaceful nuclear explosives (PNEs), Kissinger forcefully responded, "We have found there is no way to distinguish between a peaceful explosion and weapons technology. I always tell the Indians when they talk about their peaceful explosion that it is nonsense. There is no way to make this distinction."<sup>91</sup>

On March 24, Ford lifted the arms embargo on Pakistan (which also applied to India), with several key qualifications: "All sales will be consistent with the overall US policy in South Asia to encourage the process of normalization and reconciliation between Pakistan and India. Sales should not stimulate an arms race in that region or restore the pre-1965 situation in which the US was a major regional arms supplier. At least in the initial stages, the emphasis should be on weapons and equipment which clearly enhance defensive capabilities."<sup>92</sup>

Unbeknownst to the U.S. by this time Pakistan had initiated a clandestine uranium enrichment program in addition to its attempts to procure a reprocessing plant for the separation of plutonium. In late 1974, A.Q. Khan—a Pakistani nuclear scientist working for a private firm in the Dutch city of Almelo—"spent sixteen

89 Ibid.

<sup>90</sup> Memorandum of Conversation, No. 189, Washington, February 5, 1975, U.S. Department of State, Foreign Relations of the United States, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97014.htm.

<sup>&</sup>lt;sup>91</sup> Ibid.

<sup>92</sup> National Security Decision Memorandum 289, No. 193, Washington, March 24, 1975, U.S. Department of State, Foreign Relations of the United States, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97027.htm.

days...translating from German into Dutch a highly classified technical report on a dramatic advance in centrifuge technology."<sup>93</sup> Soon thereafter, Khan suggested to Pakistani scientists that they initiate a secret uranium enrichment program; Bhutto approved the plan in early 1975, and research and procurement activities began.<sup>94</sup>

Despite the lifting of the arms embargo in March, Pakistan had still not received any American arms by the end of 1975. By the fall of 1975, specific arms sales to Pakistan were beginning to take shape, and by December Kissinger assured Pakistani defense minister Ahmed that the U.S. was indeed prepared to fulfill Pakistan's request to buy 110 A-7 attack planes; as Kissinger put it, "Our intention is to find the right moment. You definitely won't be turned down."

In sum then, by the end of 1975 an initial U.S policy was beginning to emerge. The U.S. was unwilling to provide Pakistan with the formal guarantee against the Indian nuclear threat, but would seek to provide Pakistan with conventional arms as a carrot in return for some limited form of nuclear restraint; however, it was unclear at the time what exactly this restraint would constitute since no safeguards agreement was in place. At any rate, his policy soon changed, as the U.S. became aware of Pakistani attempts to purchase a reprocessing facility.

#### The Reprocessing Deal and a Failed Attempt at a Quid Pro Quo

In January of 1976, the United States became aware of the secret Pakistani deal to purchase a reprocessing facility from a French firm. As a State Department

<sup>93</sup> Richelson, 330.

<sup>&</sup>lt;sup>94</sup> Ibid. 329-330.

<sup>&</sup>lt;sup>95</sup> Memorandum of Conversation, No. 216, Paris, December 17, 1975, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97065.htm.

memo noted, "Pakistan is attempting to acquire a nuclear fuel cycle capability, ostensibly to support its tiny civil nuclear program. Intelligence estimates indicate that Pakistan intends to apply that hoped-for capability in a crash program to develop nuclear weapons. A key element in its program is the acquisition of a 'pilot' reprocessing facility from France." <sup>96</sup> In the next couple months, the U.S. made efforts to press Pakistan to postpone or cancel the deal, with President Ford sending a letter to Prime Minister Bhutto in March to that effect. In this letter, Ford warned Bhutto that U.S. -Pakistani relations could be jeopardized unless Pakistan canceled the deal. As he wrote:

"My Government has welcomed your forthright assurances that Pakistan will not divert its civil nuclear development efforts into an explosives program, and that Pakistan's nuclear activities will be devoted exclusively to peaceful purposes...My concern is not the reliability of the assurances of your Government. It is that the establishment of sensitive nuclear facilities under national control inevitably gives rise to perceptions in many quarters that, under circumstances which perhaps cannot even be foreseen today, nonpeaceful uses may be contemplated...These perceptions are heightened in Pakistan's case by the lack of a persuasive economic justification for obtaining sensitive nuclear facilities... I know that Secretary Kissinger has already expressed similar views to you on this matter, but I want to underline to you my deep personal concern over the possible effect of your actions in this area on our ability to sustain support in public opinion here for our close cooperation on a broad range of issues of interest to both our governments. I fear that many in this country will be critical of Pakistan's actions and skeptical regarding its intentions. Friendship with Pakistan has enjoyed broad popular support in this country among the public and in the Congress over the years. However, Pakistan's acquisition of these sensitive facilities would, I believe, arouse considerable criticism and could erode this support."97

<sup>&</sup>lt;sup>96</sup> Demarche to Pakistan on Nuclear Fuel Reprocessing, January 30, 1976, State Department Memorandum, in "India and Pakistan—on the Nuclear Threshold," No. 21, The National Security Archive,

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/ipn21 1.htm.

Letter From President Ford to Pakistani Prime Minister Bhutto, No. 225, Washington, March 19, 1976, U.S. Department of State, Foreign Relations of the United States, Nixon-

In April, the U.S. ambassador to Pakistan sent a memo to Washington expressing his views on the matter. He predicted if the U.S. adopted a tough stance toward Pakistan in response to the nuclear issue, "the likelihood of the Paks persisting in achieving a nuclear option will probably be increased rather than diminished by our taking this harsh line with them. If Bhutto is as determined to go ahead with a complete nuclear fuel cycle as we believe he is and if he perceives that his possibilities for obtaining and paying for the conventional weapons he feels Pakistan needs will be significantly reduced by our actions, a nuclear deterrent could become an even more attractive proposition for him." On the other hand:

"If we decide that non-proliferation must be given the highest priority, we will have to involve ourselves more deeply in Pakistan's security concerns than we've been willing to do before...We will have to move further and faster in our military sales programs than we've been prepared to do since the arms embargo was lifted... Perhaps our best hope rests in a combination of positive measures to enhance Pakistan's security... Participation in a multinational reprocessing facility, suggested to Bhutto by both the President and yourself, could be such a face-saving gambit, with Iran the obvious place for the plant (although this would be very hard indeed for Bhutto to swallow at this late stage)."

In a May 1976 meeting of State Department officials, Assistant Secretary of State for Near Eastern Affairs Etherton pointed out a development of obvious relevance for the Pakistani nuclear issue. As he noted, "Yesterday the Senate Foreign Relations Committee accepted an amendment drafted by Senator Symington which would cut off all funds for military or economic assistance to countries which either

Ford Administrations, Volume E-8, Ch. 5,

http://www.state.gov/r/pa/ho/frus/nixon/e8/97078.htm.

<sup>&</sup>lt;sup>98</sup> Telegram 3497 From the Embassy in Pakistan to the Department of State, No. 226, April 7, 1976, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97079.htm.

<sup>99</sup> Ibid.

exported reprocessing facilities or received such facilities unless two conditions are met: the reprocessing facility would have to be multilateral and the recipient country would have to agree to place all its nuclear facilities under IAEA safeguards." Two months later in July, the internal State Department debate on Pakistan policy picked up steam, with Kissinger stating in a meeting that "I must say that I have some sympathy for Bhutto in this. We are doing nothing to help him on conventional arms, we are going ahead and selling nuclear fuel to India even after they exploded a bomb and then for this little project we are coming down on him like a ton of bricks." When Under Secretary of State for Political Affairs Philip Habib pointed out that Bhutto was clearly seeking nuclear weapons, Kissinger retorted, "If you were in his place you would do the same thing." After several officials raised the possibility of further delaying arms sales to Pakistan as leverage on the nuclear issue, Kissinger became irate at his subordinates:

"I ordered you to accelerate these cases when the Pakistani Ambassador complained to me three months ago. Gentleman, there are few countries in the world which by necessity or choice are still allies of ours. There is something indecent about our always proving that we are strong by kicking our allies in the teeth. We told the Pakistanis one year ago that we would provide military equipment. We also told the Chinese. This is against my instructions that we are not moving forward." <sup>103</sup>

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB114/index.htm.

<sup>&</sup>lt;sup>100</sup> Proposed Cable to Tehran on Pakistani Nuclear Processing, May 12, 1976, in "China, Pakistan, and the Bomb," No. 3, *The National Security Archive*,

Memorandum of Conversation, No. 231, Washington, July 9, 1976, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97086.htm.

<sup>&</sup>lt;sup>102</sup> Ibid.

<sup>103</sup> Ibid.

Later on in the meeting, Kissinger aptly noted, "we started [the] military supply relationship with the Pakistanis with great fanfare and have delivered nothing. There is no leverage in interrupting something that we are not giving anyway." Kissinger continued:

"The Pakistanis don't even have the appearance of a credible defense. What they have asked for from us is piddling compared to what the Indians have. I don't think it adds to the stature of the Untied States to force an ally to be defenseless...This is what I want to do. First, the only way we are going to get him off this reprocessing plant is to give him a reactor and accept the same terms of the FRG-Iran agreement. Secondly, we should tell him that we will take steps to enhance his conventional defense. We can't tell Bhutto that he can't have either a conventional or a nuclear defense."

When other officials continued to raise objections, Kissinger made his stance even clearer: "I don't think I have succeeded in getting my point across. *Non-proliferation is not our only objective in South Asia* [emphasis added]. An imbalance is being created in which Pakistan is totally dependent on India. There is no question that we can break Pakistan's back because they have made the mistake of allying themselves with us. Secondly, I am not convinced that it will be all that simple to knock the French out of this contract." 104

Rather than simply threatening the vague stick of damaged U.S. relations,

Kissinger decided that Pakistan would need carrots as well if there were to be any
chance of terminating the reprocessing deal. On August 8<sup>th</sup>, Henry Kissinger

proposed to sell the 110 Vought A-7 attack planes to Pakistan that had been

previously promised if Bhutto would agree to cancel the deal with France, but Bhutto

refused the offer. 105 Soon thereafter, U.S. officials tried and failed to convince French

<sup>104</sup> Ibid.

Armstrong and Trento, 63.

Prime Minister Jacques Chirac to cancel the deal—although they did convince

Canada to cut off its supply of uranium for Pakistan's reactor. 106

Throughout the rest of 1976, Kissinger continued to attempt to resolve the issue, warning Ahmed in October that the Symington Amendment would likely take effect next year, banning all economic and military aid to Pakistan if the reprocessing deal was not canceled. 107 Ahmed pointed out that "The Prime Minister is being asked to back down under pressure. He's committed before his people. This should be taken into account by the President and Congress," to which Kissinger responded, "I am not using the A-7 to blackmail you. You know I have been pushing it over a reluctant bureaucracy. But I don't think we can get it through Congress unless some restraint is shown. We will handle it sympathetically. It depends now on the election." After Carter was elected President in November, Kissinger made a last ditch effort to get Pakistan to cancel the deal, informing the Pakistani ambassador to the U.S. that Carter would make a "massive effort" to get the French to cancel the deal, and that "If cancellation is a problem for you, let me suggest that perhaps delay or postponement be used as an explanation. On our side, I can assure you that we will come up with a military package including A -7s, perhaps a reactor or even a French reactor -possibly with United States credit." No agreement was reached, however, and Carter assumed office with the deal still intact.

<sup>106</sup> Ibid.

<sup>&</sup>lt;sup>107</sup> Memorandum of Conversation, No. 236, New York, October 6, 1976, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97093.htm.

<sup>108</sup> Ibid.

Memorandum of Conversation, No. 239, Washington, December 17, 1976, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-8, Ch. 5, http://www.state.gov/r/pa/ho/frus/nixon/e8/97096.htm.

By the time the Ford administration left office, the U.S. policy of offering conventional arms as a carrot in exchange for nuclear restraint had clearly failed; after all, conventional arms were hardly a substitute for a nuclear arsenal. The vague threat of damaged U.S. relations apparently had no impact on Pakistani motivations, nor did the looming Symington Amendment, which would cut off American military and economic aid. The conventional arms that the U.S. had promised in 1975 were not forthcoming, and as Kissinger rightly pointed out, "There is no leverage in interrupting something that we are not giving anyway."

### The U.S. Searches For a Coherent Policy

The Symington Amendment indeed led to the cutoff of economic and military assistance to Pakistan in September 1977. <sup>110</sup> By June 1978, however, France had terminated deal due to increasing U.S. pressure, the sharing of intelligence on Pakistan's nuclear program, and Pakistan's refusal "to accept a form of reprocessing for the plant that would have prevented the production of weapons-grade plutonium." <sup>111</sup> In response to the cancellation, U.S. aid to Pakistan was restored in August 1978. <sup>112</sup> By this time, however, Pakistan had made significant progress in its clandestine uranium enrichment program. A.Q. Khan, who had returned to Pakistan and been made director of the program in July 1976, brought with him "key plans, technical documents, and listings of component suppliers for the Dutch centrifuge—

<sup>&</sup>lt;sup>110</sup> Ahmed, 184.

<sup>&</sup>lt;sup>111</sup> Richelson, 328-9.

<sup>&</sup>lt;sup>112</sup> Leonard Spector, *Nuclear Ambitions: The Spread of Nuclear Weapons, 1989-1990* (Boulder: Westview Press, 1990), 90.

all of significant value to a nation working to develop its own capability."<sup>113</sup> One year later, in July 1977, the design for a large uranium enrichment plant at Kahuta was completed, and by 1978 Pakistan had successfully tested its enrichment ability, leading to the construction of a small pilot enrichment facility at Sihala, which began operating by 1979.<sup>114</sup>

By January of 1979, the United States had obtained evidence that Pakistan did indeed have a secret uranium enrichment program, leading to the opening of diplomatic talks with the Pakistani leadership. After refusing to allow international inspections of its nuclear facilities in March, U.S. officials quietly showed Pakistan the stick, letting the leadership know that economic and military aid would soon be cut off, a decision confirmed in early April. Soon thereafter, the U.S. adopted a multipronged effort aimed at convincing Pakistan to accept inspections and halt its nuclear weapons program through a set of carrots. U.S. officials reportedly offered to sell 50 fighter planes to Pakistan and to support a Pakistani effort through the UN to create a nuclear weapons free zone (NWFZ) in South Asia as a means of averting a nuclear arms race between Pakistan and India; however, both these attempts met with failure, as Pakistan demanded that any safeguards or inspections must also be applied to India (which India refused).

In May 1979, Assistant Secretary of State Thomas Pickering testified to a Senate Committee that Pakistan had succeeded in obtaining the technology necessary to produce highly enriched uranium for bombs; as a result, "We believe we have the

<sup>&</sup>lt;sup>113</sup> Richelson, 330.

<sup>&</sup>lt;sup>114</sup> Ibid, 331.

Nuclear Threat Initiative, "Pakistan Nuclear Chronology," available from http://www.nti.org/e research/profiles/Pakistan/Nuclear/5593.html.

capacity to slow down that kind of activity. But no one is willing to say ... we have the ability to stop it." Pickering also publicly stated in May, "we are concerned...that the Pakistani program is not peaceful but related to an effort to develop a nuclear-explosive capability." <sup>117</sup> Around the same time, the U.S. began an initiative to convince Pakistan's new military ruler, Muhammad Zia-ul-Haq, to restrict uranium enrichment to a low level insufficient for use in nuclear weapons. U.S. officials shared intelligence proving the extent of the Pakistani program, to which Zia responded, "That's absolutely ridiculous. Your information is incorrect." 118

In the summer months of 1979, U.S. President Jimmy Carter commissioned an interagency taskforce to explore policy options regarding Pakistan's nuclear weapons program; it soon became public that the options discussed included harsher economic sanctions as a stick, the provision of more effective conventional arms as a carrot and—most controversially—a covert military operation to disable Pakistan's uranium enrichment facility. Despite the assurances of U.S. officials that the latter option was not seriously considered, Pakistan reacted angrily, surrounding its nuclear facilities with anti-aircraft guns and reaffirming its commitment to persist with its supposedly peaceful nuclear program. 119

Echoing Pickering's statement, at a September meeting of the General Advisory Committee on Arms Control and Disarmament, Assistant Director of A.C.D.A. Charles Van Doren noted that the U.S. and its allies were "tightening up" on export controls but that "We may be a little late... the estimate is 2 to 4 years

116 Ibid.

<sup>117</sup> Spector, 91.
118 Richelson, 339-340.

<sup>&</sup>lt;sup>119</sup> Nuclear Threat Initiative, "Pakistan Nuclear Chronology."

before they could have enough material from this indigenous production, unsafeguarded production." Van Doren stated his view that the cutoff in aid as per the Symington Amendment "has caused some very bad blood with Pakistan, and it may be counter-productive in our efforts to work out a solution, but we didn't have any choice because, literally, the terms of the law were triggered." He continued, "We see the makings, and quite a bit more than the makings, of another Indian disaster coming up... A repetition of the Indian explosion would be fairly disastrous, not only to our non-proliferation policy, but also to international nuclear commerce," and characterized the Pakistani program as "a railroad train that is going down the track very fast, and I am not sure anything will turn it off." When several officials at the meeting raised the possibility of a commando raid against Pakistani nuclear facilities, Van Doren responded that "we were a bit hindered in that by the fact that Mr. Burke of the New York Times thought of that solution, dreamed it up and put it in the New York Times article which played in the Pakistani press very hard, and led some in this government to immediately deny that that was under consideration. In fact, it wasn't under active consideration, so our denial was true. But it makes it harder to consider that as an option when Mr. Burke thought it up and publicly exposed it, and had it categorically denied."<sup>120</sup>

Despite various U.S. policy initiatives, it was clear by the end of 1979 that

Pakistan remained totally committed to its nuclear weapons program, advancing

along the uranium enrichment route despite the termination of the reprocessing deal.

The provision of conventional arms was simply not sufficient to convince Pakistan to

<sup>&</sup>lt;sup>120</sup> Friday Morning Session, General Advisory Committee on Arms Control and Disarmament, September 14, 1979, in "China, Pakistan, and the Bomb," No. 6, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB114/index.htm.

accept safeguards, nor was the Symington Amendment's aid cutoff a strong enough stick to alter Pakistani behavior. Despite these self-evident facts, however, the U.S. remained unwilling to enact or threaten stronger sticks—not seriously considering a commando attack, nor broader economic sanctions. Moreover, the farthest the U.S. was willing to go to address Pakistan's extreme insecurity vis-à-vis India was to support a NWFZ in the UN—obviously a useless act considering that India had made clear its opposition to any such agreement. The Pakistani nuclear issue would soon take a back seat, however, as the Cold War's resurgence redefined U.S. objectives.

#### The Soviet Invasion and American Policy Failure

After another failed series of talks in October and India's formal rejection of a South Asian NWFZ in December, the U.S.-Pakistan dynamic was drastically altered when the Soviet Union invaded Afghanistan in the closing days of December 1979. 121 With the Soviet invasion of Afghanistan, U.S. policy toward Pakistan's nuclear program underwent a drastic reorientation, as Cold War strategic objectives superseded U.S. nonproliferation efforts. After the Carter Administration got the ball rolling on resuming military and economic aid to Pakistan in 1980, the incoming Reagan administration concluded a five year \$3.2 billion aid deal with Pakistan in September of 1981, which "included an agreement to sell Pakistan forty advanced F-16 fighter-bombers." <sup>122</sup> In order for this aid to be disbursed, Congress approved Pakistan for a six-year exemption from the Symington Amendment; at the same time, however, legislation was strengthened to impose economic sanctions on any newly

<sup>&</sup>lt;sup>121</sup> Nuclear Threat Initiative, "Pakistan Nuclear Chronology."<sup>122</sup> Spector, 92.

nuclear state that tested a device. <sup>123</sup> As Spector notes, "In addition to its hope that American assistance would strengthen Pakistan as an anti-Soviet bulwark in the region, the Reagan Administration argued that the aid package would check the Pakistani nuclear weapons program by providing an alternate means, namely advanced conventional arms, for that country to protect its national security." <sup>124</sup> Despite such arguments, however, it is critical to note that the massive aid packages were not in any way linked to Pakistan's behavior in the nuclear realm. Rather than using the Soviet threat to Pakistan as leverage on the nuclear issue, promising aid only in exchange for verifiable safeguards on its nuclear program, the U.S. essentially abandoned its nonproliferation efforts in favor of Cold War objectives.

In 1982, 1983, and much of 1984, the United States exerted almost no direct pressure on Pakistan to halt its steadily advancing nuclear weapons program, instead focusing on convincing third parties such as China to cease providing technological assistance to the Pakistani program. Despite such efforts, in the next few years U.S. intelligence indicated that China continued to aid the Pakistani nuclear weapons program, reportedly providing assistance at Pakistan's uranium enrichment facilities and providing Pakistan with a complete nuclear bomb design, which "might allow Pakistan to manufacture reliable nuclear arms without the need for a nuclear test." Such intelligence led the Reagan administration in 1984 to delay "for nearly a year the formal approval of a highly publicized nuclear trade pact with China." In the same year, Pakistan's large enrichment facility at Kahuta became operational and

123 Ibid.

<sup>124</sup> Ibid.

<sup>&</sup>lt;sup>125</sup> Ibid. 93.

<sup>126</sup> Ibid.

A.Q. Khan declared that the plant had succeeded in producing enriched uranium (although only low-enriched uranium, according to subsequent statements). 127

Responding to these developments, in September 1984 President Reagan sent a letter to Zia warning him of "grave consequences" if Pakistan enriched uranium to beyond five percent (far short of the ninety percent generally used in nuclear weapons), a condition that Zia reportedly agreed to in writing. Around the same time, the Soviet Union deployed 40,000 more troops to Afghanistan, and "Soviet planes began repeatedly violating Pakistani air space in order to bomb Afghan refugee camps in Pakistan." The U.S. responded in March 1985 by providing Pakistan with advanced air-to-air missiles; in July Congress approved another \$3.2 billion aid package. This occurred despite intelligence had Pakistan had conducted a "successful test of the non-nuclear triggering package for a nuclear weapon." By October, the Reagan administration learned that Pakistan had violated its assurances and enriched uranium beyond five percent; however, Reagan refrained from confronting Zia with this information when the two met later that month. 128

While Congress had approved additional aid in 1985, it also adopted the Pressler Amendment, which made continuation of aid to Pakistan conditional upon the President certifying each year that Pakistan did not have a nuclear device and that continued assistance would help to prevent this eventuality. 129 The Solarz Amendment was enacted as well, which banned "aid to any non-nuclear state found to have smuggled items from the United States for use in a nuclear explosive

Richelson, 331.

Spector, 93-94.
Reiss, *Bridled Ambition*, 186.

device." Despite the fact that Pakistan had violated the 5% barrier, in March 1986 another aid package worth more than \$4 billion was approved. 131 As Spector notes. "From this point onward, there could be no doubt in Islamabad that the Reagan Administration was aware of its advances at Kahuta and was prepared to look the other way." Although there is not a complete consensus, the bulk of the evidence supports the claim that Pakistan successfully achieved a nuclear weapons capability by 1987, and that the United States was aware of this. 133 In the first few months of 1987, both A.Q. Khan and Zia made public statements to this effect, although both were subsequently denied or qualified.<sup>134</sup> Several years later, Pakistan's top military authority, General Mirza Aslam Beg, announced that Pakistan did indeed possess such a capability by 1987. 135 While Pakistan may have not yet assembled complete nuclear weapons, it almost certainly possessed enough highly enriched uranium for several weapons and had built all of the components—thus creating a de facto nuclear weapons capability. 136 Despite this, however, U.S. presidents Reagan and Bush continued to certify Pakistan for continued aid until Bush finally refused to do so in 1990 under the weight of mounting public evidence of Pakistan's nuclear capability. 137 After more than a decade of maintaining an ambiguous nuclear posture, Pakistan tested a series of nuclear devices in May of 1998 in response to Indian tests several weeks earlier.

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<sup>&</sup>lt;sup>130</sup> Spector, 94.

Reiss, Bridled Ambition, 186.

<sup>&</sup>lt;sup>132</sup> Spector, 94.

Reiss, Bridled Ambition, 187.

<sup>&</sup>lt;sup>134</sup> Spector, 96-97.

<sup>&</sup>lt;sup>135</sup> Paul, 134.

<sup>&</sup>lt;sup>136</sup> Spector, 99-100.

Reiss, Bridled Ambition, 187.

#### 3. Analysis

- 1. Strength of United States motivation: Preventing Pakistan from becoming a nuclear-armed state was clearly not viewed as a vital security issue by U.S. officials. While the United States did want to avert a nuclear arms race in South Asia, Pakistan's status as a quasi-ally of the United States made the issue considerably less threatening, as the U.S. also had an interest in balancing against the Soviet Union in the region.
- 2. Asymmetry of motivation favoring the United States: While there certainly was an asymmetry of motivation in this case, the asymmetry clearly favored Pakistan rather than the United States. Whereas for the United States Pakistani proliferation was a relatively minor issue subordinate to Cold War rivalries, for Pakistan, the development of a nuclear arsenal was a matter of urgent national security. Having fought three wars with India over the past several decades, it would have been almost inconceivable for Pakistan to forsake a nuclear weapons program after India made clear its nuclear ambitions with its 1974 test. Lacking a formal security guarantee and the shelter of a nuclear umbrella, Pakistan pursued nuclear weapons as the best possible means of ensuring its survival in the face of a much larger and hostile rival.

U.S. officials attempted to lower Pakistan's motivation for seeking the bomb by employing a range of carrots and sticks, but rejected the strong options with the best chances of success. Despite a formal but limited alliance with Pakistan, the U.S. was unwilling to provide a full-fledged security guarantee and nuclear umbrella, for fear of alienating India. The U.S. offered conventional arms as a carrot in attempt to

help address Pakistan's security issues, and they offered to support a NWFZ in South Asia as a means of defusing the nuclear arms race with India. However, the latter effort proved futile without India's cooperation, and the former was clearly insufficient to protect against the nascent Indian nuclear threat. The U.S. was willing to threaten and employ cutoffs in aid as a stick to pressure Pakistan to comply with U.S. demands, but officials were not willing to threaten or employ sanctions or force that went beyond pre-existing U.S. aid. As the shift in U.S. policy after the Soviet invasion of Afghanistan illustrated, Presidents Carter and then Reagan perceived Cold War competition with the Soviets as a far more urgent issue than Pakistani proliferation. Reagan's decision to provide Pakistan with billions in military aid without linking the aid to any commitment to limit Pakistan's nuclear program made this quite evident. Even after Reagan sought to draw a line in the sand with President Zia ul-Haq in 1984, he continued to certify Pakistan for continued aid despite evidence that Pakistan was continuing on the path to nuclear weapons.

3. Clarity of American objectives: American objectives consistently lacked clarity in this case. For example, when Kissinger and Ford first began discussing the nuclear issue with Pakistan in 1974 and 1975, they were told quite frankly that Pakistan was developing a nuclear capability, but instead of pressing them on the issue sought some sort of vague assurances in order to allow them to end the arms embargo and continue military aid to Pakistan. The discussions surrounding the French reprocessing deal in 1976 were also somewhat vague as to U.S. objectives. Kissinger consistently made clear that the U.S. sought to prevent the deal from occurring, but he also consistently made clear his sympathy with Pakistan's position,

and also indicated that even if the deal was not canceled, he would make an effort to sell Pakistan arms in spite of the developing Symington Amendment. From 1977 to 1979, American objectives were largely clear, but after the shift in policy from 1980 onward, U.S. objectives again became opaque, as the Reagan administration pushed through massive aid packages to Pakistan apparently without receiving any type of commitment from Pakistan on their nuclear program. Furthermore, Reagan's 1984 letter to President Zia ul-Haq that warned against further uranium enrichment and against any nuclear test may have been interpreted simply as an admonition to keep the program private rather than to halt it altogether. Finally, the continued certification provided by Reagan as per the Pressler Amendment must have communicated to Pakistan that their nuclear program was not of major significance to the U.S: aid would continue to be provided regardless of countervailing evidence.

- 4. Sense of urgency to achieve the American objective: There certainly was no strong sense of urgency to achieve American objectives, even as the Pakistani nuclear program progressed. The U.S. clearly followed what George termed the "try and see approach," attempting different sets of carrots and sticks without ever making an ultimatum with strong threats attached. After 1980, any semblance of urgency on the American side was gone.
- **5. Adequate domestic political support:** Interestingly, the domestic political support for preventing Pakistani proliferation was arguably stronger than the support within the presidential administrations for the same goal. In fact, the two strongest attempts to limit Pakistan's nuclear weapons program had their origins in Congress rather than the White House. Both the 1976 Symington Amendment and the 1985

Pressler Amendment specifically sought to limit Pakistan's weapons program by tying continued aid to Pakistan's nuclear activities. The Symington Amendment provided the legal basis for the cutoff of aid under the Carter Administration in 1977 and 1979, and the Pressler Amendment would have provided for the cutoff of aid to Pakistan had the Reagan and Bush administrations been honest about their knowledge of the Pakistani nuclear weapons program.

- 6. Usable military options: The United States almost certainly had the capability to use military force to sabotage Pakistan's nuclear program; however, U.S. officials clearly did not view this option as usable. As the U.S. response to reports in 1979 that military force was being considered illustrated, the military option was not considered politically acceptable, likely because of the effects it would have in undermining the U.S.-Pakistani alliance, perhaps driving Pakistan further into the arms of the China or even the U.S.S.R—an unacceptable consequence for American Cold War designs. Obviously military force was not a usable option after 1980.
- 7. Opponent's fear of unacceptable escalation: Given that military force was an option never openly on the table, it is hard to imagine Pakistan being seriously afraid of any sort of unacceptable escalation. The U.S. "try and see approach" likely convinced Pakistan that they could continue in their program without sudden and severe consequences, and the availability of China as an alternative arms supplier certainly made the cutoff of American military aid considerably more "acceptable." Pakistan had lived without American military aid following the 1965 war with India, and they were willing to live without it (at least briefly) when aid was cut off in 1977 and again in 1979. The imperative of countering the nuclear threat from India was

greater than the desire to retain American aid, and the U.S. never threatened to escalate to more serious sanctions or military force. The U.S. reliance on Pakistan after 1980 as a strategic Cold War partner essentially removed all remaining American leverage.

8. Clarity concerning the precise terms of settlement: At various points from 1976 on, the United States proposed deals to Pakistan with clear terms in an attempt to halt the Pakistani weapons program. Most notable was the 1979 offer to provide 50 fighter jets and support a South Asian NWFZ in exchange for Pakistan agreeing to allow its nuclear facilities to be fully inspected, which Pakistan rejected. It is thus hard to say that there was a lack of clarity regarding a potential settlement; rather, the problem was that the settlement was simply unacceptable given Pakistan's perceived security needs.

#### 4. Conclusion

The failure to halt the Pakistani nuclear weapons program was a classic case of conflicting strategic priorities, half-hearted measures, and inconsistent American policy that failed to seriously reduce Pakistani motivations for seeking the bomb. The U.S. desire to counter the Soviet Union while maintaining working relations with India effectively eliminated the ability of the U.S. to utilize strong carrots—such as a formal security guarantee—and strong sticks—such as broad economic or diplomatic sanctions. The result was a succession of half-hearted measures, namely the offer of arms supplies followed by the brief cutoff in economic and military aid. Whatever coercive effect this set of modest sticks might have had was erased when the Soviet

Union invaded Afghanistan, leading the U.S. to reverse its policy and provide

Pakistan with massive military and economic aid packages with no linkage to the

Pakistani nuclear weapons program.

# 3. South Korea: Coercing a Cold War Ally

Reacting to a weakening American Security commitment, South Korea began its pursuit of nuclear weapons in the early 1970s. By the end of the decade, however, the U.S. had succeeded in pressuring South Korea to end its program by repeatedly threatening the potent sticks of American military withdrawal, an end to American economic and political support, and by reaffirming the American commitment to South Korea in order to reduce the long-term South Korean motivation to pursue the bomb.

# 1. Motives

On July 25, 1969, President Richard Nixon gave a speech on Guam that announced a significant reformulation of American Cold War foreign policy. As part of what would later become known as the Nixon Doctrine, the President declared that the United States would continue to honor its treaty commitments, but that states allied with the U.S. must henceforth take the lead in providing for their defense against conventional military aggression. This was particularly ominous for South Korea, a state that relied heavily on 70,000 U.S. troops and American nuclear weapons for its defense. According to a multitude of sources, this was the critical event prompting the South Korean pursuit of nuclear weapons. <sup>138</sup> After all, as

<sup>&</sup>lt;sup>138</sup> See, for example, Paul, 121; Hersman and Peters, 540; Michael J. Englehardt, "Rewarding Nonproliferation: The South and North Korean Cases," *Nonproliferation Review* 3, No. 3 (Spring-Summer 1996), 32; and Jonathan D. Pollack and Mitchell B. Reiss, "South Korea: The Tyranny of Geography and the Vexations of History," in *The Nuclear Tipping Point*, 261.

Englehardt notes, South Korea "would not exist if it had not been saved by American military intervention in 1950." <sup>139</sup>

The U.S. commitment to the defense of South Korea, which was codified under the 1954 Mutual Defense Treaty following the Korean War, was viewed as an essential defensive bulwark by the government in Seoul, who faced potential threats from China and the Soviet Union (both Communist nuclear powers), as well as the aggressive Communist North, who had nearly succeeded in conquering the South in 1950. <sup>140</sup> In 1968 and 1969 alone, North Korea had engaged in cross-border commando raids, attempted to assassinate South Korean President Park Chung Hee, seized the U.S.S. Pueblo, and downed an American reconnaissance plane flying well outside North Korean airspace. <sup>141</sup> By the 1970s, North Korea was on its way to building the "sixth largest military force worldwide."

Viewed through this lens, it was understandably quite a shock to South Koreans when, despite President Park's protestations, Nixon announced in 1970 a plan to begin withdrawing U.S. troops from Korea—a force that had been stationed there since 1953 as a means of deterring aggression from the North. Midway through 1971, Nixon withdrew the 7<sup>th</sup> Infantry Division<sup>143</sup>, and by the end of 1973 the U.S. had withdrawn 24,000 of the 70,000 troops that had been stationed in Korea. <sup>144</sup> In order to ameliorate these changes, the U.S. promised South Korea \$1.5 billion in military aid; however, it was not delivered on time, raising further doubts about the

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<sup>&</sup>lt;sup>139</sup> Englehardt, 32.

Hersman and Peter, 540.

<sup>&</sup>lt;sup>141</sup> Englehardt, 32.

<sup>&</sup>lt;sup>142</sup> Solingen, Nuclear Logics, 82.

<sup>&</sup>lt;sup>143</sup> Pollack and Reiss. 261.

Reiss, Without the Bomb, 81; Englehardt, 32.

American commitment to South Korea's defense. While North Korea was not a nuclear power, South Korea considered its own ground forces to be inferior to North Korea's. Herthermore, if Chinese forces were to become involved (as occurred in the Korean War), South Korea undoubtedly faced an overwhelming conventional threat. As Reiss puts it, "Given memories of the Korean War, an inferiority in the conventional balance of forces on the peninsula, and Pyongyang's perpetual hostility, nuclear weapons were thought to be attractive to South Korea in order to deter an attack by the North if US nuclear weapons were no longer available."

#### 2. Case Overview

Following the introduction of the Nixon Doctrine and the announcement in July 1970 of plans to begin withdrawing U.S. forces, South Korean President Park established the Agency for Defense Development in August in order begin "research and development of advanced weapons systems, including nuclear weapons." Further straining U.S. -South Korean relations was the 1972 Shanghai Communique, which signaled an unprecedented warming of relations between the U.S. and Communist China. This led the severing of formal diplomatic relations between the U.S. and Taiwan (a nation in a predicament very similar to South Korea), and when combined with the imminent withdrawal of U.S. forces from Vietnam, communicated

<sup>&</sup>lt;sup>145</sup> Hersman and Peter, 541.

<sup>&</sup>lt;sup>146</sup> Englehardt, 32.

<sup>&</sup>lt;sup>147</sup> Meyer, 125.

<sup>&</sup>lt;sup>148</sup> Reiss, Without the Bomb, 93.

<sup>&</sup>lt;sup>149</sup> Nuclear Threat Initiative, "South Korea Nuclear Chronology."

that—at least in Asia—anti-Communism alone was no longer enough to merit unwavering military and diplomatic support from the U.S. 150

In late 1973, by which time the U.S. rapprochement with China and the withdrawal of thousands of American troops had worsened the South Korean situation, the Agency for Defense Development "completed a long-term plan for development of nuclear weapons; the program was expected to take six to ten years, with an estimated cost between US \$1.5 billion and \$2 billion." The pursuit of nuclear weapons was tasked to the Weapons Exploitation Committee, whose goal was to utilize "the international arms market to buy strategic technology and unconventional weapons systems. Its political charge was to negotiate with foreign governments, firms, and individuals who would discreetly supply these systems. All of these international nuclear and advanced weapons technology activities were conducted in strict secrecy." 152

## **American Discovery and Kissinger's Ultimatum**

India's surprise nuclear test in May 1974 increased U.S. wariness of covert nuclear proliferation efforts, and by the end of the year, the C.I.A. had found a South Korean nuclear scientist who revealed the existence of the program. <sup>153</sup> In an independent move around the same time, Congress substantially reduced military aid to South Korea "from the US\$238 million requested by the Executive Branch to only

<sup>151</sup> Pollack and Reiss, 262.

<sup>&</sup>lt;sup>150</sup> Ibid, 80.

<sup>&</sup>lt;sup>152</sup> Michael Siler, "U.S. Nuclear Nonproliferation Policy in the Northeast Asian Region during the Cold War: The Case of South Korea," *East Asia: An International Quarterly* 41, No. 1 (Autumn 1998).

<sup>&</sup>lt;sup>153</sup> Pollack and Reiss, 262.

US\$145 million. This reduction was the direct result of Congressional hearings at which witnesses described violations of human rights by the South Korean government." 154 As Yager notes, "the authorities in Seoul were particularly disturbed by this action, because it showed that their intense efforts during the previous four year to ensure Congressional approval of funds for the military modernization programme and had not been entirely successful." <sup>155</sup> By early 1975, U.S. officials under President Ford felt comfortable enough in their intelligence to confront South Korea, and Secretary of State Henry Kissinger was dispatched to pressure President Park to give up the program. As part of this pressure, in March 1975 Congress "used a proposed loan by the US Export-Import Banks to send an unmistakable signal to Seoul. It passed a joint resolution directing the Bank to defer payment of a loan to the Korean Electric Company destined to help finance the construction of a nuclear power plant. The resolution stated that the deferral was intended to allow time for Congress to receive and review certain reports from the President on the problem of nuclear weapons proliferation." Even more worrisome, Kissinger threatened the potent stick of the withdrawal of all U.S. military personnel from Korea if Park did not halt the program, and Park complied, ratifying the NPT in April. 157

As worrisome as the reducing American presence in Korea was to South Korean leaders, completely losing the entire American presence in the short term was simply not a viable option for South Korea, facing the aggressive Communist North.

As a result, South Korea gave in to the harsh U.S. pressure, signaling its peaceful

<sup>&</sup>lt;sup>154</sup> Joseph Yager, "South Korea," in *Non-Proliferation: The Why and the Wherefore*, ed. Jozef Goldblat (London: Taylor and Francis Ltd., 1985): 199.

<sup>&</sup>lt;sup>155</sup> Ibid.

<sup>156</sup> Ibid.

<sup>&</sup>lt;sup>157</sup> Englehardt, 32.

intentions by finally ratifying the NPT after a delay of several years, a move that would require South Korea to sign an IAEA safeguards agreement.

#### The French Reprocessing Deal and American Ultimatum Redux

The issue did not end there, as the U.S. soon became aware that South Korea had entered into a deal to purchase a nuclear reprocessing facility from a French firm, which the U.S. worried could be used to extract weapons grade plutonium. Bringing pressure to bear on France as well as South Korea in the fall of 1975, the Ford Administration "threatened to withhold US Export-Import Bank credits worth \$275 million in direct low-interest loans and another \$227 million in loan guarantees for South Korea's nuclear energy program, and it warned that the proposed deal would jeopardize US-South Korean relations: "158 According to Siler, the U.S. went even further, threatening "(1) a suspension of all economic, trade, and financial assistance; (2) an acceleration of the U.S. military pullout; and (3) other unspecified political sanctions." This was a particularly potent threat since South Korea was highly dependent on the United States economically as well as militarily. The U.S. was South Korea's largest trading partner of purchasing 26% of South Korean exports at the time, and the U.S. held much of South Korea's \$20 billion foreign debt.

In addition, by withholding nuclear energy assistance as threatened, the U.S. had the ability to severely harm the South Korean nuclear energy program at a time when the government was trying to reduce its dependence on growingly expensive oil

<sup>&</sup>lt;sup>158</sup> Paul, 121.

<sup>159</sup> Siler.

<sup>&</sup>lt;sup>160</sup> Hersman and Peters, 541.

<sup>&</sup>lt;sup>161</sup> Englehardt, 32.

imports. <sup>162</sup> As Solingen notes, "without U.S. equipment and fuel supplies for South Korea's first nuclear plant, still under construction in 1975, the economy might have stalled at an already critical period following the oil crisis. Nuclear power reactors under construction were being financed virtually entirely with foreign loans. The United States allegedly made financing of South Korea's second reactor contingent on its renunciation of reprocessing capabilities. <sup>3163</sup> Furthermore, "export-oriented firms were critically dependent on primarily U.S. and Japanese investors, loans, and markets that could have curtailed and boycotted economic ties with a nuclear South Korea. <sup>3164</sup> Japan and the United States together were responsible for 85% of foreign direct investment in South Korea, and Japan was similarly opposed to a South Korean nuclear weapons program. <sup>165</sup> By the beginning of 1976, South Korea had canceled the deal and shut down its weapons program under the mounting pressure, leading the United States to reaffirm its security commitment to South Korea. <sup>166</sup>

Mirroring the confrontation in 1975, in 1976 the U.S. was able reduce South Korean motives for continuing pursuit of the bomb by structuring their motives in such a way that made persistence in the nuclear weapons realm prohibitively costly. The U.S. threat of cutting off political, military, and economic support to South Korea was extremely potent; it was credible as well due to the already stated American policy objective of reducing the American commitment in Asia.

<sup>&</sup>lt;sup>162</sup> Reiss, Without the Bomb, 89.

<sup>&</sup>lt;sup>163</sup> Solingen, Nuclear Logics, 92.

<sup>&</sup>lt;sup>164</sup> Ibid, 90.

<sup>&</sup>lt;sup>165</sup> Ibid. 92.

<sup>&</sup>lt;sup>166</sup> Hersman and Peters, 542.

### **America Reaffirms its Security Commitment**

Once President Jimmy Carter entered office in 1977, however, the nuclear weapons issue surfaced once again. Echoing a pledge he had made while campaigning, in March Carter announced his intent to withdraw almost all U.S. troops from Korea, asserting that U.S. air and naval forces could provide adequate security for South Korea. Moreover, Carter announced plans to remove approximately one thousand tactical nuclear weapons from the peninsula. Other sources of concern for South Korea included "the Administration's refusal to sell advanced conventional weapons with offensive capabilities, its tight restrictions on third-country arms sales to South Korea, and its threat to increase South Korea's defense burden costs. In response to Carter's withdrawal plan, South Korean officials declared in May that they would have to develop their own nuclear weapons if the U.S. went through with their plans; South Korea also restarted its research into building native reprocessing and enrichment facilities around this time.

Although the details are not clear, the United States managed to convince South Korea to halt its program yet again in 1978. A key component of this, of course, was Carter's decision to scrap his military withdrawal plan; however, this was not the result of South Korean threats, but rather of domestic criticism and pressure resulting from a CIA report stating that the U.S. had underestimated North Korean military strength. Moreover, the United States once again brought diplomatic and economic pressure to bear, reportedly threatening to kill a \$300 million loan to South

167 Ibid.

<sup>&</sup>lt;sup>168</sup> Paul, 121.

<sup>169</sup> Siler.

<sup>170</sup> Hersman and Peters, 542.

<sup>&</sup>lt;sup>171</sup> Reiss, Without the Bomb, 102.

Korea for its nuclear energy program unless it ceased its covert weapons activities.<sup>172</sup>

After President Park was assassinated in 1979, the new President—Chun Doohwan—
is said to have canceled the South Korean nuclear weapons program once and for all.<sup>173</sup> This decision was bolstered by the incoming Reagan administration's promise to increase the American economic and security commitment to South Korea, coupled with the threat of removing these benefits of South Korean nuclear weapons activities continued.<sup>174</sup>

In the end, as Reiss notes, South Korea was simply not willing to take the risk of placing itself "in a position where it had neither nuclear arms nor the American commitment," an eventuality that would have been realized—at least for several years—had the United States acted on its threats. By threatening potent and credible sticks, the U.S. had repeatedly succeeded in blunting the South Korean motivation to persist in its nuclear weapons program. The decisions by the Ford, Carter, and Reagan administrations to publicly reaffirm the security commitment to South Korea certainly helped as well, but this appeared to be secondary to the effects of American threats.

## 3. Analysis

1. Strength of United States motivation: The United States was highly motivated to prevent successful proliferation in this case. Not only would it undermine U.S. nonproliferation policy and the nonproliferation regime more broadly if South Korea were to proliferate, it would also increase tensions with China and the

<sup>&</sup>lt;sup>172</sup> Pollack and Reiss, 263.

<sup>&</sup>lt;sup>173</sup> Paul, 121.

<sup>174</sup> Siler

<sup>175</sup> Reiss, Without the Bomb, 99.

Soviet Union, potentially lead to pressures to proliferate in North Korea and Japan, and perhaps could even lead to a North Korean preemptive strike that would draw the U.S. into a second Korean War.

2. Asymmetry of motivation favoring the United States: Fearing that the U.S. security guarantee was weakening, South Korea certainly had a strong motivation to develop nuclear weapons to ensure its security against an overwhelming conventional threat and a region dominated by Communist nuclear powers. However, by making potent threats, the United States was able to structure Seoul's motives in such a way that developing nuclear weapons was in no way the most attractive option. As previously noted, Schelling wrote that the goal of coercive diplomacy is to make the adversary "better off doing what we want—worse off not doing what we want—when he takes the threatened penalty into account." <sup>176</sup> By repeatedly threatening to sever the political and military alliance with South Korea (and thereby introduce a dangerous window of vulnerability into South Korean security) and cripple the state's economy, this is exactly what the U.S. succeeded in accomplishing. When these threatened penalties were taken into account, there was certainly an asymmetry of motivation involved, but favoring the United States rather than South Korea. Although it may not have been in response to South Korea's nuclear activities, the U.S. decision to reaffirm its security commitment and cancel the withdrawal of U.S. troops from 1978 onward was an important carrot that also reduced South Korean motives to develop nuclear weapons.

**3.** Clarity of American objectives: American objectives in this case were clear: stopping South Korea's nuclear weapons program. This included South Korea

<sup>176</sup> Schelling, 4.

halting its own indigenous research, and it later broadened to include stopping South Korea from obtaining reprocessing facilities from other states, despite their legality under the NPT.

4. Sense of urgency to achieve the American objective: There definitely seemed to be a sense of urgency on the part of the U.S. to prevent South Korean proliferation, as U.S. officials clearly employed a "tacit ultimatum" rather than "tryand-see" approach on several different occasions. There was a specific demand made of the adversary (halting the nuclear weapons activities) and sufficiently strong and credible and threat of punishment (the withdrawal of U.S. military support and economic aid). The threat must have seemed especially credible to South Korea since the U.S. had recently withdrawn thousands of troops; in other words, the U.S. had already signaled its willingness to reducing its presence on the Korean Peninsula. While there was no explicit time limit set by the U.S., the strength and credibility of the U.S. threat could not have helped but created a sense of urgency in South Korea to comply with American demands. The same could be said about the U.S. threat to withdraw economic support if South Korea went ahead with its attempts to purchase foreign reprocessing facilities: the demand was clear (cancel the deals) and the threat once yet again strong and credible (the withdrawal of critical economic assistance and weakening of the political/military alliance). Throughout the many stages of the South Korean case, the U.S. acted based on a sense of urgency, and—perhaps more importantly—succeeded at fostering a sense of urgency amongst the South Korean government to comply.

- **5.** Adequate domestic political support: There is no evidence that the U.S. lacked domestic support for its actions vis-à-vis South Korea. In fact, the only juncture where a lack of domestic support figured prominently in the case was when domestic pressure forced Carter to abandon his plans for a drastic drawdown of U.S. forces from Korea. Interestingly, this helped reinforce U.S. efforts to halt South Korea's weapons program because it reassured Seoul about the strength of the U.S. commitment to South Korean security.
- **6. Usable military options:** There is no evidence of any serious consideration of using U.S. military force to prevent South Korean proliferation. Given the formal alliance between the U.S. and South Korea, any such use of force would be almost unthinkable. Moreover, the U.S. rightly concluded that they had more than enough leverage without threatening military force simply through South Korea's economic and military dependence on the United States.
- 7. Opponent's fear of unacceptable escalation: The fear of unacceptable escalation was certainly a consideration for South Korea when it agreed to halt its nuclear weapons program in 1975, 1976 and then again in 1978. In each case, South Korea feared that the U.S. would escalate beyond its threats and actually sever the political, economic, and military links between the two states—undoubtedly an unacceptable outcome for a highly dependent state facing myriad security threats. As Reiss noted, accepting this outcome by persisting in its nuclear weapons would have placed South Korea temporarily in a position of extreme vulnerability—without nuclear weapons and without U.S. protection.

8. Clarity concerning the precise terms of settlement: There is no evidence that precise settlement terms were negotiated, rather it seems that the settlement was understood implicitly: if South Korea shut down its nuclear weapons program, the U.S. would maintain its military presence and economic assistance to South Korea, and if Seoul chose to persist in its program, the opposite would occur.

# 4. Conclusion

U.S. policy in this case was firm, persistent, and timely, reflecting a strong motivation and sense of urgency to forestall South Korean proliferation. Potent and credible sticks were employed, and valuable carrots were provided at the end. Although it does not seem that the American reaffirmation of its security commitment was a direct quid pro quo for South Korea nuclear compliance, it nonetheless made long-term nuclear restraint much more palatable for South Korea. While U.S. leverage and motivation was important to success in the case, a key reason the U.S. was able to utilize such potent sticks because it faced no conflicting strategic or political objectives at the time. Throughout the 1970s, the U.S. was more concerned with maintaining détente and improving relations with China (two goals that would have been significantly complicated by a South Korean arsenal) than it was with containing Communist powers in Asia; as a result, American policymakers were willing to threaten a complete end to the American commitment to South Korea—a commitment that was already being reduced due to strategic considerations. Strong policy was possible in this case because strong nonproliferation measures reinforced—rather than interfered with—broader American objectives.

# 4. Israel: Half-Hearted Diplomacy

Surrounded by hostile Arab states, Israel started a nuclear weapons program with the help of the French in the mid-1950s. Throughout most of the 1960s, the U.S. made a quiet effort to halt the Israeli program, primarily relying on arms sales and vague warnings as carrots and sticks. Due to conflicting strategic and political objectives, the U.S. was unwilling to take the stronger steps necessary to reduce Israeli motives for proliferating, declining to address Israel's security predicament by formalizing an alliance, and declining to exert any sort of harsh pressure on the state.

# 1. Motives

The motives that drove Israel to develop nuclear weapons are as old as the nation itself. For as long as Israel has existed as a state, it has faced severe security threats from its Arab neighbors. When Israel declared independence based on a U.N. partition plan in 1948, it was immediately invaded by surrounding Arab states that rejected its existence—a coalition including Transjordan, Syria, Lebanon, Egypt, and Iraq. Israel managed to prevail in the war, but even as the war was raging, Israeli leader David Ben Gurion began laying the groundwork for a potential nuclear weapons program. The Holocaust helped to convince Ben Gurion of the necessity to develop an Israeli nuclear arsenal to secure the survival of the Jewish state. When Egyptian President Gamal Abdel Nasser closed the Straits of Tiran to Israeli shipping and nationalized the Suez Canal in 1956, Israel, Britain, and France

Binyamin Pinkus, "Atomic Power to Israel's Rescue: French-Israeli Nuclear Cooperation, 1949-1957," *Israel Studies* 7, No. 1 (2002): 110.

<sup>&</sup>lt;sup>178</sup> Avner Cohen, *Israel and the Bomb* (New York: Columbia Univ. Press, 1998): 10.

launched a joint military operation that succeeded in reestablishing free passage through the Canal, but failed to achieve its larger objective of toppling Nasser after a Soviet nuclear threat and tough American pressure forced the coalition to withdraw its forces. While the U.S. relied largely on economic pressure to force Britain and France to pull out, according to multiple sources this coercion by two nuclear-armed powers helped to convince Israel of the utility of nuclear weapons.<sup>179</sup>

While Israel faced no nuclear threat from its immediate enemies when it initiated its nuclear weapons program, Israeli leaders believed that nuclear weapons would help to (1) redress Israel's conventional inferiority and its lack of strategic depth, (2) provide Israel with a weapon of last resort, and (3) make up for a lack of a formal security guarantee. Surrounded by hostile and populous Arab states, Israel was vastly outnumbered and outgunned in terms of conventional military forces. This, combined with Israel's lack of strategic depth, led Israel to pursue nuclear weapons as a "great equalizer" that could deter a large-scale Arab attack against the Jewish state. <sup>180</sup> Because Israel could never rival its neighbors quantitatively, nuclear weapons could provide Israel with an important qualitative edge. <sup>181</sup> In addition to deterring attack, a nuclear capability was viewed as a weapon of last resort that could be used to save Israel if deterrence failed and Israel seemed close to defeat; this was considered especially critical since it was deemed "axiomatic that destruction of the

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<sup>&</sup>lt;sup>179</sup> See Paul, 137; and Isabella Ginor and Gideon Remez, "The Spymaster, the Communist, and Foxbats over Dimona: the USSR's Motive for Instigating the Six-Day War," *Israel Studies* 11, No. 2 (2006): 91.

<sup>&</sup>lt;sup>180</sup> Cirincione et al, 265; Paul, 138-140.

<sup>&</sup>lt;sup>181</sup> Shai Feldman, "Israel," in *Nuclear Proliferation After the Cold War* ed. Mitchell Reiss and Robert Litwak (Washington: Woodrow Wilson Center Press, 1994): 67.

state and the people would inevitably follow."<sup>182</sup> Only a formal alliance with a nuclear power could provide a similar level of security; however, Ben Gurion had been consistently rebuffed in his efforts to obtain such a guarantee for Israel, whether from NATO, France, or the United States. <sup>183</sup> In fact, due to arms embargoes and a desire to maintain positive relations with Arab states, "Until 1966, the United States refused to supply Israel with aircraft and other important conventional weapons, let alone a nuclear umbrella."<sup>184</sup> Thus, while Ben Gurion would continue to seek a formal security guarantee from the U.S. until he left office in 1963, he recognized that this would be difficult and, more importantly, was not under Israel's control. <sup>185</sup>

As Solingen sums up, when Ben Gurion made the decision to initiate a nuclear weapons program in 1956, he faced a security environment that included

"Conventional Arab military superiority; a conventional arms embargo by major powers since 1950 that applied largely to Israel; extensive Soviet military and political support for Arab regimes; well-articulated commitments by Arab leaders to extirpate Israel from the region; related Israeli anticipation that these leaders would seek nuclear weapons to that effect; Arab states' search for missile and chemical weapons technology; Israel's isolation at the U.N., where oil-rich Arab and Islamic states rallied automatic condemnations of Israel; and Nasser's 1953 closure of the Straits of Tiran."

When taken together, this security predicament made Israeli pursuit of a nuclear weapons capability almost irresistible.

<sup>&</sup>lt;sup>182</sup> Alan Dowty, "Nuclear Proliferation: the Israeli Case," *International Studies Quarterly* 22, No. 1 (March 1978): 88.

<sup>&</sup>lt;sup>183</sup> Cohen, *Israel and the Bomb*, 66.

<sup>&</sup>lt;sup>184</sup> Solingen, *Nuclear Logics*, 191.

<sup>&</sup>lt;sup>185</sup> Cohen, *Israel and the Bomb*, 43.

<sup>&</sup>lt;sup>186</sup> Solingen, Nuclear Logics, 188.

#### 2. Case Overview

Although Israel's Atomic Energy Commission (IAEC) was established in 1952, it was not until Ben Gurion returned to the post of Prime Minister in 1955 (after a two-year absence) that the project began to be directed toward building nuclear weapons. 187 In the wake of President Eisenhower's Atoms for Peace initiative, the United States agreed to sell Israel a small research reactor in 1955; however, the reactor was incapable of producing enough plutonium for nuclear weapons. 188 When IAEC head Ernst-David Bergmann explicitly asked for a larger reactor that would produce substantial quantities of plutonium, U.S. officials flatly rejected the request. 189 As a result, Israel turned to France for its nuclear weapons needs, and began negotiations for the construction of large nuclear reactor in Israel. <sup>190</sup> Israel's motives for seeking nuclear weapons and its relationship with France were both strengthened by the 1956 Suez operation and its aftermath. In fact, French Prime Minister Guy Mollet reportedly felt so guilty about drawing Israel into the affair leading to harsh Soviet and American pressure on the Jewish state—that he reportedly declared "I owe them the bomb, I owe it to them." The Suez affair was also critical in France's decision to start a nuclear weapons program, which in turn facilitated nuclear cooperation with Israel. 192 On October 3, 1957, France agreed to build Israel a large plutonium-producing reactor at Dimona; a secret portion of the deal provided for the French firm Saint Gobain to construct a reprocessing plant at the same

<sup>&</sup>lt;sup>187</sup> Cohen, Israel and the Bomb, 41.

<sup>&</sup>lt;sup>188</sup> Pinkus, 113.

<sup>&</sup>lt;sup>189</sup> Cohen, Israel and the Bomb, 44-45.

<sup>&</sup>lt;sup>190</sup> Pinkus, 117.

<sup>&</sup>lt;sup>191</sup> Ibid, 117-118.

<sup>&</sup>lt;sup>192</sup> Cohen, Israel and the Bomb, 57.

location that would be used to extract weapons grade plutonium from the reactor's spent fuel. 193 Construction began in 1958, and "although Charles de Gaulle halted construction of the plutonium facility in 1960, it was completed with the help of French technicians." 194 Prior to this, France reportedly provided Israel with information on nuclear weapons design, and shared data from a 1960 nuclear test. 195

#### The Search for a Security Guarantee and U.S. Discovery

Around the same time Israel was launching its nuclear weapons program in 1957, events in the Middle East compounded Israeli security concerns, as anti-Israel radicals took control of Syria in a coup, and threatened to do the same in Jordan. In response, Eisenhower sent the Sixth Fleet to Beirut to bolster the Jordanian government, and reassured Israel about the "deep U.S. interest in preservation of integrity and independence of Israel." This was not enough for Ben Gurion, however, and in October 1957 he asked Eisenhower for "American military hardware, a formal U.S. guarantee of Israeli security, and Washington's agreement 'that the NATO commitment should be extended to the Middle East." The U.S. declined to take any of these steps, but continued to assure Ben Gurion of American support for Israel's territorial integrity. While the United States appreciated Israel as a bulwark against Soviet-backed radicalism in the Middle East, it was unwilling to enter into any formal arrangement with Israel that could have obviated the need for

<sup>&</sup>lt;sup>193</sup> Ibid, 59; Cirincione et al, 264.

<sup>&</sup>lt;sup>194</sup> Solingen, Nuclear Logics, 187.

<sup>&</sup>lt;sup>195</sup> Cirincione et al, 264-265.

Douglas Little, "The Making of a Special Relationship: the United States and Israel,
 1957-68," *International Journal of Middle East Studies* 25, No. 4 (Nov. 1993): 565.
 197 Ibid.

nuclear weapons, or even to provide them with any tanks or advanced weaponry. <sup>198</sup> In February 1958, Israel's strategic environment darkened as Syria and Egypt joined to form the United Arab Republic (UAR), stoking Ben Gurion's fears of a "surprise attack by an Arab coalition." <sup>199</sup> The United States intervened in the Middle East yet again in July 1958, sending in 14,000 marines that helped to prevent coups in Lebanon and Jordan that would have threatened Israel. <sup>200</sup> Despite these actions, however, Israeli leaders remained unsure of the American will or ability to preserve Israeli security. After all, even if the U.S. was committed to Israel's security, it was questionable whether U.S. forces could arrive in time to save Israel in the event of a surprise attack. <sup>201</sup>

# The Initial U.S. Response

The U.S. response to Israel's nuclear program began in December 1960 when intelligence officials discovered the Dimona nuclear complex after almost three years of failing to detect the Israeli program.<sup>202</sup> The U.S. immediately recognized that Dimona was likely the centerpiece of a nuclear weapons program; however, when the U.S. asked Ben Gurion to accept IAEA safeguards later that month, he refused, yet agreed to allow visits by scientists from "friendly states" and gave a "categoric assurance" that no nuclear weapons were being developed.<sup>203</sup>

<sup>&</sup>lt;sup>198</sup> Ibid, 566.

<sup>199</sup> Cohen, Israel and the Bomb, 65.

<sup>&</sup>lt;sup>200</sup> Little, 566.

<sup>&</sup>lt;sup>201</sup> Cohen, *Israel and the Bomb*, 65.

<sup>&</sup>lt;sup>202</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 1-4.

<sup>&</sup>lt;sup>203</sup> Cohen, *Israel and the Bomb*, 91-94.

When John F. Kennedy assumed the presidency in January 1961, he became the first U.S. president to be convinced that nonproliferation was a key U.S. interest; according to an aide, nuclear proliferation was President Kennedy's "private nightmare."204 Kennedy viewed Israel as an important test case for his nonproliferation policy—successful Israeli proliferation would not only undermine this policy, it could also lead Germany to develop nuclear weapons, undermining Kennedy's plan for a Multilateral Force (MLF) in Western Europe. 205 While Kennedy wanted to prevent Israel from acquiring a nuclear capability, he had to keep in mind that Israel "enjoyed unique domestic political support in America...without the support of about 80 percent of Jewish voters, he would not have been elected."<sup>206</sup> These were not the only concerns of U.S. policymakers, however. As Secretary of State Rusk informed Kennedy in a memo in January 1961, "Israel's acquisition of nuclear weapons would have grave repercussions in the Middle East, not the least of which might be the probable stationing of Soviet nuclear weapons on the soil of Israel's embittered Arab neighbors." Moreover, as Shalom notes, Israeli proliferation could lead to a laundry list of negative consequences for the U.S:

"First, Israeli nuclear capability would cause substantial damage to the status of the United States and other Western countries in the Arab world. It was assumed that even American opposition to Israel's nuclear activity would not allay the suspicion that the United States was cooperating with them. It was also expected that a nuclear capacity would so enhance Israel's feeling of security and, indeed, superiority over the Arabs, that it might become more aggressive and conduct even more daring retaliatory acts...Finally, it was expected

<sup>&</sup>lt;sup>204</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 5.

<sup>&</sup>lt;sup>205</sup> Ibid 10

<sup>&</sup>lt;sup>206</sup> Cohen, Israel and the Bomb, 100.

<sup>&</sup>lt;sup>207</sup> Memorandum From Secretary of State Rusk to President Kennedy, No. 5, Washington, January 30, 1961, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xvii/17702.htm.

that Nasser might be tempted to perform some action against the reactor. Perhaps the worst-case scenario envisaged the Egyptians attempting to acquire their own nuclear capability."<sup>208</sup>

Responding to these concerns, Kennedy began pressing for a U.S. visit to Dimona in early 1961, and also maintained Eisenhower's policy of refusing to sell Israel the anti-aircraft HAWK missiles they had long been asking for—withholding the sales as piece of leverage to use over the nuclear issue. 209 After months of stalling, Israel allowed U.S. scientists to visit Dimona on May 18, and they found no evidence to contradict the Israeli assertion that Dimona was purely peaceful. However, as Cohen notes, "due to Israeli control of the visit, the CIA doubted the veracity of the AEC report, a pattern that persisted throughout the entire period during which AEC scientists visited Dimona. After December 1960, the intelligence community now held the consistent assessment that Israel was aiming at the bomb and would do everything possible to advance its pursuit."<sup>211</sup> As Kennedy's National Security Advisor McGeorgy Bundy wrote years later, the American visits to Dimona "were not as seriously and rigorously conducted as they would have had to be to get the real story."<sup>212</sup> On May 30<sup>th</sup>, Kennedy met with Ben Gurion face to face in New York to discuss the Dimona issue. The Israeli leader claimed that the complex was for research into desalinization—not nuclear weapons—but he did not fully close off the possibility of weapons development in the future; as he put it, "For the time being the only purposes are for peace...But we will see what happens in the Middle East. It

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<sup>&</sup>lt;sup>208</sup> Zaki Shalom, "Kennedy, Ben-Gurion and the Dimona Project, 1962-1963," *Israel Studies* 1, No. 1 (Spring 1996): 10.

<sup>&</sup>lt;sup>209</sup> Little, 568.

<sup>&</sup>lt;sup>210</sup> Cohen, *Israel and the Bomb*, 107.

<sup>&</sup>lt;sup>211</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 5-6.

<sup>&</sup>lt;sup>212</sup> Ibid.

does not depend on us. Maybe Russia won't give bombs to China or Egypt, but maybe Egypt will develop them herself."<sup>213</sup> Importantly from Kennedy's perspective, Ben Gurion also gave his permission for Kennedy to share the scientists' report to reassure Egypt's President Nasser about Dimona's peaceful purpose.<sup>214</sup> This meeting allowed Israel to avoid a direct confrontation with the United States for the next two years, but this was largely a result of Kennedy's failure to press Ben Gurion on the issue. As Cohen notes, Kennedy "did not ask why Israel needed a plutonium separation plant, or why Israel would invest so much in a large research reactor whose ostensible purpose was only to serve as an interim step to building a nuclear power plant, or why the French-Israeli nuclear deal had been kept secret. Kennedy did not raise these issues, although they were the ones that had led to the confrontations in December and January."<sup>215</sup> Kennedy essentially accepted Ben Gurion's statement at face value (despite countervailing evidence) and declined to threaten any consequences for lack of Israeli compliance on the issue.

By August 1962, the Joint Chiefs of Staff had prepared a memo recommending policy steps to restrain the Israeli nuclear program. Specifically, the memo recommended attempting to persuade Israel, "by all feasible means, official, quasi-official and private," that a weapons capability "would be against the best interests of the Free World, the Middle East and of Israel." The memo also recommended that the U.S. "Take the initiative, by using all available political and

<sup>&</sup>lt;sup>213</sup> Cohen, Israel and the Bomb, 108.

<sup>&</sup>lt;sup>214</sup> Ibid.

<sup>&</sup>lt;sup>215</sup> Ibid, 110.

<sup>&</sup>lt;sup>216</sup> Paper Prepared by the Joint Chiefs of Staff, No. 95, Washington, Undated, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26198.htm.

economic means, while maintaining a creditable US military capability, to resolve the sources of tension in the Middle East."<sup>217</sup>

In the same month that this memo was completed, Kennedy finally agreed to sell HAWK missiles to Israel on two conditions: first, that Israel accept a U.S. plan for solving the Palestinian refugee issue, and second, that they permit "regular visits by Americans to Dimona, where they could judge for themselves whether or not the installation was part of a weapons program." In late 1962, in response to Egyptian military improvements, Kennedy repeatedly assured Israeli Foreign Minister Golda Meir of American support for Israel, writing to her in December that "I think it is quite clear that in case of an invasion, the US would come to the support of Israel," but that he hoped "that Israel would give consideration to our problems on this atomic reactor." In September 1962, American scientists made their second visit to Dimona, again finding no evidence of a nuclear weapons program.

By the end of 1962, then, U.S. policy had hit somewhat of a roadblock. The U.S. was unwilling to provide Israel with the formal alliance it had long desired, and while it had agreed to sell Israel the HAWK missiles, it had only linked this sale to continued American visits to Dimona, which were utterly insufficient to verify the peaceful nature of the Israeli nuclear program. Realizing the inadequate nature of U.S. policy, Kennedy soon made a tougher effort to restrain the Israeli program.

<sup>217</sup> Ibid.

<sup>&</sup>lt;sup>218</sup> Little, 568.

<sup>&</sup>lt;sup>219</sup> Little, 569; Mordechai Gazit, "The Genesis of the US-Israeli Military-Strategic Relationship and the Dimona Issue," *Journal of Contemporary History* 35, No. 3 (July 2000): 415.

<sup>&</sup>lt;sup>220</sup> Cohen, *Israel and the Bomb*, 112.

### U.S. Policy Reappraisal and Kennedy's Warning

After close to two years of minimal pressure, in 1963 President Kennedy exerted the strongest pressure yet on Israel in an effort to bring its nuclear program under control, as "the fear that Israel would soon become a nuclear-weapon state, the Egyptian ballistic missile program, and the consequences of both for U.S. interests led to a new effort to freeze the Israeli nuclear program."<sup>221</sup> Reflecting these fears, on March 26 Kennedy issued a National Security Action Memorandum to the State Department, CIA, and Atomic Energy Commission, directing them "as a matter of urgency," to "undertake every feasible measure to improve our intelligence on the Israeli nuclear program as well as other Israeli and UAR advanced weapon programs" and "to develop proposals for forestalling such programs." On April 2, Kennedy unsuccessfully requested semiannual visits of Dimona from Ben Gurion; the same day he also met with Israeli defense official Shimon Peres, at which time Peres first stated what would become the basis of Israel's ambiguous nuclear policy: "I can tell you most clearly that we will not introduce nuclear weapons to the region, and certainly we will not be the first."<sup>223</sup> In the wake of radical regimes taking power in Syria and Iraq, Peres also asked for advanced weaponry and "a public guarantee that any Arab effort 'to change the present territorial status quo would be met by immediate United States military intervention," a proposal Kennedy rejected for fears of inciting confrontation with the Soviets.<sup>224</sup> On April 17, the Arab Federation

<sup>&</sup>lt;sup>221</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 117.

National Security Action Memorandum No. 231, No. 199, Washington, March 26, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26203.htm.

<sup>&</sup>lt;sup>223</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 119.

<sup>&</sup>lt;sup>224</sup> Little, 570.

unveiled a proclamation "calling for a military union to bring about the liberation of Palestine," leading Ben Gurion to again seek a formal alliance with the United States, as well as U.S. arms supplies.<sup>225</sup>

On May 1st, responding to liberal Senators "attacking the Administration's allegedly pro-Nasser and pro-Arab policy in the Middle East," Kennedy made clear in a White House meeting that his "immediate concern, regardless of the merits of any long-term arguments about the rights and wrongs of the situation, is to take some of the domestic political cutting edge off these Congressional Zionist-inspired attacks." National Security Council staffer Robert Komer suggested, "a more fundamental approach to this problem...some kind of US guarantee in the area, and I gather that this guarantee would probably be for the preservation of the status quo and the peace." Komer continued that "he felt such a guarantee was going to be necessary sooner or later, and that if we extended it sooner we would be better able to exact concessions and agreements from both sides." National Security Advisor McGeorge Bundy noted his agreement with this sentiment, but reminded Komer "that the President's concern was for the more immediate aspects as reflected on the domestic front." Despite Bundy's nudging, Komer persisted in his argument, raising the Israeli nuclear issue and "pointing out how desirable it would be if both sides would agree to renounce involvement in nuclear activity and would further agree to submit to some kind of inspection-policing activity to assure compliance." However, Bundy expressed reservations with this plan, saying he was not supportive of the idea of "signing on to a non-starter." The memorandum also noted that Bundy "has expressed

<sup>&</sup>lt;sup>225</sup> Cohen, Israel and the Bomb, 122-123.

the same thought before by saying the President simply did not believe in laboriously and publicly marching up some steep hill in order to get pushed down." <sup>226</sup>

Despite these reservations, several weeks later the U.S. began developing a plan to do exactly what Komer had suggested—convince Israel and the UAR to enter into an arms control agreement covering nuclear weapons using as a carrot some type of security guarantee for Israel. As the initial proposal noted, "The rise in U.S. domestic pressures against arms escalation in the Near East, particularly against the UAR missile efforts make such an approach increasingly urgent... If the U.S. is to move ahead on a security assurance for Israel, the commitment Israel seeks from us must be made conditional on an Israeli commitment to us not to develop nuclear weapons or offensive missiles; such a commitment may be impossible to secure in the absence of a parallel assurance from the UAR." The same day that this proposal was circulated, Komer sent a memo to President Kennedy informing him that "the negotiations are envisaged as lasting several months, and ending up either in a UAR-Israel arms limitation agreement plus security guarantee, or in a nuclear limitation security arrangement with Israel alone. The form of guarantee envisaged... is an executive agreement or Presidential letter rather than a treaty, essentially to avoid Congressional problems. It of course falls far short of demands in BG's latest letter,

<sup>&</sup>lt;sup>226</sup> Memorandum for the Record, No. 231, Washington, May 1, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26209.htm.

<sup>&</sup>lt;sup>227</sup> Memorandum From the Assistant Secretary of State for Near Eastern and South Asian Affairs (Talbot) to Secretary of State Rusk, No. 247, Washington, May 14, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26209.htm.

especially BG's clear idea that alliance means US arms aid."<sup>228</sup> In other words, the U.S. was prepared to offer Israel carrots, but nothing close to the formal alliance and arms supplies that Israel sought.

On May 18, Kennedy sent his strongest letter yet to Ben Gurion, rejecting an alliance and increased arms sales, and warning that the U.S. "supports Israel in a wide variety of other ways which are well known to both of us...this commitment and this support would be seriously jeopardized in the public opinion in this country and in the West, if it should be thought that this government was unable to obtain reliable information on a subject as vital to peace as the question of Israel's efforts in the nuclear field."229 Kennedy also noted that he could not "imagine that the Arabs would refrain from turning to the Soviet Union for assistance if Israel were to develop a nuclear weapons capability—with all the consequences this would hold. But the problem is much larger than its impact on the Middle East. Development of a nuclear weapons capability by Israel would almost certainly lead other larger countries, that have so far refrained from such development, to feel that they must follow suit." <sup>230</sup> In his May 27 response, Ben Gurion maintained that Israel was not building nuclear weapons, but also reserved the option, emphasizing Israel's security threats and reiterating "we should have to follow developments in the Middle East.<sup>231</sup>

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<sup>&</sup>lt;sup>228</sup> Memorandum From Robert W. Komer of the National Security Council Staff to President Kennedy, No. 250, Washington, May 16, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26209.htm.

<sup>&</sup>lt;sup>229</sup> Cohen, *Israel and the Bomb*, 128.

<sup>&</sup>lt;sup>230</sup> Telegram From the Department of State to the Embassy in Israel, No. 252, Washington, May 18, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26209.htm. <sup>231</sup> Cohen, *Israel and the Bomb*, 130.

Significantly, Ben Gurion reserved the right to close certain facilities and to set the terms of the visits, which would remain annual rather than biannual.<sup>232</sup>

Meanwhile, in June the State Department confirmed that annual visits would be insufficient to verify Dimona's peaceful usage, and set five conditions that would "ensure the visits should be conducted in a manner that would satisfy basic verification requirements," including a June or July 1963 visit, a June 1964 visit, followed by visits every six months. Furthermore, American scientists would need "access to all areas of the site and any part of the complex such as fuel fabrication facilities or plutonium separation plant which might be located elsewhere" and must "have sufficient time at the site for a truly thorough examination." 233

On June 16, 1963, Kennedy sent a letter to Ben Gurion based on these conditions, threatening a potent stick. His message was clear: "if Israel did not allow American visits to Dimona, under Kennedy's tough conditions, he threatened to deprive Israel of the U.S. commitment to ensuring Israel's security." Unfortunately, Ben Gurion resigned the same day the letter was received, leading Kennedy to resend essentially the same letter to his successor—Levi Eshkol—two and a half weeks later. While Eshkol was contemplating his response to the American ultimatum, Kennedy put the Middle East arms control plan into motion, sending John McCloy as a presidential envoy in early July in an attempt to secure two parallel agreements: an Egyptian-Israeli agreement to jointly abstain from developing nuclear weapons and ballistic missiles, and an American-Israeli agreement for some type of security

<sup>&</sup>lt;sup>232</sup> Shalom, 15.

<sup>&</sup>lt;sup>233</sup> Cohen, *Israel and the Bomb*, 133.

<sup>&</sup>lt;sup>234</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 8.

guarantee short of a formal alliance.<sup>235</sup> However, after Nasser responded negatively to the idea, Kennedy canceled the mission before the Israeli leg of the trip. <sup>236</sup> On July 17<sup>th</sup>, Levi Eshkol sent a memo to Kennedy asking for more time to formulate a response to his letter. 237 Two days later, Komer sent a memo to Kennedy noting that "Israel will almost certainly insist on some form of greater security reassurance as its price for not going nuclear... State is extremely chary, arguing that we already guarantee Israel and that anything we do to make this more public will only spook the Arabs, to Israel's disadvantage and our own. This just won't convince the Israelis, however, so we have to look at other options."<sup>238</sup> In other words, the strategic importance of maintaining good relations with the Arab states constrained U.S. policy choices. Several days later, Komer expanded on this idea, noting that the U.S. might be able to weather the harsh Arab reaction to an Israeli security guarantee if it could be painted as a means of achieving "Israeli nuclear self-denial." As a less costly option, Komer raised the possibility of "a public letter to Eshkol (in response to nuclear self-denial assurances), reiterating our deep interest in Israel's security, reminding him your 8 May statement meant US would protect Israel, but telling him we'd have to be on the other side if Israel attacked."<sup>240</sup>

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<sup>240</sup> Ibid.

<sup>&</sup>lt;sup>235</sup> Cohen, *Israel and the Bomb*, 126-7.

<sup>&</sup>lt;sup>236</sup> Ibid 156

<sup>&</sup>lt;sup>237</sup> Memorandum From Robert W. Komer of the National Security Council Staff to President Kennedy, No. 298, Washington, July 19, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26215.htm.

<sup>&</sup>lt;sup>238</sup> Ibid.

Memorandum From Robert W. Komer of the National Security Council Staff to President Kennedy, No. 300, Washington, July 23 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26215.htm.

After more than a month of internal debate and delay over how to respond to the harsh Kennedy's letter, Eshkol wrote back on August 19<sup>th</sup>. He accepted the "demand that American scientists could conduct periodic visits to the Dimona site, including one before the reactor became critical, but left vague his reply on the matter of frequency" and several other of the conditions Kennedy set.<sup>241</sup> Despite Eshkol's vague and largely evasive reply, Kennedy responded warmly, writing to Eshkol "your letter of August 19 was most welcome here."<sup>242</sup> Kennedy made a deliberate decision at this time to delay the question of security assurances, hoping to dissociate it from the nuclear question for the time being.<sup>243</sup> This understanding, vague as it may have been, shaped subsequent U.S. policy toward Israel and "greatly diminished" the American sense of urgency regarding the nuclear issue.<sup>244</sup> Kennedy's refusal to press Israel after a less than adequate reply set a precedent of failing to follow through on coercive threats that would continue throughout the case.

In October, a little more than a month before he was assassinated, President Kennedy officially notified Eshkol of his rejection of a formal security agreement with Israel, but emphasized the U.S. commitment to "the security and independence of Israel" as well as the "will and ability to carry out its stated determination to preserve it."<sup>245</sup> Yet, as Israel defense official Rabin informed Komer, there were

<sup>&</sup>lt;sup>241</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 10.

<sup>&</sup>lt;sup>242</sup> Gazit, 420.

Memorandum of Conversation, No. 303, Washington, July 23, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26215.htm; Memorandum From Acting Secretary of State Ball to President Kennedy, No. 317, Washington, August 23, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26376.htm.

<sup>&</sup>lt;sup>244</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 12.

<sup>&</sup>lt;sup>245</sup> Cohen, Israel and the Bomb, 169-170.

"Three candid reasons why Israel regarded US assurances as not being comparable to our commitments to NATO and other allies. First, they were not against a Communist enemy. The US would fight if their chief opponents attempted aggression, but it might be a different matter where no Communist enemy was involved... Second, we had open formal treaty commitments to our other allies but not to Israel. These open commitments were a stronger deterrent. Third, we did joint planning under our other alliances, and this was essential to make them militarily effective." <sup>246</sup>

Despite not offering a security assurance, Kennedy did take the important step of agreeing to talks with Israel about their arms situation, laying the groundwork for an increased strategic relationship with Israel.<sup>247</sup> In December 1963, the reactor at Dimona began operating.<sup>248</sup>

By taking the possibility of a formal security guarantee off the table, and by failing to press Israel on the vague and inadequate inspection system, by the end of 1963 Kennedy had essentially decided to forego both strong carrots and strong sticks, setting a precedent that would continue until Israel succeeded in developing nuclear weapons in 1967. The refusal to move beyond an informal to a formal alliance for fear of a Soviet and Arab backlash, when coupled with the refusal to take any credible and concrete steps to coerce Israel for fear of domestic backlash, left U.S. nonproliferation policy vis-à-vis Israel in a netherworld with almost zero hopes of reducing Israeli motives for proliferating.

<sup>&</sup>lt;sup>246</sup> Memorandum for the Record, No. 360, Washington, November 14, 1963, U.S. Department of State, *Foreign Relations of the United States*, Kennedy Administration, Volume XVIII, http://www.state.gov/r/pa/ho/frus/kennedyjf/xviii/26382.htm.

<sup>&</sup>lt;sup>247</sup> Gazit, 420.

<sup>&</sup>lt;sup>248</sup> Cohen, *Israel and the Bomb*, 179.

### **Increased Arms Sales and the Push for IAEA Safeguards**

These talks began with the Johnson administration in early 1964, where the first major Israeli request was for the U.S. to sell Israel American-built M-48 tanks, which they apparently viewed as tacit reciprocation for agreeing to continue American visits to Dimona. President Johnson refused, however, because Eshkol would not allow Johnson to reassure Nasser about Israel's nuclear program—Eshkol thought it was in Israel's best interest to keep Nasser guessing for the sake of deterrence, whereas Johnson feared it would lead to a heightened arms race or a preemptive Egyptian attack.<sup>249</sup> As Eshkol explained to Johnson in April, "In view of our excessive vulnerability—the paucity of air fields and the density of population within a very small geographical area—the danger of sudden attack is ever present. The U.S. commitment to halt aggression cannot in itself remove this danger. It is our conviction that the only way to prevent war is for President Nasser to know that Israel possesses adequate deterrent capacity."<sup>250</sup> A little more than a week later, U.S. officials pushed the issue even further, offering to sell Israel the tanks as a carrot in exchange for "an outright commitment not to develop nuclear weapons," an offer Israel rejected.<sup>251</sup> Despite this rejection, however, U.S. policy soon shifted again.

In May, Nasser sponsored the founding of the Palestine Liberation Organization (PLO), a move that increased Israel's sense of vulnerability and prompted Johnson to make the difficult decision between selling Israel tanks and accepting the backlash in the Arab world, or continuing to refuse, which could increase the chances of an all-out Arab assault on Israel that "virtually guaranteed

<sup>&</sup>lt;sup>249</sup> Ibid, 198-200. <sup>250</sup> Ibid, 200.

<sup>&</sup>lt;sup>251</sup> Ibid, 201.

Israeli development of nuclear weapons."<sup>252</sup> In June, a compromise was reached:

Johnson would press West Germany to sell Israel 200 new M-48 tanks, and in return

Eshkol would continue to allow visits to Dimona and allow Johnson to reassure

Nasser about Israel's nuclear program.<sup>253</sup> Again, the U.S. traded away arms for a

weak pledge that did nothing to restrain the Israeli nuclear effort, this time because

the desire to maintain a strategic balance in the Middle East intruded into the process.

Beginning in 1964, however, U.S. officials became increasingly aware that the Kennedy-Eshkol understanding on visits to Dimona was inadequate, leading them to seek alternate methods of bringing Israel's nuclear program under control. Despite the fact that U.S. scientists continued to affirm Dimona's peaceful usage through 1967, it was increasingly apparent beginning in 1964 that the rules Israel had set for the visits made it impossible to truly verify the purpose of Israel's nuclear program. Among other things, Eshkol continually made excuses to prevent scientists from making the biannual visits that would be required for full verification, did not allow scientists to bring any measuring instruments to Dimona, set strict rules for where the scientists could go at Dimona, and did not allow scientists to stay for more than a day. <sup>254</sup> As a State Department memo by George Ball put it in December 1964, "Visits to date have fallen considerably short [of] normal safeguard requirements and at best accomplished only determination [of] nature [of] facilities at site and productive capacity at time of visit. AEC and intelligence community agree...more thorough

<sup>&</sup>lt;sup>252</sup> Little, 573-574.

<sup>&</sup>lt;sup>253</sup> Ibid, 575.

<sup>&</sup>lt;sup>254</sup> Cohen, *Israel and the Bomb*, 176-178. As Cohen later notes (p.188), "fuel from the Dimona reactor could be discharged every six months or less, and subsequently reprocessed to extract plutonium of weapon-grade quality. This was the reason for Kennedy's insistence on semi-annual visits."

inspection imperative."<sup>255</sup> Responding to Eshkol's continued efforts to delay and circumscribe U.S. visits, Ball noted "Our inability [to] fathom Eshkol's arguments for delay naturally heightens our security fears. Eshkol's remark that "we cannot build nuclear weapon in two months" [is] not reassuring in light [of] estimate [of] US experts that if Israel decided to produce weapon following January 1964 inspection, it could produce enough plutonium for one or two nuclear devices by the end of 1965."<sup>256</sup> Adding to U.S. suspicion was the high level of secrecy Israel had maintained, the acquisition of missiles from France capable of carrying a nuclear payload, and statements by Israeli officials that seemed to imply "military planning that includes the use of nuclear weapons."<sup>257</sup>

Recognizing these shortcomings, in early 1965 U.S. officials began steadily pushing Israel to accept full IAEA safeguards at Dimona. In February, after revelations that the U.S. was selling Jordan M-48 tanks had severely angered Israel, the U.S. offered to sell Israel M-48 tanks as a carrot if they would agree to accept IAEA safeguards and pledge not to develop nuclear weapons. However, while Eshkol agreed to pledge not to build nuclear weapons, he refused to accept IAEA

<sup>&</sup>lt;sup>255</sup> Telegram From the Department of State to the Embassy in Israel, No. 113, Washington, December 14, 1964, U.S. Department of State, *Foreign Relations of the United States*, Johnson Administration, Volume XVIII,

 $http://www.state.gov/www/about\_state/history/vol\_xviii/l.html.$ 

<sup>&</sup>lt;sup>256</sup> Ibid.

<sup>&</sup>lt;sup>257</sup> Cohen, Israel and the Bomb, 180-183.

<sup>&</sup>lt;sup>258</sup> Telegram From the Embassy in Israel to the Department of State, No. 167, Tel Aviv, February 28, 1965, U.S. Department of State, *Foreign Relations of the United States*, Johnson Administration, Volume XVIII,

http://www.state.gov/www/about state/history/vol xviii/q.html.

safeguards that would close off the Israeli nuclear option.<sup>259</sup> As one U.S. diplomat observed after visiting Israel in early March,

"All indications are toward Israeli acquisition of a nuclear capability. There is little realization in Israel of the intensity of U.S. opposition to nuclear proliferation. U.S. hesitation and delays in pressing for the recent inspection of the Dimona reactor plus the failure to insist upon a two-day visit have led the Israelis to believe we are not serious... Israeli officials and public appear firmly to believe that the U.A.R. will have a nuclear capability within 5 to 7 years. Planning for Israeli acquisition of a comparable capability is moving forward on this assumption. The Science Attache has calculated that the target date for acquisition of a nuclear weapons capability by Israel is 1968-9. He has discovered information indicating that Israel has already acquired the know-how for Plutonium metal production." <sup>260</sup>

Despite this increasingly worrisome intelligence, however, the U.S. made little attempt to form a stronger policy.

After weeks of failed attempts at convincing Eshkol, the U.S. and Israel signed a "Memorandum of Understanding" on March 10 whereby Israel renounced its opposition to U.S. arms sales to Jordan, and the U.S. "reaffirmed its concern for the maintenance of Israel's security,' and renewed its commitment 'to the independence and integrity of Israel.' In return, 'the Government of Israel... reaffirmed that Israel will not be the first to introduce nuclear weapons into the Arab-Israel area.""<sup>261</sup> Following this vague agreement that did nothing to verifiably halt the Israeli nuclear weapons program, the Johnson administration began to sell arms to Israel at a higher rate than anytime in Israel's history, largely as a carrot designed to "keep up pressure

<sup>259</sup> Ibid.

<sup>&</sup>lt;sup>260</sup> Memorandum From the Director of the Office of Near Eastern Affairs (Davies) to the Assistant Secretary of State for Near Eastern and South Asian Affairs (Talbot), No. 178, Washington, March 5, 1965, U.S. Department of State, *Foreign Relations of the United States*, Johnson Administration, Volume XVIII,

http://www.state.gov/www/about state/history/vol xviii/r.html

<sup>&</sup>lt;sup>261</sup> Cohen, *Israel and the Bomb*, 207.

on Israel not to go nuclear," as Rusk explained to Nasser in March 1965. <sup>262</sup> In May 1965, in reciprocation for the sale to Jordan, the U.S. agreed to sell Israel 210 M-48 tanks, along with a \$34 million credit. <sup>263</sup> Despite previous failures, the U.S. continued its attempt to convince Israel to accept IAEA safeguards at Dimona throughout 1965. In February 1966, during negotiations for selling Israel fighter planes, Secretary of State Dean Rusk turned to the stick, warning Israeli Foreign Minister Abba Eban that "the only major question that could have a disastrous effect on U.S.-Israeli relations was Israel's attitude on proliferation. Israel was apparently following a policy designed to create ambiguity in the Arab world. This also created ambiguity in Washington. Israel should expect the U.S. to be extremely clear and utterly harsh on the matter of non-proliferation. He urged the Foreign Minister not to underestimate the total involvement of U.S.-Israel relations in this matter. <sup>264</sup> Despite Rusk's tough words, however, U.S. actions remained weak and inconsistent, betraying an unwillingness to take any concrete steps to pressure Israel beyond vague warnings.

After months of denying the Israeli request, Defense Secretary Robert McNamara offered to sell Israel the 48 Skyhawk fighter jets as carrots in February in exchange for Israel accepting IAEA safeguards; Israel rejected this linkage, and then instead of withholding the planes, in March a weaker compromise was reached which essentially rehashed the March 1965 pledge that Israel "will not be the first to introduce nuclear weapons" into the Middle East. <sup>265</sup> As State Department officials

<sup>265</sup> Cohen, Israel and the Bomb, 212-213.

<sup>&</sup>lt;sup>262</sup> Little, 575-576.

<sup>&</sup>lt;sup>263</sup> Ibid, 576.

<sup>&</sup>lt;sup>264</sup> Memorandum of Conversation, No. 269, Washington, February 9, 1966, U.S. Department of State, *Foreign Relations of the United States*, Johnson Administration, Volume XVIII, http://www.state.gov/www/about\_state/history/vol\_xviii/za.html.

explained the decision in July 1966, "if Israel is unable to obtain its valid conventional arms requirements, those in Israel who advocate acquisition of nuclear weapons will find a much more fertile environment for their views."<sup>266</sup> In the same month, Secretary Rusk again gave a harsh warning to Israel, informing Israeli ambassador to the U.S. Gideon Rafael that if Israel was not developing nuclear weapons (as they claimed), then it should "get it out of the way by accepting safeguards. He again noted that if Israel is holding open the nuclear option, it should forget US support. We would not be with you, he said."<sup>267</sup> However, Israel continued to refuse full IAEA safeguards, even after the U.S. offered Israel a nuclear desalinization plant in return; thus the flawed annual visits to Dimona continued.<sup>268</sup>

By this point in time, U.S. warnings had almost certainly lost their credibility, as American officials had repeatedly made vague warnings of dire consequences for U.S.-Israeli relations without ever acting upon them. The U.S. failure to link arms sales with any verifiable limits on the Israeli nuclear program compounded problems, but the underlying problem was simple: for a variety of political reasons, the U.S. simply was not willing to offer the carrots (formal alliance) or act upon the sticks (total loss of American support) that would have a chance of reducing Israeli motivations to proliferate.

<sup>&</sup>lt;sup>266</sup> Little 576

<sup>&</sup>lt;sup>267</sup> Telegram From the Department of State to the Embassy in Israel, No. 312, Washington, July 28, 1966, U.S. Department of State, *Foreign Relations of the United States*, Johnson Administration, Volume XVIII,

http://www.state.gov/www/about state/history/vol xviii/zf.html.

<sup>&</sup>lt;sup>268</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 14-15.

#### **Israel Crosses the Threshold**

By the end of 1966, Israel "had completed the development and testing of all the components of its first nuclear device" and the United States had turned to pressuring Israel to sign the newly-formed NPT as its primary strategy for halting Israel's nuclear weapons program.<sup>269</sup> In February 1967, a news report circulated that Israel had conducted an important test for a nuclear device, convincing the United States, Egypt, and the U.S.S.R. that Israel was on the brink of a nuclear weapons capability.<sup>270</sup> In May, Egypt closed the Straits of Tiran, expelled UN peacekeepers from Sinai, and massed its troops on the Israeli border, initiating the crisis that would lead to the Six Day War. On May 17 and May 26, Soviet planes overflew Dimona on a successful reconnaissance mission, helping to trigger the Israeli pre-emptive strike that started the war.<sup>271</sup> On the eve of the war in late May, Israel secretly "improvised and made operational two nuclear devices."<sup>272</sup>

In the wake of its decisive victory in the Six Day War, Israel successfully withstood U.S. pressure to sign the NPT, and in 1969 Israel and the U.S. came to an agreement that would form the basis of Israel's policy of strategic ambiguity, or nuclear opacity. President Nixon promised to halt U.S. pressure on Israel over its nuclear program if the latter would agree to a policy of "'nuclear restraint,' defined as no testing, no acknowledgement, and no display of nuclear weapons." In the end, while the United States clearly failed to prevent Israeli proliferation, consistent

<sup>&</sup>lt;sup>269</sup> Cohen, *Israel and the Bomb*, 232; Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 15.

<sup>&</sup>lt;sup>270</sup> Ginor and Remez, 110-111.

<sup>&</sup>lt;sup>271</sup> Ibid 115-117

<sup>&</sup>lt;sup>272</sup> Cohen, "Israel and the Evolution of U.S. Nonproliferation Policy," 16.

<sup>&</sup>lt;sup>273</sup> Solingen, *Nuclear Logics*, 203.

diplomatic pressure did succeed in avoiding some of its worst consequences by forcing Israel to adopt a secretive, ambiguous nuclear posture. At the same time, Israel's strategic manipulation of their nuclear program played a critical role in fostering the American commitment to arming Israel that persists to this day.

### 3. Analysis

- 1. Strength of United States motivation: Both under Kennedy and Johnson, the United States had a moderately strong motivation to prevent Israeli proliferation. Although an Israeli arsenal clearly did not threaten the United States or its allies, the U.S. was worried about the Arab response, a possible nuclear arms race, the increased chance of superpower confrontation, and the damage Israeli proliferation could do to the newly developing nonproliferation norm as signified by the NPT.
- 2. Asymmetry of motivation favoring the United States: Given the conviction amongst the Israeli leadership (especially Ben Gurion) that their state was constantly under the threat of a surprise attack that could destroy the Jewish state and its people, and that nuclear weapons were the ultimate deterrent and insurance policy to prevent this eventuality, there was a definite asymmetry of motivation favoring Israel at the outset.

Moreover, the U.S. failed to redress this asymmetry because it was unwilling to utilize a combination of carrots and sticks that could have reduced the Israeli motivation. While U.S. policymakers recognized that the best—and perhaps only—way to reduce Israel's motivation and halt its nuclear weapons program would be to provide a formal American security guarantee, they declined to do so for fear of an

Arab and Soviet backlash. Because of this unwillingness, the U.S. initially took the opposite route, as in 1963 Kennedy went as far as threatening to end the informal American commitment to Israel's security if they did not open up their nuclear program to American inspection. However, the U.S. was also clearly hesitant to avoid a direct confrontation with Israel, repeatedly issuing vague threats to Israel to push them to comply with U.S. requests, but then never acting upon these threats when Israel repeatedly failed to be fully compliant. Even when Eshkol failed to accept several of Kennedy's conditions for inspecting Dimona, and when he later refused to accept IAEA safeguards on Israel's nuclear facilities, both Kennedy and Johnson failed to carry through on their threats to downgrade U.S.-Israeli relations; on the contrary, they reacted mildly and, in Johnson's case, even increased arms sales to Israel. The biggest tangible act the U.S. undertook to coerce Israel was withholding arms and military supplies at several points; however, considering that the U.S. had never been a major arms provider to Israel to begin with, it is hard to see how this sanction could have had a decisive effect. In fact, as the situation developed, the U.S. began to see increased arms sales as a nonproliferation tool, when in fact Israel never had any intention of halting its nuclear weapons program.

3. Clarity of American objectives: U.S. leaders made their objective of stopping the Israeli nuclear weapons program clear throughout the case; the problem was simply that Israel had no inclination to comply with this demand, and the United States didn't do enough to alter their decision making calculus. Beginning in 1963, Israeli leaders deliberately introduced ambiguity into the bilateral discussions—promising not to "introduce nuclear weapons" to the region while simultaneously

continuing their program. As their continued efforts to deceive the United States and obstruct American inspections of Dimona illustrate, however, Israeli officials were fully aware that the United States sought to prevent Israel from achieving a basic nuclear weapon capability, not just their open deployment, declaration, and testing.

- 4. Sense of urgency to achieve the American objective: During the seven year period when the United States sought and failed to prevent Israel from acquiring a nuclear weapons capability, there were almost no instances where U.S. officials seemed to act based on a sense of urgency. While Kennedy threatened to end America's commitment to Israel if they did not allow for stringent American inspections in May 1963—a threat that led to a panic in the Israeli government under Eshkol and took Israeli officials weeks to form a response to—this was after more than two years of little to no pressure on Israel. However, after Eshkol responded in a largely evasive manner, Kennedy dropped the issue, cementing the deeply flawed Dimona visit arrangement that continued until Israel successfully built nuclear weapons. After Kennedy's threat, which clearly fell into the 'tacit ultimatum' approach, U.S. policy shifted largely to the 'try and see approach,' where various sets of weaker threats and incentives were offered in succession.
- 5. Adequate domestic political support: Unlike most cases of nuclear nonproliferation, the Israeli case certainly did pose domestic challenges due to Israel's high level of support, both in Congress and the public. In fact, in May 1963, just prior to when Kennedy delivered his ultimatum to Eshkol, a group of U.S. Senators prepared to introduce a resolution calling for a formal alliance with Israel, a challenge Kennedy managed to head off by publicly stating, "We support the security

of both Israel and her neighbors."<sup>274</sup> As noted previously, Kennedy was fully aware that he might not have been elected in 1960 without the overwhelming support he received in the Jewish community. As a result of this strong domestic support for Israel, Kennedy and his Democratic successor, Lyndon Johnson, would likely have been able to enter a formal security arrangement with Israel with little domestic opposition. However, while the United States had legitimate geopolitical reasons to support Israel, namely the Jewish state's opposition to Soviet-backed Arab regimes, it arguably had a stronger interest in restraining Israel—both to maintain relations with oil-producing Middle Eastern states and to avoid a nuclear arms race that could lead to confrontation with the Soviets. As a result, the U.S. focused largely on pressure and threats rather than carrots; it is plausible to argue that strong domestic support for Israel may have convinced U.S. administrations to forego stronger coercive measures against Israel over its nuclear program.

- **6. Usable military options:** Despite the fact that the United States had no formal alliance with Israel, the strong domestic support that Israel enjoyed coupled with important common interests between the two states made military force unthinkable.
- 7. Opponent's fear of unacceptable escalation: In 1963, when Kennedy threatened to deprive Eshkol of the American commitment to Israeli security if he did not accept strict new conditions for inspecting Dimona, he almost certainly roused Israeli fears of unacceptable escalation. Kennedy's ultimatum led to a near-crisis in the Israeli government, with weeks of internal debate in the Israeli cabinet where some advocated rejecting inspections altogether, some advocated complying fully and

<sup>&</sup>lt;sup>274</sup> Little, 571.

Israel's nuclear intentions.<sup>275</sup> Eshkol responded in a vaguely positive manner in order to avert a harsh U.S. response, and this proved to be more successful than he could have possibly imagined, as Kennedy essentially dropped the issue rather than demand clear commitments from the Israeli leader. From this point on, there was little reason for Israel to fear unacceptable escalation; not only was U.S. credibility undermined by their acceptance of the impotent Dimona visitation agreement, but subsequent U.S. threats were largely based on withholding American armaments—something Israel had done without for years. Moreover, U.S. officials soon made it clear they would sell Israel arms regardless of their nuclear program, essentially removing the last piece of leverage the U.S. held over Israel.

**8.** Clarity concerning the precise terms of settlement: There were several junctures when the U.S. proposed clear agreements for bringing Israel's nuclear program under control; for example, the five conditions for inspecting Dimona or the promise of increased arms supplies for accepting IAEA safeguards. The clarity was not the problem; rather, the issue was Israel's refusal to accept these agreements, and the U.S. reluctance to follow through on its vague coercive threats.

### 4. Conclusion

Despite the strong desire to halt a Middle East arms race that could lead to confrontation with the Soviets, the U.S. failed to take the steps necessary to reverse the asymmetry of motivation favoring Israel. Caught between the imperatives of maintaining working relations with the Arab states and maintaining support for a

<sup>&</sup>lt;sup>275</sup> Cohen, *Israel and the Bomb*, 162.

strategic and domestically popular informal ally, U.S. nonproliferation policy vis-à-vis Israel was trapped in an in-between state where the U.S. refused to offer the carrots (formal security guarantee) or threaten the sticks (public abandonment of diplomatic and economic support) that had the potential of reducing Israeli motivation to persist its program. The result was a half-hearted mix of carrots (arms sales) and weak sticks (vague warnings) that did little more than keep the Israeli program clandestine.

# 5. Taiwan: Persistence Pays Off

Reacting to the Chinese nuclear threat and accelerated by the decreasing

American security commitment, Taiwan began to pursue nuclear weapons in the late

1960s. Throughout the 1970s and into the 1980s, the U.S. persistently pressured

Taiwan to halt its suspicious nuclear activities by threatening potent sticks that led to

at least partial Taiwanese compliance, eventually ending the program once and for all

in 1988. Due its concurrent efforts to improve relations with China, U.S. efforts were

aided by the fact that the threats to downgrade relations with Taiwan were in line

with—rather than in conflict with—broader American strategic objectives.

## 1. Motives

After decades of conflict, in 1949 the Chinese Civil War ended as Communist forces gained control of Mainland China and the Nationalists retreated to the island of Taiwan, where they established a government under the leadership of General Chiang Kai-shek. The Nationalists considered this to be the legitimate government of all China, an assertion initially supported by the United States and a majority of the international community, as Taiwan (officially known as the Republic of China) represented China at the U.N. and other international organizations. Taiwan's opposition to Communist China, and the overwhelming military threat it faced from Communist forces, led the United States to conclude a Mutual Defense Treaty with Taiwan in 1954 that committed the United States to come to the defense of Taiwan in the event of an attack.<sup>276</sup> Despite this security guarantee, Taiwan's fears of China

<sup>&</sup>lt;sup>276</sup> Hersman and Peters, 543.

were heightened by Chinese bombings of the Taiwanese-controlled islands of Quemoy and Matsu in 1954 and 1958; both times, it took U.S. intervention to defuse the fighting.<sup>277</sup>

Undoubtedly the most important trigger for Taiwan's nuclear weapons program was China's first nuclear test in October 1964, an event that virtually every discussion of the Taiwanese nuclear program cites as a critical motivating factor. <sup>278</sup> Chiang Kai-shek in particular was shaken by the Chinese test, unsuccessfully urging the United States to preventively attack Chinese nuclear installations.<sup>279</sup> As he warned the United States, "we could wiped out in one attack...an attack on Taiwan would leave the island desolated and U.S. retaliation would be too late." 280 Since the U.S. did not appear willing to take out China's nuclear facilities, and Chiang Kai-shek was unsure of the U.S. "willingness to retaliate" in the event of a nuclear strike on Taiwan, he asked for U.S. military equipment and assistance that would allow Taiwan to do the job itself, which the U.S. rejected. 281 Even in the absence of a Chinese attack, Taiwanese leaders feared China would use its nuclear arsenal to intimidate Taiwan; perhaps even more important, a nuclear China threatened Taiwan's prestige—as Mitchell puts it, "a nuclear PRC may have challenged the government on Taiwan where it hurt the most: on the question of who were the keepers of China's

<sup>&</sup>lt;sup>277</sup> Solingen, *Nuclear Logics*, 100.

<sup>&</sup>lt;sup>278</sup> See, for example, Hersman and Peters, 543; Solingen, *Nuclear Logics*, 103; David Albright and Corey Gay, "Taiwan: Nuclear Nightmare Averted," *Bulletin of Atomic Scientists* 54, No. 1 (January/February 1998), 55; and Derek Mitchell, "Taiwan's Hsin Chu Project: Deterrence, Abandonment, and Honor," in *The Nuclear Tipping Point*, 294.

<sup>&</sup>lt;sup>279</sup> Albright and Gay, 55.

<sup>&</sup>lt;sup>280</sup> Solingen, *Nuclear Logics*, 103.

<sup>&</sup>lt;sup>281</sup> Ibid.

historical great-power status."282 Taiwan was also cognizant of the fact that its own international support would not last; after all, "the world could not ignore a nucleararmed People Republic of China forever, regardless of sentiment or ideology."283

Reacting to the existential threat posed by a Chinese nuclear arsenal, the threat to Taiwanese prestige such an arsenal posed, and exacerbated by the U.S. focus on Vietnam, in 1967 the Taiwanese Defense Ministry and several other officials (notably Chiang Kai-shek's son and future successor, Chiang Ching-kuo) proposed a \$140 million program to develop nuclear weapons for Taiwan.<sup>284</sup>

## 2. Case Overview

To this day, it is unclear whether Chiang Kai-shek explicitly authorized the Taiwanese nuclear weapons program.<sup>285</sup> According to Ta-You Wu, Chiang's science advisor at the time, he rejected the plan due to its high cost and the associated risks of alienating the U.S., concurring with Wu's recommendation. 286 Wu contends that Chiang Ching-kuo (then a defense ministry official) proceeded to start the program without his father's approval beginning in 1969, while some U.S. intelligence sources indicate Chiang Kai-shek was fully aware and supported the nascent program.<sup>287</sup> Regardless of this detail, what is clear is that in 1969 the nuclear weapons program was initiated, nominally under the auspices of the civilian Institute for Nuclear Energy Research (INER), but also with involvement from the military's Chungshan

<sup>282</sup> Mitchell, 296. <sup>283</sup> Ibid, 295.

<sup>&</sup>lt;sup>284</sup> Hersman and Peters, 543.

<sup>&</sup>lt;sup>285</sup> Mitchell, 296.

<sup>&</sup>lt;sup>286</sup> Albright and Gay, 55-56.

<sup>&</sup>lt;sup>287</sup> Solingen, *Nuclear Logics*, 101.

Institute of Science and Technology. As Hersman and Peters note, "while Taiwan's Atomic Energy Council oversaw the ostensibly civilian nuclear power industry, a military officer from the Chungshan Institute involved in the nuclear weapons program served on the council's oversight board, further blurring the line between the civilian and emerging military program. Additionally, many INER staff members were officers in the Nationalist Army." Although Taiwan signed the NPT in 1968, in 1969 INER signed a deal to purchase a heavy water research reactor from Canada that would become the basis of Taiwan's nuclear weapons program. In the same year, the U.S. refused to sell Taiwan a large reprocessing plant that could potentially have been used to produce weapons-usable plutonium.

At the same time as Taiwan's nuclear weapons program was getting underway, international events conspired to increase Taiwan's motivations for pursuing the bomb. In 1971, Taiwan was expelled from the United Nations and the UN recognized the People's Republic of China as the only legitimate Chinese government. President Nixon's trip to China in 1972, and the subsequent Shanghai Communique promising to work toward normalization of relations between the U.S. and China, only compounded Taiwan's insecurity, reinforcing the case for a Taiwanese nuclear arsenal. <sup>292</sup> In 1971, as a result of Taiwan's expulsion from the UN and IAEA, a trilateral agreement between the U.S., Taiwan, and IAEA was negotiated under which the U.S. "became the ultimate legal guarantor of Taiwan's non-nuclear

<sup>&</sup>lt;sup>288</sup> Albright and Gay, 56.

<sup>&</sup>lt;sup>289</sup> Hersman and Peters, 543.

<sup>&</sup>lt;sup>290</sup> Albright and Gay, 56.

<sup>&</sup>lt;sup>291</sup> Mitchell. 298.

<sup>&</sup>lt;sup>292</sup> Hersman and Peters, 544.

status—facilitated by IAEA inspections."<sup>293</sup> In the early 1970s, the IAEA began its inspections of INER facilities, inspections that were hindered by "too few inspection rights, a lack of designated inspectors, and inadequate equipment."<sup>294</sup> Around this time, Taiwan greatly increased its efforts in the nuclear field, purchasing multiple light water reactors for civilian use while the Defense Ministry began its efforts to achieve the ability to separate plutonium for use in nuclear weapons.<sup>295</sup> Based on the size of Taiwan's young program and the purchasing of the Canadian heavy water reactor—which could produce plutonium in sufficient quantities to produce nuclear weapons—a November 1972 U.S. Special National Intelligence Estimate concluded that "Taipei's present intention is to develop the capability to fabricate and test a nuclear device" but noted that sensitivity to American and Chinese reactions would likely keep Taiwan from stockpiling weapons and openly testing them.<sup>296</sup>

# First U.S. Warnings

Raising further U.S. concerns, in late 1972 the U.S. learned that Taiwan was seeking to buy reprocessing equipment from a German company, equipment that could be used to extract plutonium from the heavy water's spent fuel for use in nuclear weapons. Although Taiwan was a formal ally of the United States, U.S. officials feared Taiwanese proliferation would undermine the overall nonproliferation

<sup>&</sup>lt;sup>293</sup> Mitchell, 297-298.

<sup>&</sup>lt;sup>294</sup> Albright and Gay, 58.

<sup>&</sup>lt;sup>295</sup> Hersman and Peters, 544.

<sup>&</sup>lt;sup>296</sup> Taipei's Capabilities and Intentions Regarding Nuclear Weapons Development, Special National Intelligence Estimate, November 16, 1972, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 1A, *The National Security Archive*, <a href="http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm">http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm</a>.

regime, as well as lead to a nuclear showdown between Taiwan and China. Furthermore, as William Burr notes, successive U.S. administrations were "hypersensitive" to Taiwan's nuclear development because "any developments suggesting that the Kuomintang regime was seeking a nuclear capability could cause unwanted tensions in U.S.-China and China-Taiwan relations and, at the worst, put to the test U.S. security guarantees for Taiwan." This was especially worrisome because the United States was currently in the process of attempting to improve relations with China. In early 1973, the U.S. successfully pressured Germany to reject the Taiwanese purchase of reprocessing equipment.

In the same year, Taiwan's heavy water reactor went into operation, a

Canadian model identical to the reactor India used to produce plutonium for its 1974

nuclear test.<sup>301</sup> In order to produce fuel for the reactor, INER began operating a fuel
fabrication plant and "secured approximately 100 metric tons of natural uranium from

South Africa, much more than was necessary to serve the research reactor."<sup>302</sup>

Around this time, the U.S. Embassy in Taipei began to take notice of "the large
acquisition of technology and uranium that had no overt corresponding research
program."<sup>303</sup> Adding fuel to the fire, the U.S. learned in late 1973 that Taiwan was

<sup>&</sup>lt;sup>297</sup> Mitchell, 295.

<sup>&</sup>lt;sup>298</sup> William Burr, "The Taiwanese Nuclear Case: Lessons For Today," Carnegie Endowment for International Peace,

http://www.carnegieendowment.org/publications/index.cfm?fa=view

<sup>&</sup>amp;id=19491&prog=zch,zgp&proj=znpp.

299 Hersman and Peters, 547.

<sup>300</sup> Solingen, *Nuclear Logics*, 101.

<sup>&</sup>lt;sup>301</sup> Albright and Gay, 57.

<sup>&</sup>lt;sup>302</sup> Mitchell, 298.

<sup>&</sup>lt;sup>303</sup> Hersman and Peters, 544.

again attempting to buy a reprocessing plant, this time from companies in France and Belgium.<sup>304</sup>

Reacting to this development, the U.S. sent a study team of scientists and diplomats to Taiwan in October, who were instructed to inform Taiwanese officials that the U.S. suspected Taiwan was "interested in developing a capacity to manufacture nuclear weapons. We consider the ROC desire to establish an independent reprocessing facility as one sign of this intention...Should we have reason to believe that the ROC has moved from consideration of a nuclear weapons program to <u>actual implementation</u>, we would be forced to react. That reaction would be based upon the circumstances at the time." Responding to this vague warning, within weeks, the Taiwanese Foreign Minister informed the U.S. Ambassador that plans to acquire a reprocessing facility had been dropped, and added that Taiwan "had no intention of proceeding in face of US opposition since ROC could not jeopardize nuclear cooperation from US."306 The U.S. Ambassador pressed the issue even further, stating "we wished ROC to observe even stricter standards than other countries and to go out of its way to remove any ambiguity because we could not otherwise ensure the kind of cooperation necessary for the nuclear power program. We were asking not only that ROC desist from seeking reprocessing capability but also that it cease minor activities which implied continuing interest in this

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<sup>304</sup> Burr, "The Taiwanese Nuclear Case: Lessons For Today."

<sup>&</sup>lt;sup>305</sup> Roger Sullivan to Assistant Secretary of State for Far East and Pacific Affairs Arthur W. Hummel, Jr., "Nuclear Study Group Visit to Taiwan," October 29, 1973, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 2B, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

<sup>&</sup>lt;sup>306</sup> U.S. Embassy Taiwan Cable 7051 to State Department, "Fonmin Reaffirms ROC Decision to Refrain From Acquiring Nuclear Reprocessing Plant," November 23, 1973, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 3B, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

direction."<sup>307</sup> The Ambassador also made sure to emphasize carrots for Taiwanese cooperation, including an assured fuel supply for Taiwanese power reactors and aid in research and expedition of additional power reactor acquisitions.<sup>308</sup> In 1974, the CIA judged that "Taipei conducts its small nuclear program with a weapon option clearly in mind, and it will be in a position to fabricate a nuclear device after five years or so."<sup>309</sup> In the same year, as part of its efforts to improve relations with China, the U.S. removed its nuclear weapons from Taiwan.<sup>310</sup> Despite this apparent U.S. policy success, however, the relatively weak threats of reduced nuclear cooperation and additional unspecified consequences for continued Taiwanese nuclear weapons activities proved insufficient to halt the program.

# IAEA Inspections and Increased U.S. Pressure

In fact, largely unbeknownst to the United States, by 1975 Taiwan had already attained a limited reprocessing capability for its nuclear weapons program. By the end of the year, the reactor had already produced spent fuel containing 15 kg of weaponsgrade plutonium, and Taiwan had already built a small "Plutonium Fuel Chemistry Laboratory" to extract this material, with reprocessing equipment provided by the French firm Saint Gobain prior to the French government's rejection of the deal. This laboratory had already produced small amounts of refined plutonium metal, a substance "rarely if ever used in civilian programs." With equipment obtained from companies in France, Germany, and the United States, Taiwan had also built an even

<sup>308</sup> Ibid.

<sup>307</sup> Ibid.

<sup>&</sup>lt;sup>309</sup> Albright and Gay, 57.

<sup>310</sup> Solingen, Nuclear Logics, 103.

smaller reprocessing facility at the "Hot Laboratory." While neither of these facilities produced sufficient quantities of reprocessed plutonium suitable for nuclear weapons, they did indicate an interest in nuclear weapons research, especially when combined with Taiwan's attempts to procure larger reprocessing facilities.<sup>311</sup>

In 1975, Chiang Ching-kuo came to power following his father's death, and by early 1976, "the IAEA suspected that Taiwan's nuclear ambitions might stretch beyond power production." Around this time, the U.S. and IAEA discovered that Taiwan had the capability to produce plutonium metal, and also noticed 500 grams of plutonium were unaccounted for, leading the IAEA to demand to inspect to the "Plutonium Fuel Chemistry Laboratory," which Taiwan initially resisted then allowed in May, rousing further U.S. and IAEA suspicion. The IAEA conducted a major inspection of Taiwanese facilities in July 1976, and found several discrepancies, but couldn't definitively determine whether Taiwan had been secretly reprocessing plutonium. In August, the Ford administration discovered that Taiwan was again attempting to purchase reprocessing technology, this time from a Dutch firm, exacerbating U.S. concerns.

Reacting to this development, in September the State Department instructed the Ambassador in Taipei to deliver a message to Taiwan warning that "we do not accept the argument that a reprocessing facility is required to support the ROC's

311 Ibid.

Hersman and Peters, 544.

<sup>&</sup>lt;sup>313</sup> Albright and Gay, 58.

<sup>314</sup> Ibid.

<sup>&</sup>lt;sup>315</sup> U.S. Embassy Belgium Cable 8149 to State Department, "Nuclear Processing in ROC," August 20, 1976, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 4E, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

nuclear power program." The U.S. Ambassador again warned that Taiwan's lack of compliance would threaten the nuclear cooperation between the two states, and went even further this time, hinting a more potent stick, namely "legislative efforts by the US congress, such as the Symington Amendment, to deny US military and economic assistance to any country that acquires a national reprocessing capability. This reflects the growing sensitivity of congressional and public opinion on the issue of nuclear proliferation and the implications seem clear to my government—should the ROC or any other government seek national reprocessing facilities, this would risk jeopardizing additional highly important relationships with the US." These threats appeared to be successful, as on September 14, Chiang Ching-kuo reiterated that Taiwan's policy was "not to manufacture nuclear weapons" and that "all nuclear research on Taiwan would be directed toward peaceful uses." He pledged that Taiwan would cease all reprocessing activity and end attempts to purchase reprocessing technology abroad.

This time, the threatened stick had increased from a vague warning and a cutoff in nuclear cooperation to a threat to end military and economic assistance as well as nuclear cooperation. However, the Symington Amendment that would trigger

<sup>&</sup>lt;sup>316</sup> State Department Cable 91733 to Embassy Taiwan, "ROC's Nuclear Intentions," September 4, 1976, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 6A, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

<sup>317</sup> Ibid

<sup>&</sup>lt;sup>318</sup> U.S. Embassy Taiwan Cable 6272 to State Department, "ROC's Nuclear Intentions: Conversation with Premier Chiang Ching-kuo," September 15, 1976, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 7A, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

Albright and Gay, 58.

such cutoffs was not yet U.S. law, and the threat soon proved to be insufficient to convince Taiwanese to completely halt their program.

## **Reducing Taiwanese Capabilities**

While the U.S. was pressuring Taiwan to abandon its nuclear weapons efforts, China began to take notice. In the fall of 1976, in a meeting with Australian diplomats, "a Chinese official accused the United States of assisting Taiwan in its pursuit of nuclear weapons, saying that the PRC would hold Washington responsible if Taiwan became a nuclear power." In late 1976 and early 1977, the IAEA uncovered further evidence indicating that Taiwan was secretly reprocessing plutonium from spent fuel rods; making matters worse, Chiang Ching-kuo stated that while "we have the ability and facilities to manufacture nuclear weapons...we will never manufacture them." In January 1977, when the Taiwanese Vice Foreign Minister asked "out of curiosity" what the consequences for violating U.S. nonproliferation guidelines would be, he was informed that the stick would be even greater than previously threatened: "the sanctions would not be confined to nuclear matters but would also affect a wide range of relations, including military cooperation." 322

By March, the U.S. had decided that "determined and far-reaching action is required to eliminate the nuclear proliferation risk we now face on Taiwan," leading

<sup>322</sup> Albright and Gay, 58.

<sup>&</sup>lt;sup>320</sup> Hersman, 544.

<sup>&</sup>lt;sup>321</sup> Albright and Gay, 59.

<sup>&</sup>lt;sup>322</sup> U.S. Embassy Taiwan Cable 332, "US Nuclear Team Visit to ROC—Calls," January 19, 1977, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 10E, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

the U.S. Ambassador to inform Chiang Ching-kuo that President Carter is determined "to do everything in his power to prevent nuclear proliferation." This marked a shift in U.S. policy beyond simply seeking assurances from Taiwan toward verifiably halting Taiwan's nuclear weapons program. The Ambassador informed Chiang that "following a review of all the available evidence, the US is convinced that much of INER's current activities have far greater relevance to a nuclear explosive research program than to the ROC's nuclear power program. This is of greatest concern to us and unless the ROC's nuclear program is significantly modified to eliminate all proliferation risks, we will not be able to continue cooperation on peaceful nuclear energy matters. Other important relationships between us will also suffer." The Ambassador continued that in order "for us to be sufficiently assured about the ROC's nuclear program to permit such cooperation, we desire your government's agreement on the following steps:

(1) Include all present and future ROC nuclear facilities and materials under the US/ROC bilateral agreement for cooperation. (2) Dispose of spent fuel from existing and future reactors under mutually acceptable conditions. (3) Terminate all fuel cycle activities and reorient facilities involving or leading to weapons-usable materials, such as the separation or handling of plutonium and uranium-233, and development of uranium enrichment and heavy water production capabilities. (4) Avoid any program or activity which, upon consultation with the US, is determined to have application to the development of a nuclear explosive capability. (5) Transfer all present holdings of plutonium to the US under appropriate compensatory arrangements. (6) Pending establishment of a mutually acceptable research program, disposition of spent fuel in a mutually acceptable manner, and mutual determination that effective safeguards could be

324 Ibid.

<sup>&</sup>lt;sup>323</sup> State Department Cable 67316 to Embassy Taiwan, "Nuclear Representation to the ROC," March 26, 1977, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 13A, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

applied to the reactor and associated facilities, suspend operation of the TRR and notify the IAEA of your government's action." <sup>325</sup>

With the threat of a cutoff in nuclear cooperation, as well as the even more crucial military, economic, and even diplomatic support, Taiwan complied with the tough American conditions, which went far beyond Taiwan's obligations under the NPT. 326 After all, as Harkavy notes, at the time Taiwan had "no discernible alternatives to U.S. arms sales." Furthermore, "in the 1970s, Taiwan imported over 80 percent of its energy needs, mostly oil, and nuclear power had become critical to the model's viability...The United States was not only Taiwan's main market, source of foreign investment, and provider of weapons and security guarantees, but also its principal supplier of low-enriched uranium for power reactors.",<sup>328</sup> The U.S. forced Taiwan to shut down its heavy water reactor, and "in 1977 every fuel element in the core was radioactively scanned by scientists from Los Alamos National Laboratory. This process verified Taiwan's declaration of the irradiation history of the fuel rods that were in the core, making it likely that any future diversions would be detected. But it did not, and could not, settle questions about past diversions." As part of complying with U.S. requests, Taiwan tore down its reprocessing facilities and converted its "Hot Laboratory" to other uses. 330 By late April 1977, National Security Advisor Zbigniew Brzezinski notified Carter "it is now quite clear that the Taiwanese Institute of Nuclear Energy Research has been ordered to terminate its heavy water

<sup>325</sup> Ibid.

<sup>&</sup>lt;sup>326</sup> Mitchell, 301.

<sup>&</sup>lt;sup>327</sup> Harkavy, 147.

<sup>&</sup>lt;sup>328</sup> Solingen, 112.

Albright and Gay, 59.

<sup>330</sup> Ibid.

reactor project and close hot laboratory. The American effort to crack down on this project clearly yielded its desired results."<sup>331</sup>

In the summer months of 1978, inspectors found what they thought to be evidence of uranium enrichment—the alternate way to produce fissile material for nuclear weapons. While the details are still classified, according to Burr the U.S. again succeeded in bringing Taiwan into line by applying tough pressure; as he puts it, "Chiang knew that the Carter administration was negotiating a normalization agreement with Beijing that would end official U.S.-Taiwan ties, but would still leave the island dependent on U.S. security guarantees and arms sales. Thus, he was constrained to issue a more authoritative and unambiguous statement that his government 'has no intention whatsoever to develop nuclear weapons or a nuclear device.'" In the following years, to further reduce the risk of Taiwanese proliferation, the U.S. converted the heavy water reactor's core to reduce the amount of plutonium it could produce, and arranged for all of Taiwan's spent fuel to be transferred to the United States—a deal which was concluded in 1985.<sup>333</sup>

By the end of 1978, it appeared that the U.S. had finally brought the Taiwanese nuclear program under complete control. By threatening the potent sticks of an end to nuclear, military, economic, and even diplomatic support, the U.S. significantly reduced Taiwanese motives to persist in its efforts. After all, like in the South Korean case, a total withdrawal of American support would leave Taiwan in a position of extreme temporary vulnerability, making the pursuit of nuclear weapons

<sup>&</sup>lt;sup>331</sup> Zbigniew Brzezinski to President Carter, "Weekly National Security Report #11," April 29, 1977, in "The United States and Taiwan's Nuclear Program, 1976-1980," No. 14, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/nukevault/ebb221/index.htm.

<sup>332</sup> Burr, "The Taiwanese Nuclear Case: Lessons For Today."

<sup>&</sup>lt;sup>333</sup> Albright and Gay, 59.

for security purposes potentially self-defeating. However, as the American commitment continued to deteriorate, Taiwan once again began pursuing nuclear weapons covertly, leading to a final American intervention.

#### **Taiwan's Final Attempt**

In 1979, the United States normalized relations with Communist China, an action Taiwan considered "a deep betrayal." As part of this shift, the U.S. also ended the Mutual Defense Treaty with Taiwan, replacing it with the Taiwan Relations Act, which defined threats to Taiwan as "of grave concern" but left the formal U.S. security commitment unclear. 335 In 1982, the joint Sino-U.S. Communique was unveiled, which required the U.S. to gradually decrease its arms sales to Taiwan and heightened Taiwan's fears of American abandonment. 336 Perhaps driven by these concerns, which greatly compounded Taiwanese insecurity, in 1987 INER secretly constructed a "multiple hot cell facility" that could be used for reprocessing plutonium, directly violating Taiwan's agreement with the U.S. 337 Fortunately for the United States, in January 1988 INER deputy director Colonel Chang Hsien-vi defected to the U.S. with the help of the CIA, providing extensive information about the reprocessing facility and Taiwan's nuclear weapons program. 338 Based on this information and a subsequent inspection, the U.S. exerted "intense pressure" on Taiwan to shut down the reprocessing facility and end its nuclear weapons program once and for all, which new Taiwanese President Lee Teng-hui pledged to do in a

<sup>&</sup>lt;sup>334</sup> Mitchell, 295.

<sup>&</sup>lt;sup>335</sup> Hersman and Peters, 545.

<sup>&</sup>lt;sup>336</sup> Solingen, 103.

Albright and Gay, 59-60.

<sup>&</sup>lt;sup>338</sup> Ibid; Mitchell, 300.

"written guarantee" to President Reagan. 339 In addition, in March the U.S. went even further, reportedly threatening to cut off fuel supplies unless Taiwan completely shut down its heavy water reactor and converted it to light water—removing the capability to produce weapons-usable amounts of plutonium. 340 Taiwan complied with all U.S. demands, effectively ending Taiwan's nuclear weapons program. Despite the fact that Taiwan never seemed to have produced enough fissile material for a nuclear bomb, in 1988 U.S. intelligence officials estimated that Taiwan was only "one to two years away from having a new weapons capability." There is no indication that Taiwan has restarted its nuclear weapons program since.

#### 3. Analysis

1. Strength of United States motivation: Due to its concurrent efforts to improve relations with Communist China, the United States was strongly motivated to reverse Taiwan's nuclear weapons program. After all, as Chinese officials had admitted, they would hold the United States responsible for such an eventuality. Furthermore, in addition to the damage it would do to U.S.-Chinese rapprochement and the broader nonproliferation regime, a nuclear-armed (or near-nuclear-armed) Taiwan could have invited a preemptive Chinese attack, which in turn could have forced the United States into a bloody (and potentially nuclear) war.

2. Asymmetry of motivation favoring the United States: Given the apparently weakening U.S. commitment to Taiwanese security, Taiwan had strong incentives to develop a nuclear arsenal to deter aggression from China, whose

<sup>&</sup>lt;sup>339</sup> Mitchell, 300.

Albright and Gay, 60.
 Hersman and Peters, 545.

military was vastly superior numerically and whose government had never abandoned its claim of legal authority over the island as part of its "One China" policy. One indication of the strength of Taiwanese motivation is the fact that despite U.S. interventions in 1973, 1976, 1977, and 1978, Taiwan continued covert efforts at building nuclear weapons on and off until 1988. In the end, however, U.S. officials were able to reduce Taiwanese motivations to pursue the bomb by threatening to end economic, military, and even political support for Taiwan. Without U.S. support, Taiwan would have been exponentially more vulnerable to a Chinese attack. Taiwan repeatedly acceded to U.S. demands, and while they may have continued their nuclear program secretly, they were only willing to pursue it as long as it didn't bring them into open confrontation with the U.S and thereby jeopardize the American commitment to Taiwan's security.

- **3. Clarity of American objectives:** The United States made its objectives very clear in this case, consistently informing Taiwanese officials of exactly what it expected from them in order to resolve the nuclear issue.
- 4. Sense of urgency to achieve the American objective: Each time the U.S. received intelligence indicating Taiwanese activity in the nuclear weapons realm, the United States responded promptly, reflecting a definite sense of urgency to achieve the objective of halting Taiwan's program.
- 5. Adequate domestic political support: There was indeed adequate domestic political support for preventing Taiwan from developing nuclear weapons. In fact, the passage of the Symington Amendment by Congress in 1976 considerably strengthened the U.S. government's hand, indicating to Taiwan that they would face

sanctions in the military and economic—not just nuclear—realms if they did not cooperate. Furthermore, the amendment made such sanctions *automatic*, and not subject to discussion or a potentially sympathetic president's discretion.

- **6. Usable military options:** Due to the formal (and later informal) alliance between the two states, military force was clearly not a usable option.
- 7. Opponent's fear of unacceptable escalation: The fear of unacceptable escalation was almost certainly instrumental in the Taiwanese decisions to submit to U.S. demands at various points between 1973 and 1988. Losing military and economic aid from the United States was clearly an unacceptable outcome—especially while Taiwan did not yet possess nuclear weapons—and like in the South Korean case, the U.S. had probably strengthened its credibility by already signaling a willingness to rethink its alliance commitments. The fact that Taiwan continued its program covertly from 1973 to 1988—despite always nominally agreeing to U.S. demands—can perhaps be explained as an attempt to hedge its bets in an attempt to prepare for the future possibility of the U.S. abandoning their commitment to Taiwan.
- 8. Clarity concerning the precise terms of settlement: The multiple settlements arrived at between the U.S. and Taiwan were generally clear. Problems only arose when Taiwan willingly chose to ignore the terms of previous settlements and continue its nuclear weapons activities covertly. There is no evidence of Taiwanese nuclear weapons activities since 1988.

## 4. Conclusion

The ultimately successful use of coercive diplomacy against Taiwan was characterized the utilization of potent sticks and persistent efforts to bring the Taiwanese problem under control. Each of the several times the U.S. discovered new Taiwanese nuclear weapons activities, it reacted promptly and threatened increasingly strong penalties—effectively communicating to Taiwan how motivated the U.S. was to prevent a Taiwanese nuclear weapons capability and reducing the motivation of Taiwan to persist in its program by threatening such high costs. Similar to the South Korean case, the U.S. was able to credibly threaten Taiwan with potent sticks since such measures in fact reinforced (rather than cut against) the broader American objective of improving relations with Communist China. It was not simply that the U.S. held great leverage over Taiwan, but also that the U.S. was willing to threaten using it because of the prevailing strategic objective of rapprochement with China—an objective that Taiwanese nuclear arsenal would have seriously hindered.

# 6. South Africa: Too Little Too Late

The combination of international isolation due to apartheid and the growing Soviet-Communist influence in Sub-Saharan Africa led South Africa to begin pursuing nuclear weapons in the early 1970s. The U.S. made no effort to restrain the South African program before 1977, and when the U.S. finally did react, growing opposition to apartheid coupled with significant American strategic interests in South Africa greatly constrained U.S. policy, as the U.S. offered no carrots, relied on weak sticks, and failed to reduce South African motivations to develop the bomb.

## 1. Motives

Beginning with the election of the Nationalist Party in 1948, South Africa began to legally institutionalize its longstanding system of racial separation and discrimination—known as apartheid—whereby the white minority subjected and disenfranchised the black majority. Despite the international opprobrium directed at its racist policies in the UN, throughout the 1950s and much of the 1960s South Africa maintained strong relationships with the United States and Western Europe, owing largely to its strategic geographical location, its vast mineral resources (including uranium used for the U.S. and U.K. nuclear weapons programs), and its strong opposition to the spread of communism.<sup>342</sup> In this period, South Africa made a strong effort to forge formal security arrangements with Western nations, including a failed attempt at joining NATO.<sup>343</sup> The best South Africa could come up with,

<sup>&</sup>lt;sup>342</sup> Reiss, Without the Bomb, 173.

<sup>&</sup>lt;sup>343</sup> William Long and Suzette Grillot, "Ideas, Beliefs, and Nuclear Policies: The Cases of South Africa and Ukraine," *Nonproliferation Review* 7, No. 1 (Spring 2000): 30.

however, was the 1955 Simonstown Agreement, whereby the British Navy was allowed a base near Cape Town in return for Britain's promise to sell weapons and munitions to South Africa.<sup>344</sup>

An important turning point in South Africa's international relations occurred in March 1960, when South African government forces killed 69 unarmed demonstrators in Sharpeville, leading to strong international condemnation and increased internal resistance, as the Pan African Conference and African National Congress formally adopted violence as a component of their strategy. 345 Largely as a result of the Sharpeville Massacre, in early 1961 South Africa was "forced to withdraw from the British Commonwealth."346 Soon thereafter, the Organization of African Unity was established, and in 1963 the UN instituted a voluntary arms embargo against South Africa, an embargo that was largely enforced by both the United States and Great Britain, increasing South African insecurity and leading to a substantial growth in South Africa's native defense industry. 347 Around this time, as Meyer notes, "any notions South African leaders may have harbored about being part of a greater 'white commonwealth'—providing diplomatic and security guarantees were called into question." <sup>348</sup> In the late 1960s, in an attempt to ameliorate its isolation, South Africa made largely unsuccessful attempts to improve relations with other African states, including a 1970 offer to sign a nonaggression pact with any willing government.<sup>349</sup>

<sup>344</sup> Ibid.

<sup>&</sup>lt;sup>345</sup> Ibid, 29.

<sup>&</sup>lt;sup>346</sup> Reiss, Without the Bomb, 174-5.

<sup>&</sup>lt;sup>347</sup> Harkavy, 145.

<sup>&</sup>lt;sup>348</sup> Meyer, 117.

Reiss, Without the Bomb, 174-5.

In the early 1970s, South Africa's international isolation continued to grow. By 1972, South Africa "had decreased the number of international organizations in which it participated from forty to two." <sup>350</sup> Due to the growing Soviet support for African liberation movements and growing Soviet influence in newly independent African states, in 1971 South African leaders (particularly Defense Minister P.W. Botha) began to fear a Soviet-backed "total onslaught" aimed at destroying the white South African government, an attack Botha and the head of the South African Defense Forces felt was inevitable. 351 Like Israel, South Africa feared "wholesale massacres, perhaps of genocidal proportions," could occur following defeat. These fears persisted despite the low likelihood of Soviet attack and the fact that South Africa was militarily superior to any plausible coalition of African states.<sup>353</sup>

Driven by these inflated perceptions of security threats, in the early 1970s South Africa began exploring nuclear weapons. As Purkitt and Burgess note, psychological factors, "including apartheid leaders' extreme sense of nationalism, a laager (or 'circle the wagons') complex, and fear of onslaughts by Soviet-backed communists and black nationalists," played a large role in this decision. 354 While South African leaders did not envision using nuclear weapons on the battlefield, they felt that their possession of such weapons would help "to 'blackmail' the West

<sup>&</sup>lt;sup>350</sup> Helen Purkitt and Stephen Burgess, "Correspondence: South Africa's Nuclear Decisions," International Security 27, No. 1 (Summer 2002): 187,

<sup>351</sup> Richelson. 244.

<sup>&</sup>lt;sup>352</sup> Harkavy, 143.

<sup>&</sup>lt;sup>353</sup> Peter Liberman, "The Rise and Fall of the South African Bomb," *International Security* 26, No. 2 (Fall 2001): 46.

354 Purkitt and Burgess, 187.

(especially the United States) into tacitly supporting its security, or at least not abandoning it wholly to its fate." <sup>355</sup>

## 2. Case Overview

South Africa's nuclear program began in 1948 with the founding of the Atomic Energy Corporation (AEC) to assess the country's vast uranium resources.<sup>356</sup> Due to these resources, starting in the 1950s the U.S. began extensive cooperation with South Africa on nuclear research and energy. In 1957, South Africa and the U.S. signed an agreement whereby the U.S. provided South Africa with the Safari-1 research reactor and enriched uranium fuel; the reactor went into operation in 1965 under full IAEA safeguards. 357 Because of its uranium resources, South Africa was asked by the U.S., Canada, and Great Britain to help found the IAEA, and was rewarded with a position on the organization's Board of Governors. 358 Between 1968 and 1970, South Africa considered signing the NPT and then rejected the treaty, ostensibly due to dissatisfaction with clauses related to the superpowers disarming, the perceived discrimination against non-nuclear states, the intrusive safeguards, and "the absence of guarantees for the sharing of benefits from peaceful nuclear explosions and for the unhampered commercial and technological development of nuclear energy." South Africa also claimed that the NPT's full-scope safeguards would endanger the security of the new uranium enrichment process South Africa

<sup>355</sup> Long and Grillot, 27.

<sup>&</sup>lt;sup>356</sup> Cirincione et al., 409.

<sup>&</sup>lt;sup>357</sup> Frank Pabian, "South Africa's Nuclear Weapon Program: Lessons For U.S. Nonproliferation Policy," *Nonproliferation Review* 3, No. 1 (Fall 1995): 2.

<sup>358</sup> Reiss. *Without the Bomb*, 183.

<sup>&</sup>lt;sup>359</sup> Ibid, 188.

was developing for commercial usage.<sup>360</sup> In 1970, after rejecting the NPT, Prime Minister John Vorster "invited collaboration by 'non-Communist countries'" in developing the technology; he also declared that while South Africa's nuclear program was exclusively peaceful for the time being, it "would not be limited to promotion of the peaceful application of nuclear energy."<sup>361</sup>

Ostensibly to showcase this new technology, South Africa began construction of a uranium enrichment facility (called Y Plant) at Valindaba, this plant in turn "made possible the manufacture of weapons-grade uranium outside international inspection and control." In March 1971, the Minister of Mines authorized research into peaceful nuclear explosives (PNE), supposedly for commercial purposes. As Liberman notes, however, "the South African leadership knew that a successful PNE program would generate a de facto nuclear weapons capability." After three years of research, in May 1974 the AEC conducted a successful non-nuclear test of its guntype design, and Prime Minister Vorster authorized the construction of PNE device and the development of a test site in the Kalahari desert. In the same year, Y Plant began operating, and a CIA report responded to a South African nuclear official's remark that "South Africa now has the capability to construct an atomic bomb" by concluding that "South Africa is not currently in a position to produce nuclear

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<sup>&</sup>lt;sup>360</sup> Richard Betts, "A Diplomatic Bomb For South Africa?" *International Security* 4, No. 2 (Autumn 1979): 96.

<sup>&</sup>lt;sup>361</sup> Purkitt and Burgess, 187-188.

<sup>&</sup>lt;sup>362</sup> Long and Grillot, 29.

<sup>&</sup>lt;sup>363</sup> Zondi Masiza, "A Chronology of South Africa's Nuclear Program," *Nonproliferation Review* 1, No. 1 (Fall 1993): 36.

<sup>&</sup>lt;sup>364</sup> Liberman, 50-51.

<sup>&</sup>lt;sup>365</sup> Richelson, 244-245.

weapons...[but] a crude fission device could be produced within this decade."<sup>366</sup> Two months later in September, a U.S. intelligence estimate noted "South Africa probably would go forward with a nuclear weapons program if it saw a serious threat from African neighbors beginning to emerge."<sup>367</sup>

Beginning in 1974, South African leaders began to perceive just such a threat emerging. In April, Portugal abandoned its African colonies in Angola and Mozambique. To South Africa, this meant that "the *cordon sanitaire* of white rule to the North was fast disappearing," exacerbated by the recognition of "the increasingly inevitable defeat of Ian Smith's white Rhodesians, outnumbered twenty-five or more to one by black Zimbabweans." In the same year, an attempt was made to expel South Africa from the UN; however, the U.S., U.K. and France vetoed, blocking this attempt. In March of 1975, the Angolan civil war broke out, with the Soviet Union backing the newly established Marxist government and South Africa intervening to support anti-government rebels; by October, Cuba had dispatched fifty thousands troops to support the government against South Africa, and a Marxist regime had taken control in Mozambique as well. In Meanwhile, Britain terminated the

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<sup>&</sup>lt;sup>366</sup> Office of Scientific Intelligence, Central Intelligence Agency, "South Africa Not Currently in Position to Build Nuclear Weapons," *Weekly Surveyor*, July 22, 1974, in "U.S. Intelligence and the South African Bomb," No. 7, *The National Security Archive*, www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm.

<sup>&</sup>lt;sup>367</sup> Director of Central Intelligence, Memorandum, "Prospects for Further Proliferation of Nuclear Weapons," September 4, 1974, in "U.S. Intelligence and the South African Bomb," No. 8, *The National Security Archive*, www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm.

<sup>&</sup>lt;sup>368</sup> David Fischer, "South Africa," in *Nuclear Proliferation After the Cold War*, 214.

Reiss, Without the Bomb, 176.

<sup>&</sup>lt;sup>370</sup> Reiss, *Bridled Ambition*, 8.

Africa's intervention in Angola; this all served to reinforce the South African regime's sense of insecurity and "betrayal." Reflecting these fears was a March 1975 memo drafted by South African Lt. Gen. R.F. Armstrong, arguing for the development of nuclear weapons in order to counter the threat "that a hostile African nation might acquire a nuclear weapon from China, and that a United States pursuing East-West détente could not be counted upon to come to South Africa's aid." While not the same rationale that drove South Africa's development of nuclear weapons, the memo nonetheless reflected the growing insecurity and paranoia in the South African military establishment at the time.

## **U.S. Anti-Apartheid Pressure**

Making matters worse, in 1975 a campaign by congressional leaders opposed to apartheid led the Ford administration to cancel its nuclear fuel shipments for South Africa's Safari-1 reactor; the next year similar pressure led the U.S. to withdraw its bids to construct two nuclear power plants in South Africa. The Ford administration had initially argued against cutting off the fuel shipments, since this could encourage the South Africans to turn their own pilot plant for low enrichment toward high enrichment—in order to run the research reactor—thus giving them unsafeguarded weapons-grade uranium. South Africa's international isolation was heightened in April, when the Ford administration officially endorsed majority rule in South Africa for the first time; things got even worse in June 1976, when 176 black

<sup>&</sup>lt;sup>371</sup> Pabian, 3.

<sup>&</sup>lt;sup>372</sup> Verne Harris, Sello Hatang, and Peter Liberman, "Unveiling South Africa's Nuclear Past," *Journal of Southern African Studies* 30, No. 3 (September 2004): 463

Liberman, 69.

<sup>&</sup>lt;sup>374</sup> Betts, 112.

South Africans were killed during a riot at Soweto, leading to "worldwide censure of the Republic's racial policies." As Reiss notes, "this reaction, coupled with the general hostility toward South Africa, moved Pretoria to inform the country that in the event of a military conflict it would not be supported by the West. The Republic's absence of allies, and the fear of possible aggression from neighboring states simultaneous with internal turmoil, led the government to outline a 'total national strategy' to mobilize the country's resources for defense."

However, despite increased U.S. opposition to South Africa's racial policies, policymakers recognized that the U.S. still had important interests in South Africa that depended on maintaining some modicum of working relations. As a 1975 State Department report noted:

"The two areas in Sub-Saharan Africa of most strategic concern to us are South Africa and the Horn of Africa. The sea lanes around the Cape of Good Hope are used and will continue to be used by both naval vessels and jumbo tankers carrying oil from the Middle East to Western Europe and to a limited extent to the US. The monitoring of these sea lanes and the ability in extremis to interdict traffic to and from the Indian Ocean is important to us. As our naval activity in the Indian Ocean expands, the US Navy would find it convenient, though not essential, to make use of South Africa's ports for purposes of naval ship visits, preventive maintenance and emergency repairs...Finally, throughout Sub-Saharan Africa, we have a broad negative interest in impeding the Soviet Union, the PRC and unfriendly Arab nations from further extending their political influence and in obtaining additional access to military facilities."

<sup>&</sup>lt;sup>375</sup> Reiss, Without the Bomb, 177.

<sup>&</sup>lt;sup>376</sup> Ibid

<sup>&</sup>lt;sup>377</sup> Action Memorandum From Deputy Assistant Secretary of State For African Affairs (Mulcahy) and Director of Policy Planning (Lord) to Secretary of State Kissinger, No. 29, Washington, June 27, 1975, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-6, www.state.gov/r/pa/ho/frus/nixon/e6/67203.htm.

The report also noted that the security of American economic interests in Sub-Saharan Africa depended upon continuing to "exercise restraint in our relations with the Government of South Africa" and recommended that the U.S. "should give priority attention to developing stronger bilateral relationship with key African countries...those that possess resources we want, where we have large or significant investment, or which accord us landing rights and use of their ports or provide us with useful strategic facilities. In terms of these specific interests, South Africa and Nigeria are far and away the most important countries to us in Sub-Saharan Africa." The report continued, "given South Africa's political isolation and its government's desire to strengthen its ties to the US, we believe our interests there are secure so long as the present regime is in power." In terms of military relations with South Africa, the report recommended that the U.S. continue its "policy of restraint with respect to military links with the Republic of South Africa. To enter into a closer military relationship with South Africa would be viewed by black African countries as an embrace of apartheid. It might produce economic retaliations against US firms and would almost surely provoke black African countries to deny us facilities which they now make available to use. It might also open up opportunities for the Soviets and Chinese to expand their military presence in black Africa." This middling of policy of restraint toward South Africa was deemed essential for "protecting our conflicting interests in black and white Africa" and meant that the US "should make it clear that while we are not going to support certain moves to ostracize or impose sanctions against the Republic of South Africa, neither do we feel compelled to serve as South Africa's defenders in the international arena."<sup>378</sup>

<sup>378</sup> Ibid.

In September, a CIA assessment noted that despite strong evidence of South African interest in nuclear weapons, "there is no convincing evidence that nuclear weapons actually are being developed at this time." Two months later, Jimmy Carter was elected president, heightening South African fears of abandonment. Carter was known for his strongly anti-apartheid views, and his administration's "professed absence of 'an inordinate fear of communism' signaled to Pretoria that it could no longer hope to win sympathy in Washington by portraying itself as the last anticommunist bastion in southern Africa." In June 1977, South Africa was kicked off the IAEA's Board of Governors, while India (who also had not signed the NPT and had conducted a nuclear test in 1974) was not. In the same year, "the United States, Britain, France, Canada, and West Germany formed a 'Contact Group' to push Pretoria's withdrawal from Namibia and manage that country's transition to independence." By June of 1977, South Africa had finished designing its first guntype nuclear device.

Despite South Africa's continued advances in the nuclear realm, however, by mid-1977 the U.S. had still not directly engaged South Africa on the issue, largely because of the lack of a smoking gun proving that South Africa indeed sought nuclear weapons. Reflecting the policy of "restraint" the U.S. had long maintained toward South Africa as a means of securing strategic U.S. interests in the region, the U.S. had

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<sup>&</sup>lt;sup>379</sup> Office of Scientific Intelligence, Central Intelligence Agency, "South Africa Again Rumored to be Working on Nuclear Weapons," *Weekly Surveyor*, September 13, 1976, in "U.S. Intelligence and the South African Bomb," No. 14, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm.

Reiss, Without the Bomb, 177.

<sup>381</sup> Liberman, 69.

<sup>&</sup>lt;sup>382</sup> Reiss, Bridled Ambition, 9.

<sup>&</sup>lt;sup>383</sup> Masiza, 38.

essentially ignored repeated statements by South African leaders hinting at a nuclear weapons program; along with the unsafeguarded uranium enrichment technology that South Africa had publicly stated it was developing. Meanwhile, growing antiapartheid pressure in the U.S. had increased South African isolation as the U.S. cut off nuclear fuel shipments and finally endorsed majority rule. In July, however, new intelligence would finally force the United States to act.

#### The Kalahari Test Confrontation

On July 30, 1977, Soviet satellites detected that South Africa appeared to be preparing a nuclear test site in the Kalahari Desert. One week later, the Soviets informed President Carter of this development; two days later, the Soviet news agency reported this development to the world, and the U.S. confirmed the Soviet assessment with its own satellites.<sup>384</sup> American intelligence officials were surprised by this discovery, since they thought South Africa was still one to four years away from a nuclear weapons capability.<sup>385</sup> In retrospect, however, this estimate was correct. South Africa had not yet begun producing weapons-usable highly enriched uranium; thus, the Kalahari test was planned to be of the 'cold' variety—that is, without a uranium core in the device.<sup>386</sup> The Carter administration responded vigorously to the planned test, enlisting the support of France, Britain, and West Germany—all of whose leaders exerted diplomatic pressure on South Africa to cancel the test between August 14<sup>th</sup> and the 21<sup>st,387</sup> While it remains unclear what exactly the

<sup>&</sup>lt;sup>384</sup> Richelson, 278.

<sup>&</sup>lt;sup>385</sup> Reiss, Without the Bomb, 186.

<sup>&</sup>lt;sup>386</sup> Masiza, 38.

<sup>&</sup>lt;sup>387</sup> Betts, 105.

United States threatened, it is known that France threatened "to break diplomatic relations and terminate its assistance in constructing the nuclear power plants that it had sold South Africa—a sale for which the French had taken some flak." Other threats included trade sanctions and the additional French threat that it would refuse to even sell South Africa spare parts for military supplies already provided. 389

Carter demanded a set of written assurances from Prime Minster Vorster, which he acceded to. Vorster pledged that South Africa did "not have and not intend to develop nuclear explosive devices for any purpose either peaceful or as a weapon, that the Kalahari test site...[was] not designed to test nuclear explosives and that no test [would] be taken in South Africa now or in the future." After Vorster announced in October that he was "not aware of any promise that I gave to President Carter," U.S. officials responded by publicizing the written pledge Vorster had made; as Betts notes, however, "the letter did not constitute a legal agreement, and Vorster's own words suggest the South Africans did not feel irrevocably bound by the assurance." In the wake of the aborted test, a U.S. intelligence estimate concluded, "the South African government plans to proceed through the various stages of a nuclear weapons program, including the eventual testing of a weapon."

South African leaders were surprised by the harsh reaction to their test preparations. After all, India had tested a PNE in May 1974 without "any kind of

<sup>388</sup> Richelson, 281.

<sup>&</sup>lt;sup>389</sup> Betts, 102.

<sup>&</sup>lt;sup>390</sup> Fischer, 209.

<sup>&</sup>lt;sup>391</sup> Betts, 105-106.

<sup>&</sup>lt;sup>392</sup> Director of Central Intelligence, Interagency Assessment, "South Africa: Policy Considerations Regarding a Nuclear Test," August 18, 1977, in "U.S. Intelligence and the South African Bomb," No. 18, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm.

immediate punishment or concrete penalties."<sup>393</sup> In response to South Africa's planned nuclear test, the UN arms embargo was made mandatory in November 1977. Reacting to these developments, Prime Minister Vorster determined that South Africa would have "no alternative but to develop a nuclear deterrent."<sup>394</sup> At this point, he ended the PNE program and officially directed the nuclear explosives program toward military uses.<sup>395</sup> In other words, despite the assurances Vorster had given the U.S, by further underscoring South Africa's isolation rather than ameliorating it, the sticks the U.S. and other Western states had threatened had in fact *increased* South Africa's motivation for developing the bomb.

#### **Failed Push for NPT Ratification**

Despite increasingly strained relations between the two states because of apartheid and the aborted nuclear test, the U.S. government nonetheless "opposed a complete ban on nuclear cooperation with South Africa" in order to preserve leverage that could be used to gain South African adherence to the NPT. As part of a diplomatic offensive to achieve this goal, in late 1977 the Carter administration said it would suspend the "contract to provide low-enriched uranium to the Koeberg reactors unless South Africa acceded to the NPT." Coupled with this stick, in order to reassure South Africa that it would indeed resume fuel shipments if South Africa complied, the U.S. government voted against U.N. resolutions mandating a total ban

<sup>&</sup>lt;sup>393</sup> Reiss, *Bridled Ambition*, 31.

<sup>&</sup>lt;sup>394</sup> Pabian, 3.

<sup>&</sup>lt;sup>395</sup> Liberman, 53.

<sup>&</sup>lt;sup>396</sup> Pabian, 4.

<sup>&</sup>lt;sup>397</sup> Paul, 114.

on nuclear cooperation with South Africa.<sup>398</sup> Strengthening the U.S. position, in March 1978 Congress passed the Nuclear Nonproliferation Act (NNPA), which prohibited "the transfer of nuclear technology to countries lacking full-scope IAEA safeguards. The NNPA was also retroactively applied to all previous agreements and contracts."<sup>399</sup> This officially cut off South Africa's only reliable fuel supply, forcing them to build several new expensive installations necessary to fabricate their own nuclear fuel. <sup>400</sup> As Paul notes, South Africa viewed this act as a "unilateral abrogation," and responded (as the Ford administration had predicted in 1975) by accelerating its own production of highly enriched uranium, much of which would be diverted for use in nuclear weapons. <sup>401</sup> Just like the pressure exerted over the aborted nuclear test, this stick proved to be counterproductive by heightening the sense of isolation that led South Africa to pursue nuclear weapons in the first place.

By late 1978, it was clear that despite strenuous diplomatic efforts, the U.S. had failed to convince South Africa to join the NPT and accept full safeguards. For one thing, the South African government believed that even if it joined the NPT, domestic political sentiment in the U.S. would make it difficult for the U.S. government to resume nuclear cooperation; as a result, South African leaders concluded that "'Pretoria's accession to the NPT without fundamental political reform at home would not gain South Africa international acceptance' or an end to

<sup>&</sup>lt;sup>398</sup> Betts, 113.

<sup>&</sup>lt;sup>399</sup> Pabian, 4.

<sup>400</sup> Ibid.

<sup>&</sup>lt;sup>401</sup> Paul, 114.

nuclear sanctions.<sup>3,402</sup> As a 1981 internal South African memo explained in retrospect, in June 1978 it was:

"Abundantly clear that the United States would not supply the fuel in question unless South Africa acceded to the NPT and subjected all its nuclear facilities and activities to international safeguards. More restrictive conditions were thus imposed unilaterally by the United States after conclusion of the contract...South Africa has no hope of any assistance from the United Nations in case of attack. On the contrary, it is continually being threatened with action under Chapter VII of the Charter of the United Nations. While this state of affairs continues, South Africa cannot in the interest of its own security sign the NPT and thus set the minds of its could-be attackers at rest, allowing them to proceed freely with their plans against us." "403"

Meanwhile, in January 1978 the Y Plant had begun producing highly enriched uranium for use in nuclear weapons. 404 Reflecting the growing tension in relations between South Africa and the U.S., in April South Africa "expelled three American diplomats who were alleged to have used the defense attaché's plane to take aerial photographs of 'strategic installations,'" including the Y Plant. 405 When former Defense Minister P.W. Botha succeeded Vorster as Prime Minster in September 1978, he created a committee of high-ranking cabinet officials to examine South Africa's nuclear weapons policy. 406 South Africa was barred from participation in the IAEA General Conference in 1979 due to its lack of NPT membership and full scopesafeguards, despite the fact that the conference took place in India, a state that had conducted a nuclear test in 1974 and was also not an NPT member. 407

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<sup>402</sup> Liberman, 69.

<sup>&</sup>lt;sup>403</sup> Pabian, 5.

<sup>&</sup>lt;sup>404</sup> Masiza, 38.

<sup>&</sup>lt;sup>405</sup> Richelson, 284.

<sup>406</sup> Liberman, 53.

<sup>&</sup>lt;sup>407</sup> Pabian, 5.

In April of 1979 a U.S. intelligence estimate noted the "recent stationing of South African Army personnel at the Pelindaba center," interpreting it as a sign that "the production of significant quantities of weapons-usable uranium has begun." Three months later in July, the committee created by Prime Minster Botha recommended building seven deliverable nuclear devices; the idea was that "the calculated ambiguity of neither confirming nor denying nuclear weapons possession, and having an ability to test rudimentary devices,' would be 'sufficient to ensure nuclear coupling with the West." In November, South Africa crossed the final threshold and fully assembled its first usable nuclear device.

Interestingly, it wasn't until 1983 that South Africa formally developed a strategy for its nuclear arsenal, which involved three stages. All As Cirincione et al. describe: "Phase 1 involved neither confirming nor denying its nuclear capability. In phase 2, if faced with imminent attack, Pretoria would reveal its capability to Western leaders to force their intervention. If that failed, phase 3 would involve overt nuclear testing to demonstrate South Africa's ability and willingness to use nuclear weapons. According to Waldo Strumpf, a longtime high-ranking official in the South African nuclear program, "The strategy was never to use the weapons.

<sup>&</sup>lt;sup>408</sup> Office of Scientific Intelligence, Central Intelligence Agency, "South Africa: Military Personnel at the Valindaba Uranium Enrichment Plant," *Scientific Intelligence Weekly Review*, April 30, 1979, in "U.S. Intelligence and the South African Bomb," No. 20, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm.

<sup>&</sup>lt;sup>409</sup> Paul, 114.

<sup>&</sup>lt;sup>410</sup> Pabian, 1.

<sup>&</sup>lt;sup>411</sup> Liberman, 56.

<sup>&</sup>lt;sup>412</sup> Cirincione et al, 410.

word."<sup>413</sup> In other words, South Africa's nuclear weapons were meant as a sort of insurance policy, a last ditch political tool designed to blackmail the West into protecting South Africa if military defeat seemed imminent. The reports that U.S. support of Israel in the 1973 war was the result of the fear of Israeli nuclear escalation was believed by some South African officials to be support for their strategy.<sup>414</sup>

In 1991, under the leadership of Prime Minister F.W. de Klerk, South Africa took an unprecedented step and secretly destroyed its six nuclear weapons and signed the NPT as part of its transition to majority rule and attempt to reintegrate into the international community. It was not until 1993 that de Klerk finally revealed this publicly, confirming "what many had long suspected: that South Africa had surreptitiously acquired a small nuclear arsenal."

#### 3. Analysis

1. Strength of United States motivation: While the United States was motivated to prevent South Africa from developing nuclear weapons as part of its broader nonproliferation policy and efforts to promote a norm against nuclear proliferation, there were no particularly compelling geostrategic reasons why a South African arsenal would threaten U.S. interests. South Africa was located in a region (sub-Saharan Africa) of very little strategic interest to the United States, and the most important U.S. interests in the region were dependent on maintaining a somewhat cordial relationship with South Africa (trade relations, mineral resources, naval and shipping lanes).

<sup>413</sup> Reiss, Bridled Ambition, 16.

<sup>414</sup> Liberman, 62.

Reiss, Bridled Ambition, 7.

2. Asymmetry of motivation favoring the United States: Given the paranoid belief in the South African leadership that a nuclear arsenal was necessary as insurance against a "total onslaught" of black Africans and the relatively modest U.S. motivation to stop the South African nuclear program, it is quite clear that a distinct asymmetry of motivation was present in this case, albeit favoring South African. Moreover, the United States failed to utilize any combination of carrots and sticks that could have conceivably reduced South African motivation. In fact, the United States did not directly press South Africa to restrain its nuclear activities until the aborted Kalahari test in 1977 provided incontrovertible proof of South African nuclear ambitions; even then, the Carter administration continued the Ford policy of restricting nuclear cooperation as the sole lever for influencing South African policy, which again only served to reinforce South African isolation and convince the leadership of the need for a self-sufficient nuclear program.

Likely due to anti-apartheid sentiment in the government and public, the U.S. never attempted to address the underlying motives driving South Africa to pursue nuclear weapons in the first place (namely, international isolation and growing Communist influence in Southern Africa), nor to offer South Africa any benefits for signing the NPT and halting its nuclear weapons program. Any type of security assurance for South Africa was politically impossible, as were conventional arms transfers. Furthermore, because the U.S. was not militarily allied with South Africa and already abided by an arms embargo against the state, the only additional sticks the U.S. could plausibly threaten or employ were a cutoff in nuclear cooperation (which the Carter administration carried out) and broader economic sanctions—the

latter of which were never really considered likely because of the importance of South Africa's trade, resources, and shipping lanes. Perhaps most importantly, the South African government believed (and perhaps rightly so) that any real diminishment of its international isolation would require an end to apartheid, not simply nuclear restraint.

- 3. Clarity of American objectives: American objectives in this case were not made explicitly clear until after the U.S. detected the Kalahari test site in 1977.

  Although the U.S. intelligence community had long been aware of South Africa's developing nuclear capabilities, it was not until then that South Africa's weapons ambitions were confirmed. From this point on, the U.S. government made its objectives clear, pressing the South African prime minister to pledge that South Africa did "not have and not intend to develop nuclear explosive devices for any purpose either peaceful or as a weapon." Despite such clear objectives, however, the U.S. government made few concrete efforts to halt the South African program, relying solely on the threat of a total cutoff in nuclear cooperation as leverage, a relatively weak stick—especially when it is considered that the Ford administration had already restricted nuclear cooperation two years earlier for reasons unrelated to the South African nuclear program.
- 4. Sense of urgency to achieve the American objective: The only point in the case when the United States acted with a sense of urgency was when it appeared that South Africa was preparing to conduct a nuclear test in 1977. The Carter administration responded by quickly orchestrating a successful international diplomatic offensive to halt the test, and even cooperated closely with the Soviet

Union. Both before and after this point, however, there was little in American conduct that suggested policymakers were acting based on any sense of urgency.

**5.** Adequate domestic political support: While there was certainly adequate domestic support for the objective of preventing South Africa from obtaining a nuclear weapons capability, there was even stronger support for pressuring South Africa to end apartheid, a fact that complicated the use of coercive diplomacy to halt South Africa's nuclear program. One of the key elements in a successful coercive diplomacy strategy is the use of credible threats of punishment; however, it must be clear to the adversary that if they comply with the coercer's demands, they will not be punished. Because domestic political opinion was so strongly against apartheid, both in the public and in congress, South Africa had reason to believe that no matter what it did with its nuclear program, it would still remain at arm's length politically from Washington. Because of this perception, South Africa had little incentive to comply with the U.S; for example, in 1978 when the U.S. threatened to suspend fuel shipments unless South Africa signed the NPT. After all, in 1975 congressional antiapartheid activists had already succeeded in restricting fuel shipments and nuclear cooperation, with these sanctions completely unrelated to any desired South African move in the nuclear realm. Moreover, although domestic opinion may have supported the objective of preventing a South African nuclear arsenal, it did not necessarily support the means most likely to achieve this objective—namely, some form of positive incentives that ameliorated South Africa's sense of isolation, whether in the form of security assurances against aggression, conventional arms transfers, or diplomatic support.

- **6. Usable military options:** Given the limited geostrategic interests the United States held in Southern Africa, the use of military force to halt the South African nuclear weapons program was never a realistic option.
- 7. Opponent's fear of unacceptable escalation: Because of the United States' limited interests in the region and the little leverage it held over South Africa, it is unlikely that South African leaders feared any sort of unacceptable escalation for continuing its clandestine nuclear weapons program. As the aborted 1977 Kalahai test illustrates, South African leaders were sensitive to intense international pressure against nuclear testing; however, the result simply seems to have been that South Africa continued to develop nuclear weapons while simply abstaining from testing. In fact, the concerted pressure brought to bear against South Africa over the planned test apparently convinced Prime Minister Vorster of the necessity of a nuclear deterrent, likely because it simply underscored the international isolation South Africa faced.
- 8. Clarity concerning the precise terms of settlement: When the United States attempted to persuade South Africa to scrap its nuclear weapons program and sign the NPT in 1978, it proposed a clear quid pro quo whereby the U.S. would continue nuclear fuel shipments for the Koeberg reactors if South Africa complied, and withhold them if South Africa refused. The terms of the proposed settlement were clear, but South Africa was simply not persuaded the settlement was in its best interest. Moreover, due to the domestic U.S. opposition to apartheid, South Africa was not convinced that the U.S. government could continue fuel shipments in the future even if it wanted to.

## 4. Conclusion

Despite indications that South Africa was moving toward developing nuclear weapons, the U.S. made no real effort to stop them prior to the 1977 aborted test. U.S. policy toward South Africa from this point on was confrontational but weak, increasing South African isolation (and concomitantly, the motivation to proliferate) without imposing substantial costs. Because of strong anti-Apartheid sentiment, the use of carrots to induce South African compliance was politically impossible, despite the fact that carrots would have been most likely to succeed. At the same time, the strategic importance of South Africa's economic and natural resources, along with its strategic geographical location, made potent sticks impractical as well, leaving U.S. policy in a weak, middling state similar to the policy vis-à-vis Israel and Pakistan.

# 7. Libya: Unsolicited Success

Driven by a desire to counter Israel and attain status and leadership in the Arab world, Libya initiated an indigenous nuclear weapons program in the 1970s after failing to acquire ready-made nuclear weapons from foreign powers. Libya's motivations for pursuing the bomb began to decline in the early 1990s, but the U.S was preoccupied by Libya's support for terrorism and refused to discuss the issue even when approached by Libya. After Libya renounced terrorism and began compensating Lockerbie victims, the U.S. finally entered negotiations with Libya, offering a package of carrots (including an end to the policy of regime change) that further reduced Libyan motivations and led to the end of its WMD programs in 2003.

# 1. Motives

In September 1969, Colonel Muammar Qaddafi seized power in a coup, unseating the Western-oriented monarch King Idris and initiating a dramatic reorientation in Libyan domestic and foreign policy. Qaddafi, a radical pan-Arabist, sought to position Libya at the forefront of the Arab struggle against Israel and almost immediately began pursuing nuclear weapons, ostensibly as a means of achieving this end. However, compared to most other nations with nuclear ambitions, Libya faced a relatively mild security environment. Unlike its fellow Arab states, Libya had never taken part in direct conflict with the geographically distant Israel; furthermore, it faced no readily apparently nuclear or overwhelming conventional threat. While

<sup>&</sup>lt;sup>416</sup> Solingen, *Nuclear Logics*, 215.

(including Chad, Sudan, Tunisia, Malta, and Egypt); as Solingen notes, "none of these neighbors posed existential threats to Libya and most of these conflicts were nothing but the product of Qadhafi's own provocations." Moreover, these conflicts occurred after Qaddafi's decision to pursue a nuclear weapons capability, not before. As a result, Cirincione et al. may provide a more likely explanation for Qaddafi's nuclear ambitions, namely his desire "to become the leader of the Arab world and to raise Libya's prestige among Islamic and other countries in the developing world." After all, as Solingen point out, "Israel's ambiguous nuclear capabilities provided an excellent target for the young revolutionary and aspiring pan-Arab leader to emulate and counter."

# 2. Case Overview

Almost immediately after seizing power in 1969, Qaddafi began his efforts to acquire a nuclear arsenal for Libya. In 1970, a Libyan official approached Egyptian president Gamal Abdel Nasser and asked for assistance in purchasing a nuclear bomb for Libya from China. Despite Nasser's response that this would not be possible, the official continued on to China, where Premier Chou En-Lai rebuffed his request. After failing to obtain ready-made nuclear weapons from China, Libya began to pursue an indigenous nuclear weapons program while simultaneously approaching other states for assistance in the nuclear realm. In 1973, Libya attempted to buy equipment suitable for plutonium separation from a French company;

<sup>417</sup> Ibid, 214.

<sup>&</sup>lt;sup>418</sup> Cirincione et al., 318.

<sup>419</sup> Solingen, Nuclear Logics, 215.

<sup>420</sup> Richelson, 325.

<sup>&</sup>lt;sup>421</sup> Meyer, 139.

however, the French government refused to approve the deal. 422 In the same year, Libyan officials reportedly concluded a secret deal with Pakistani president Bhutto whereby Libya "would finance the Pakistani nuclear weapons program in exchange for 'full access' to 'the entire capability' to be developed."423 Also in 1973, Libya invaded a region of northern Chad, partially because the area was believed to be "rich in uranium deposits."424 A year later, Libya tried to purchase a research reactor from the United States along with fuel, but the government vetoed the deal. In 1975, the same year that Libya ratified the NPT, Qaddafi ordered PLO headman Yasser Arafat to secretly gather a team of Arab scientists for the purpose of building a nuclear bomb; however, Arafat informed Qaddafi that this would not be possible "due to a lack of qualified personnel."426 By this time, a CIA report had concluded that Libya indeed sought nuclear weapons, noting that "the acquisition of nuclear weapons was a stated objective" of Qaddafi's, but that "it will probably take at least a decade for Libya to produce a nuclear weapon."427

For a number of reasons, the prospect of a Libyan bomb was troubling to U.S. government officials at the time. A year after seizing power in 1969, Qaddafi demanded that Britain and the U.S. abandon the military bases they maintained in Libya—by June 1970, the two countries had obliged. In the next several years, relations with the United States grew markedly worse, as Qaddafi "zealously"

<sup>&</sup>lt;sup>422</sup> Richelson, 325.

<sup>423</sup> Ibid.

<sup>424</sup> Solingen, Nuclear Logics, 213.

<sup>&</sup>lt;sup>425</sup> Richelson, 326.

<sup>426</sup> Ibid.

<sup>&</sup>lt;sup>427</sup> Ibid, 336.

<sup>&</sup>lt;sup>428</sup> Christopher Blanchard, "Libya: Background and U.S. Relations," *Congressional Research Service Report* (June 2007): 3.

participated in the Arab oil boycott of the United States consequent to the October 1973 Arab-Israeli War, in 1974 nationalized U.S. oil companies operating in Libya, and severed relations with President Anwar Sadat of Egypt for seeking closer ties with the United States after the Yom Kippur War of 1973."429 These events led Nixon to recall the Ambassador to Libya in 1973; the Nixon administration also restricted the sale of arms to Libya. 430 Making matters worse, Libya "gradually reversed its stance on its initially icy relationship with the Soviet Union and extended Libyan support to revolutionary, anti-Western, and anti-Israeli movements across Africa, Europe, Asia, and the Middle East." Another key source of tension between Libya and the United States was inflexible Libyan opposition to the Israeli-Palestinian peace process, as well as direct Libyan support and harboring of terrorist groups, including Abu Nidal, the Red Army Faction, the Popular Front for the Liberation of Palestine-General Command, and the IRA. 432 By 1976, the CIA declared Libya to be "one of the world's least inhibited practitioners of international terrorism," linking the state to "the 1972 Munich Olympics killing of Israeli athletes, the 1973 assassination of the U.S. ambassador to Sudan, and the 1975 raid of a meeting of the Organization of Petroleum Exporting Countries (OPEC) in Vienna."433

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<sup>&</sup>lt;sup>429</sup> F. Ugboaja Ohaegbulam, "U.S. Measures Against Libya since the Explosion of Pan Am Flight 103," *Mediterranean Quarterly* 11, No. 1 (Winter 2000): 113.

<sup>&</sup>lt;sup>430</sup> Jentleson and Whytock, 57.

<sup>&</sup>lt;sup>431</sup> Blanchard, 3.

<sup>&</sup>lt;sup>432</sup> Ibid, 4.

<sup>&</sup>lt;sup>433</sup> Jentleson and Whytock, 56.

## Libyan Nuclear Efforts Accelerate

In 1977, the Soviet Union agreed to build a small research reactor at Tajura, which went into operation in 1981. 434 The Soviets also agreed in principle to build Libya a much larger nuclear power reactor, but the agreement was subject to continuous negotiations and delays for close to a decade and was never actually built. 435 In 1978, Libya turned to India for help in the nuclear weapons realm, with a Libyan official traveling to India to ask for assistance in obtaining "an independent nuclear capability." <sup>436</sup> India declined to help Libva acquire nuclear weapons, which in turn led to "Libya's termination of oil shipments to India, but no change in New Delhi's refusal to help Libya gain entrance to the nuclear club.",437 Meanwhile, from 1978 to 1981, Libya purchased 2263 tons of uranium ore concentrate from Niger for use in its nuclear endeavors. 438 One purpose of the uranium purchase was reportedly to remind Pakistan of the continued Libyan willingness to finance the Pakistani program in exchange for sharing in the fruits of the research. 439 Some of this uranium was apparently delivered to Pakistan; however, by 1979 (after the fall of Bhutto's regime) "Qaddafi became concerned that the Pakistanis would not fulfill their part of the deal and is reported to have insisted on participation of Libyan technicians. The Pakistani leadership refused, and Libva withdrew its support."<sup>440</sup> Responding to these failures, Qaddafi turned to the black market, offering "somewhere between \$100,000

<sup>434</sup> IAEA, "Implementation of the NPT Safeguards Agreement in the Socialist People's Libyan Arab Jamahiriya" (September 2008): 4.

<sup>435</sup> Richelson, 327

<sup>436</sup> Ibid, 326.

<sup>437</sup> Ibid.

<sup>&</sup>lt;sup>438</sup> IAEA, 4.

<sup>439</sup> Richelson, 326,

<sup>&</sup>lt;sup>440</sup> Meyer, 139.

and \$1 million to anyone who would deliver to him an operational nuclear weapon.

There were reported to have been at least two responses, and apparently Qaddafi actually paid for a bogus bomb.<sup>2,441</sup>

In 1982, Libya began negotiating a nuclear cooperation deal with Belgium, which would have provided Libya with assistance in building nuclear power plants and a plant that could produce uranium tetrafluoride—a precursor to enriched uranium. 442 The same year, in response to Libyan support for terrorism, the U.S. "imposed an embargo on crude oil imports from Libya." In 1984, the United States intervened and successfully pressured Belgium to abandon the nuclear cooperation agreement with Libya before it had been finalized. 444 In the same year, Libya made its first contact with A.Q. Khan, who offered his services in helping Libya acquire the necessary technology, materials, and equipment for enriching weapons-grade uranium; however, Libya declined the offer, apparently because it was determined that "the scientific and industrial requirements were too demanding for Libya in terms of resources and technological capabilities at that time." <sup>445</sup> By 1985, a CIA report had concluded that the Libyan nuclear weapons program had "major problems, including poor leadership and a lack of coherent planning, as well as political and financial obstacles to acquiring nuclear facilities.' As a result, the weapons analysts believed it 'highly unlikely the Libyans will achieve a nuclear weapon capability within at least the next 10 years.",446 Starting a pattern that would continue for years, the U.S.

<sup>&</sup>lt;sup>441</sup> Ibid, 140.

<sup>442</sup> Richelson, 327.

<sup>&</sup>lt;sup>443</sup> Jentleson and Whytock, 58.

<sup>444</sup> Richelson, 327.

<sup>&</sup>lt;sup>445</sup> IAEA, 5.

<sup>446</sup> Richelson, 337.

deferred the issue of Libya's nuclear weapons program since it was not deemed to be an imminent threat.

## Libyan Support for Terrorism and the U.S. Response

Meanwhile, Libya's continued involvement in international acts of terrorism soon led to direct confrontation with the United States. From 1984 to 1986, Libya was linked to numerous terrorist attacks across Europe, including the 1984 shooting of a British police officer outside the Libyan embassy in London, the 1985 *Achille Lauro* hijacking, the Rome and Vienna airport attacks in December of the same year, and finally the Berlin discotheque bombing in April 1986, which killed two American soldiers and injured over seventy other Americans. He U.S. forcefully responded to the Berlin attack several weeks later, bombing military compounds, terrorist training camps, as well as Qaddafi's own family residence. Although the attack failed to kill Qaddafi, it nonetheless was a direct manifestation of the policy of regime change increasingly advocated by the Reagan administration and the CIA. The same year, the U.S. instituted its first set of sanctions against Libya, a total economic embargo that included oil exports; however, Libya managed to maintain the same production levels by increasing its trade with other states, for example Italy.

A little over two years later in December 1988, in what many have argued was retaliation for the U.S. attack on Libya, Libyan agents planted a bomb that destroyed

<sup>&</sup>lt;sup>447</sup> Jentleson and Whytock, 58.

<sup>448</sup> Ibid.

<sup>&</sup>lt;sup>449</sup> Ibid, 59.

<sup>&</sup>lt;sup>450</sup> Ibid, 61.

Pan Am flight 103 over Lockerbie, Scotland, killing 189 Americans. <sup>451</sup> Despite this, when George H.W. Bush entered office in 1989, Libya made several attempts to improve relations with the U.S., seeking bilateral talks and a normalization of relations. However, the Bush administration responded by stepping up the pressure on Libya, even implicitly threatening a military strike on a Libyan chemical weapons facility in March 1990, leading Qaddafi to claim a fire had damaged the plant and shut down its production. <sup>452</sup>

The next month, Qaddafi publicly called for Libyan development of nuclear weapons as part of a "multifaceted deterrent force." As part of this effort, between 1989 and 1991 Libya made an abortive push to acquire the technology for a reprocessing facility and also contacted A.Q. Khan for help acquiring centrifuge technology that could be used to enrich uranium; by 1991, Libya had indeed received design information and some components for the centrifuges. In November 1991, a U.S. court indicted two Libyan intelligence agents for their role in the Lockerbie bombing. Soon thereafter, Britain, France, and the United States jointly declared that Libya must "accept responsibility for the actions of Libyan officials; disclose all it knows of this crime, including the names of all those responsible; and allow full access to all witnesses, documents, and other material evidence, [and] pay appropriate compensation." After Libya rejected these demands, the U.S. sought U.N. sanctions against Libya, which passed the Security Council in April of 1992,

<sup>451</sup> Ohaegbulam, 115.

<sup>&</sup>lt;sup>452</sup> Jentleson and Whytock, 63; Ronald Bruce St. John, "'Libya is Not Iraq': Preemptive Strikes, WMD and Diplomacy," *Middle East Journal* 58, No. 3 (Summer 2004): 388.

<sup>&</sup>lt;sup>453</sup> Joshua Sinai, "Libya's Pursuit of Weapons of Mass Destruction," *Nonproliferation Review* 4, No. 3 (Spring/Summer 1997): 97.

<sup>&</sup>lt;sup>454</sup> IAEA, 5-6; A3.

<sup>455</sup> Ohaegbulam, 117.

imposing "a ban on air travel to and from Libya; a ban on the sale of arms, commercial planes, and spare parts to the country; and a reduction in personnel at Libyan embassies."

Libya responded by opening backchannel negotiations with the United States, reportedly offering to hand over the two suspects and discuss its WMD programs and support for terrorism in return for the normalization of relations and an end to the U.N. sanctions. 457 However, unwilling to offer any carrots to Libya, the U.S. rebuffed these offers, and Libya publicly declared their willingness to allow a trial of the Lockerbie suspects in a country outside Britain or the United States; however this offer too was rejected, leading to a renewal of the sanctions in December 1993 that now "froze Libya's financial assets abroad and banned the sale of oil-industry equipment to the country."458 These sanctions would stay in place until 1999, but since they did not affect oil exports (which Germany and Italy had strongly opposed), they failed to severely damage the Libyan economy. 459 In 1995, Libya secretly decided to "reinvigorate" its nuclear weapons program, ordering additional centrifuges from the Khan network that began to arrive in 1997. 460

Meanwhile, due to domestic pressures and a campaign pledge to support harsher sanctions against Libya, President Clinton supported and eventually signed the Iran-Libya Sanctions Act in August 1996, whose stated aims were to "pressure Libya to comply with UN Security Council resolutions, which call on it to extradite for trial the accused bombers of flight 103 and to cease all support for international

<sup>456</sup> Ibid, 117-118.

<sup>457</sup> St. John, 389-390.

<sup>458</sup> Ohaegbulam, 118.

<sup>&</sup>lt;sup>459</sup> Ibid.

<sup>&</sup>lt;sup>460</sup> IAEA, 5.

terrorism...to limit the flow to Libya of resources necessary to obtain weapons of mass destruction...to help deny Iran and Libya revenues that could be used to finance international terrorism." The sanctions imposed penalties on foreign firms that violated the U.N. sanctions, in addition to firms that invested over \$40 million in Libya's oil industry, or that sold Libya technology that could be used for its WMD programs. 462 Bolstering this effort, a month earlier the U.S. had succeeded in convincing 33 member states of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies to prohibit exports to Libya with potential military applications. 463 However, European states were not pleased with the portion of the Iran-Libya Sanctions Act that imposed penalties on foreign firms, which they perceived as a "U.S. attempt to apply its unilateral law on a multilateral basis.",464 The European Union responded swiftly, passing a statute in November that prohibited European firms from complying with the act, a move that led to lax enforcement of the measures from a U.S. government wary of confrontations with its allies. 465 In the same year, the U.S. threatened military force against a Libyan chemical weapons plant being constructed at Tarhuna, leading Libya to halt the project.<sup>466</sup>

Frustrated with the sanctions, in 1997 Libya proposed three options for trying the Lockerbie suspects that involved them not being tried in Scotland or the United States. The U.S. and Britain rejected these options, however, maintaining their

<sup>461</sup> Ohaegbulam, 127-8.

<sup>462</sup> Cirincione et al., 318-9.

<sup>463</sup> Ibid.

<sup>464</sup> Ohaegbulam, 128.

<sup>465</sup> Ibid, 129.

<sup>&</sup>lt;sup>466</sup> Jentleson and Whytock, 63-4.

demand that the suspects be handed over. Meanwhile, the Arab League and the Organization of African Unity (OAU) began supporting Libya's position, authorizing members to cease complying with elements of the UN sanctions and threatening to cease complying totally if the US and Britain didn't select one of Libya's three options by September 1998. Responding to these pressures, in August 1998 the U.S. and Britain agreed to one of the compromise options in which the suspects would be tried in the Netherlands but by Scottish judges and under Scottish law. Libya agreed to this option, but after delaying handing over the suspects for fear that the sanctions wouldn't be lifted, in December 1998 the U.S. informed Libya that more sanctions would be levied "if the two Libyan suspects were not turned over for trial in the Netherlands by February 1999." When Libya failed to meet this deadline, the U.S. and Britain pushed for tougher U.N. sanctions, but the Security Council rejected this move. In response, the U.S. and Britain declared that Libya had thirty days to hand over the suspects before stronger measures would be explored. Despite publicly rejecting the deadline, on March 19 South African President Nelson Mandela announced that Libya had agreed to hand over the suspects by April 6. The suspects were handed over on April 5, and the same day the UN sanctions were suspended they would be permanently lifted only when "Libya had complied with other requirements, including accepting responsibility for the flight 103 crash, payment of compensation to the victims' families if the suspects are convicted, and renouncing the sponsorship of terrorism." U.S. sanctions remained in place, and in the first official discussion between the two countries in close to two decades, U.S. officials communicated to Libya in June that the sanctions would continue under Libya

fulfilled all its requirements under the UN sanctions and ceased its support for terrorist groups. 467

In sum, throughout the 1990s U.S. policy toward Libya was almost solely devoted to issues of terrorism. The U.S. actually refused to discuss WMD issues with Libya before the terrorism issues were resolved and declined to employ any carrots or sticks specifically related to the nuclear program. While the U.S. threatened force against Libyan chemical weapons facilities, it never did against Libyan nuclear facilities. Meanwhile, Qaddafi was growing increasingly frustrated with sanctions, leading Libya to seek a comprehensive rapprochement with the U.S. and the West.

## **Back Channel Negotiations and American Success**

Meanwhile, as this tough public diplomacy was going on, the U.S. had opened secret talks with Libya in May, during which Libya had formally offered to end its WMD programs as part of a guid pro quo for the lifting of sanctions. 468 As a condition for opening the talks, the Clinton administration obtained Libya's promise to keep the negotiations under wraps and to "cease lobbying for the UN to lift permanently its sanctions." <sup>469</sup> During the talks, Libya agreed to cease support for terrorism and cooperate with U.S. anti-terrorism efforts, and also offered to sign the Chemical Weapons Convention and bring their chemical weapons program under inspection. However, the U.S. refrained from pursuing the WMD issue since it considered terrorism and the Lockerbie issue to be top priorities; furthermore, it was recognized that Libya's WMD programs were in the early stages of development and

<sup>&</sup>lt;sup>467</sup> Ohaegbulam 119-126.

Jentleson and Whytock, 70. 469 St. John, 391.

did not represent an imminent threat.<sup>470</sup> Once the terrorism issues were resolved, U.S. officials informed Libya that U.S. sanctions would continue until the resolution of WMD issues.<sup>471</sup> In other words, the U.S. again deferred the WMD issue because of conflicting political objectives. Although it continued to oppose the permanent lifting of U.N. sanctions, in July 1999 Britain reinstated diplomatic relations with Libya.<sup>472</sup>

Beginning in 2000, Libya accelerated its uranium enrichment program, installing centrifuge cascades and placing orders for thousands of more advanced centrifuges, along with all the other equipment necessary for the gas centrifuge process. Ari In January 2001, the trial of the Lockerbie suspects concluded in the Netherlands under a panel of Scottish judges, finding one of the two suspects guilty. In response, U.S. and British officials began talks with Libya "detailing the steps Libya must take to terminate UN sanctions. Act came up for renewal in Congress. While the Bush administration advocated for a two year extension in order to give the U.S. greater "flexibility" in negotiating with the states, Congress decided on a five year extension that increased the scope of sanctions against Libya, "lowering the operative investment level for triggering sanctions from \$40 million to \$20 million." In the wake of September 11th, Libya denounced the attacks and began direct cooperation with the U.S. with intelligence on Islamist terrorist groups in the region, whom Libya also considered threatening;

<sup>&</sup>lt;sup>470</sup> Ibid, 392.

<sup>&</sup>lt;sup>471</sup> Ibid.

<sup>472</sup> Ohaegbulam, 134.

<sup>&</sup>lt;sup>473</sup> IAEA, 5-6.

<sup>474</sup> St. John, 393.

<sup>&</sup>lt;sup>475</sup> Ibid.

moreover, in December 2001 Qadhafi pledged to Dutch officials to sign the Chemical Weapons Convention and permit inspections.<sup>476</sup>

Despite these conciliatory steps, in 2001 the A.Q. Khan network sent a supply of enriched uranium to Libya. 477 Furthermore, in late 2001 to early 2002, the network sent Libya a complete nuclear weapon design and plans for a centrifuge enrichment plant "almost on a turnkey basis." Around the same time, Libya received its first shipment of ballistic missiles from North Korea. In September of 2002, Qaddafi gave a speech asserting Libya was no longer a rogue state. He also announced that Libya had detained Islamic militants suspected of links to al-Qa'ida and reiterated Libya's willingness to pay compensation to the families of the Lockerbie victims. Libya was now cooperating on matters of terrorism, the U.S. began to turn its focus to Libya's WMD programs. In December, the Bush administration unveiled its National Strategy to Combat Weapons of Mass Destruction, a report that identified Libya as "among the countries that are the central focus of the new U.S. approach," which included the possibility of preemptive military strikes.

Building on informal talks that had been occurring for the past year or so, in March 2003 Libyan officials approached Britain offering to negotiate an end to its WMD programs. This began a process of negotiations with British and U.S. officials that led Libya to publicly accept responsibility for the Lockerbie bombing in August

<sup>&</sup>lt;sup>476</sup> Ibid, 393-4.

Solingen, Nuclear Logics, 217.

<sup>&</sup>lt;sup>478</sup> Jentleson and Whytock, 68.

<sup>&</sup>lt;sup>479</sup> Ibid.

<sup>&</sup>lt;sup>480</sup> St. John, 395-6.

<sup>&</sup>lt;sup>481</sup> Ihid

<sup>&</sup>lt;sup>482</sup> Jentleson and Whytock, 73.

2003 and agree to pay \$2.7 billion in compensation to the victims' families. As In September, Libya began making the payments, the suspended U.N. sanctions against Libya were finally permanently lifted, and Libya reached a preliminary agreement with the U.S. and Britain whereby Libya would dismantle its WMD programs in exchange for a package of carrots, including an end to U.S. and British sanctions. In October, the Proliferation Security Initiative (PSI) made its first interdiction in Taranto, Italy; the ship seized was transporting centrifuge components for Libya's uranium enrichment program. According to a number of observers, this helped to speed up negotiations and improve the American and British bargaining position. Soon after the interdiction, Libya allowed U.S. and British inspectors to visit to Libya's WMD facilities. As a final condition for the deal insisted upon by Qaddafi, the U.S. made a security concession and agreed to end its policy of promoting regime change in Libya. On December 19th, Libya announced that it had reached a deal with the U.S. and Britain, declaring that it would:

"Eliminate all elements of its chemical and nuclear weapons programs; declare all nuclear activities to the International Atomic Energy Agency (IAEA); eliminate ballistic missiles beyond a 300-kilometer (km) range with a payload of 500 kilograms (kgs); accept international inspections to ensure Libya's complete adherence to the Nuclear Nonproliferation Treaty (NPT) and sign the Additional Protocol; eliminate all chemical weapons stocks and munitions and accede to the Chemical Weapons Conventions (CWC); and allow immediate inspections and monitoring to verify all of these actions."

<sup>&</sup>lt;sup>483</sup> Ibid, 74; Blanchard, 8.

<sup>&</sup>lt;sup>484</sup> St. John, 396-7.

<sup>&</sup>lt;sup>485</sup> See, for example: Blanchard, 27; Jentleson and Whytock, 74-76; Cirincione et al., 319; and St. John, 399.

<sup>486</sup> Blanchard, 27.

<sup>&</sup>lt;sup>487</sup> Jentleson and Whytock, 74.

<sup>&</sup>lt;sup>488</sup> Sharon Squassoni and Andrew Feickert, "Disarming Libya: Weapons of Mass Destruction," *Congressional Research Service Report* (April 2004): 1-2.

Inspections continued following the agreement, and in January and March 2004, all equipment related to the production of WMD began to be removed from Libya by Britain and the U.S. 489 While Libya was nowhere near attaining a nuclear weapons capability, it soon became clear that Britain and the U.S. had underestimated Libyan progress in the nuclear realm, particularly because of the materials it had received from the A.Q. Khan network, which the inspections of Libya helped to uncover. 490 Despite being under IAEA safeguards since 1980, Libya had managed to conceal extensive activities and equipment related to the production of highly enriched uranium; Libya had also clandestinely succeeded in separating a small quantity of plutonium. 491 Particularly surprising was the discovery that Libya had obtained complete plans for a centrifuge plant and a complete nuclear bomb design from the network. 492 However, due to a lack of adequate scientific personnel, missing rotor components for its centrifuges, and a failure to build the facilities needed to produce uranium hexafluoride for the centrifuges, the Libyan nuclear weapons program still faced many obstacles to its completion. 493 According to IAEA head Mohamed ElBaradei's estimation, Libya was three to seven years from achieving a nuclear weapons capability. 494

President Bush ended most sanctions against Libya by executive order in September 2004, including the unfreezing of about \$1 billion in assets in the United States. By June 31<sup>st</sup>, 2006, the U.S. had fully restored diplomatic relations with Libya,

<sup>&</sup>lt;sup>489</sup> Blanchard, 27-28.

<sup>&</sup>lt;sup>490</sup> St. John, 400.

<sup>&</sup>lt;sup>491</sup> IAEA, 2.

<sup>&</sup>lt;sup>492</sup> David Albright and Corey Hinderstein, "Unraveling the A.Q. Khan Network and Future Proliferation Networks," *The Washington Quarterly* 28, No. 2 (Spring 2005): 114.

<sup>&</sup>lt;sup>493</sup> Montgomery, 162; 168.

<sup>&</sup>lt;sup>494</sup> Cirincione et al, 320.

also removing Libya from the list of state sponsors of terrorism, which in turn lifted all the remaining trade restrictions. In September, Libya was officially removed from the Iran-Libya Sanctions Act. 495

While the Bush administration claimed the 2003 invasion of Iraq was critical to convincing Libya to renounce its WMD programs, a more balanced analysis points to other factors—namely a changed security environment and a desire to end its international isolation. As Qaddafi put it in an interview in 2005, "we started to ask ourselves, 'by manufacturing nuclear weapons, against whom are we going to use them?' World alliances have changed. We had no target. And then we started thinking about the cost. If someone attacks you and you use a nuclear bomb, you are in effect using it against yourself.",496 Furthermore, as Bowen notes, given that Libya had signaled its willingness to negotiate on its WMD programs repeatedly since 1992, "The Iraq War cannot, therefore, be described as a principal driving factor of Gadhafi's decision to disarm." Thus, while Qaddafi reportedly told Italian Prime Minister Berlusconi in 2003 that "I will do whatever the Americans want, because I saw what happened in Iraq, and I was afraid," the overall chronology suggests that "the war may have cemented the regime's perception that its interests were best served by cooperating on WMD, and in the process it may have provided added impetus by accelerating the decision to disarm." <sup>498</sup> Apart from pure security issues, the U.S. sanctions had begun to seriously impact the Libyan economy, especially its oil industry. While Libya was still able to sell its oil to European states, its oil

<sup>&</sup>lt;sup>495</sup> Blanchard 1-7.

<sup>&</sup>lt;sup>496</sup> Cirincione et al, 319.

<sup>&</sup>lt;sup>497</sup> Wyn Bowen, *Libya and Nuclear Proliferation: Stepping Back From the Brink* (New York: Routledge, 2006): 63-4.

<sup>&</sup>lt;sup>498</sup> Ibid, 64.

equipment and infrastructure—which was largely of U.S. design—had been steadily deteriorating and could not be easily replaced due to the sanctions. 499 As a result, U.S. investment and trade was viewed as critical in order to modernize the Libyan oil industry, as well as to improve the wider economy and increase oil prices. 500 More broadly, by ending the unilateral U.S. sanctions, Libya's renunciation of its WMD programs removed the final barrier to its reintegration into the world community and all the economic and diplomatic benefits that would bring.

### 3. Analysis

1. Strength of United States motivation: While the U.S. was certainly interested in preventing a rogue state like Libya from acquiring nuclear weapons, the U.S. motivation was relatively low throughout the case since Libya was never believed to be anywhere close to developing the bomb. As a result, the U.S. focused largely on export controls to contain the struggling Libyan program.

2. Asymmetry of motivation favoring the United States: For mos of the case, the asymmetry of motivation clearly favored Libya. Although Libya did not face as threatening a security environment as other proliferators, it viewed nuclear weapons as the easiest way to achieve status in the Arab world and balance against a nuclear-armed Israel; meanwhile, the U.S. was only very weakly motivated to halt the Libyan program.

In the 1990s, however, Libya's motivations for pursuing the bomb began to decline, as Arab conflict with Israel was greatly reduced and the pan-Arab movement

<sup>&</sup>lt;sup>499</sup> Jentleson and Whytock, 78. <sup>500</sup> Ibid.

was dead for all intents and purposes. When coupled with the deleterious economic impact of U.S. and U.N. sanctions, Libya began to see its WMD programs as more of a liability than an asset. As a result, Libya repeatedly approached the U.S. to negotiate on the WMD issue, but U.S. deliberately deferred the WMD simply because it placed a higher priority on the terrorism issue, which it believed to be more of an imminent threat. Thus, even though Libya's original motives for pursuing nuclear weapons were essentially obsolete by the 1990s, there was no compelling reason to give the program up since doing so would not ameliorate Libya's international isolation without also addressing the issues of terrorism. Once the terrorism issues were resolved and thus the conflicting political objectives were removed, the WMD issues moved to the fore in U.S.-Libyan relations and it was finally possible for Libya to gain something of tangible benefit for the struggling, aimless program—thus reducing Libyan motivations even further and shifting the asymmetry of motivation in America's favor. Although the Libyan nuclear program was still relatively primitive and thus not an imminent threat, dismantling the Libyan program was a huge diplomatic victory for the U.S, especially in the wake of the prime importance the Bush administration had placed on WMD nonproliferation as a justification for the 2003 Iraq War.

3. Clarity of American objectives: The U.S. objective of ending the Libyan nuclear weapons program was clear, and was reflected in its public statements and its efforts to prevent Libya from acquiring sensitive nuclear technologies. However, up until 2003, the U.S. made no direct effort to persuade Libya to end its program, instead relying almost solely upon export controls to contain the program.

- 4. Sense of urgency to achieve the American objective: At no point in the case was there any sense of urgency for the United States to achieve its objective.

  This is almost certainly reflective of the fact that the U.S. intelligence community was aware that the Libyan program was in the early stages and not anywhere near completion. As a result, the U.S. was willing to wait on resolving the nuclear issue until after the more immediate issue of support for terrorism was resolved.
- 5. Adequate domestic political support: There was indeed adequate domestic support for U.S. efforts to coerce Libya; however, like the presidential administrations throughout the case, the public and congress were more concerned with Libya's support for terrorism than its nuclear program, especially in the wake of the 1988 Lockerbie bombing. The public was adamant about punishing Libya for its role in the bombing, and this sentiment was largely responsible for the 1996 Iran-Libyan Sanctions Act signed by President Clinton. Congress proved to be even more zealous about coercing Libya than President Bush in 2001, as it opted for a five-year extension of the Iran-Libya Sanctions Act rather than the two-year extension Bush requested in order to provide the U.S. with more diplomatic flexibility.
- 6. Usable military options: Given Libya's international isolation and disregard for norms against terrorism and WMD proliferation, military options were more feasible in this case than in most cases of nuclear proliferation. Moreover, the United States had used military force against Libya in the past, punitively bombing the country in 1986 in retaliation for the Berlin discotheque terrorist attack. In addition, the United States had repeatedly threatened to use force against Libyan chemical weapons plants, often leading Libya to slow its chemical weapons

programs. Following the 9/11 attacks, the Bush administration made preventive counterproliferation strikes a key pillar of U.S. foreign policy, making the use of military force against Libya's WMD programs all the more feasible. Especially in the wake of the Iraq invasion of 2003, Libya was surely aware that a military strike was not out of the question; the stationing of tens of thousands of U.S. troops in the region could not have been ignored. However, the reality is that Libya had been seeking to end its isolation and restore relations with the U.S. for a number of years; thus, if anything the possibility of military action only hastened the Libyan decision to scrap its WMD programs.

- 7. Opponent's fear of unacceptable escalation: Given that the U.S. already maintained wide-ranging economic sanctions against Libya, the only unacceptable escalation Libya could have plausibly feared was the use of military force. However, while this may have reinforced Qaddafi's thinking, it likely played only a secondary role, with the desire to end U.S. and British sanctions and to restore diplomatic relations with the U.S. clearly the prime drivers of Libyan behavior, as evidenced by repeated Libyan efforts to negotiate a package deal with the U.S. to end Libyan WMD programs prior to the Iraq War and 2002 U.S. policy shift toward preemptive counterproliferation.
- **8.** Clarity concerning the precise terms of settlement: The deal reached to end Libya's WMD programs was indeed clear in its terms, with a defined set of economic and diplomatic benefits provided to Libya after it dismantled its weapons programs.

# 4. Conclusion

While the U.S. achieved success in the Libyan case, it was ultimately more the result of a Libyan diplomatic initiative than motivated U.S. efforts. The longstanding U.S. policy of isolating and imposing sanctions on Libya because of its support for terrorism certainly influenced the Libyan decision to seek rapprochement with the U.S., and the 2003 Iraq War may have accelerated the process. However, other than working to prevent Libya from obtaining sensitive nuclear technologies, the U.S. made essentially no concerted effort to convince Libya to end its nuclear program, prioritizing it below the issues of terrorism both for domestic political and strategic reasons—even resisting Libyan attempts to discuss WMD programs prior to 2003. Thus, while the U.S. motivation to halt the Libyan program was low, Libyan motivations were declining as well, and the U.S. seized the opportunity in 2003 once the terrorism issue was resolved, providing the carrots necessary to reverse the asymmetry of motivation favoring Libya.

# 8. India: Nonproliferation Policy Paralysis

Sparked by the 1964 Chinese nuclear test, India began its pursuit of nuclear weapons in 1965. Due to conflicting strategic objectives, in 1967 the U.S. declined to provide India with the nuclear guarantee it sought as a substitute for an indigenous nuclear weapons capability. After this point, the U.S. made little effort to restrain the Indian program, relying on vague, weak warnings as sticks, and little in the way of carrots. In 1971, U.S. rapprochement with China and the tilt toward Pakistan crippled any hopes the U.S. had of forestalling an Indian nuclear arsenal.

### 1. Motives

After attaining independence from Britain in 1947, India began to pursue a foreign policy of nonalignment. Under the leadership of its first prime minister, Jawaharlal Nehru, India sought to avoid being entangled in the Cold War rivalry between the United States and U.S.S.R, which in turn would allow India to receive economic aid from both countries, and would provide the opportunity to lead to the emerging Third World movement. As Reiss describes, "The nonalignment policy was thus intended to prevent any outside interference or intervention in South Asia so that India would be able to achieve internal unity and prosperity, to become the dominant regional power, and to gain international stature as a voice for decolonization, equality, and world peace."

Despite such lofty visions, however, India soon found itself in conflict with its two largest neighbors: Pakistan and China. In 1947, almost immediately upon

<sup>&</sup>lt;sup>501</sup> Reiss, Without the Bomb, 204-5.

achieving independence, India fought Pakistani tribesmen to a standstill over the disputed territory of Kashmir. Three years later in 1950, China seized a portion of Tibet claimed by India without a fight, eventually leading to a 1954 agreement whereby India agreed to abandon its legal claim to the territory in exchange for principles of "peaceful coexistence" between the two states. 502 Such attempts to make peace with China proved unsuccessful in October 1962, as China invaded India across the Himalayas and seized 14,000 square miles of the Ladakh border region. <sup>503</sup> After India refused an armistice, China undertook another offensive in November, leading eventually to an agreement whereby China withdrew "its forces 20 kilometers, subject to an armistice, noninterference with the withdrawal, New Delhi's acceptance of a 20 kilometer demilitarized zone, and no attempt to reestablish any of the Indian posts captured by the Chinese in Ladakh." 504 As Ganguly notes, "The significance of this war on India's foreign and security policymakers cannot be underestimated. The Chinese attack fundamentally called into question Nehru's varied attempts to court the Chinese and to bring China into the comity of nations...the border war forced Nehru to reappraise his strategy and his most cherished ideals." The 1962 war opened the prospect of a two front war with Pakistan and China, and led India to shift its defense policy from one based on peace and nonviolence to one based on a strong military posture. 506

<sup>502</sup> Thid

<sup>&</sup>lt;sup>503</sup> Sumit Ganguly, "India's Pathway to Pokhran II: The Prospects and Sources of New Delhi's Nuclear Weapons Program," *International Security* 23, No. 4 (Spring 1999): 151.

Reiss, Without the Bomb, 206.

<sup>&</sup>lt;sup>505</sup> Ganguly, 151-2.

<sup>&</sup>lt;sup>506</sup> Reiss, Without the Bomb, 207.

Compounding India's insecurity, in October 1964 China tested its first nuclear bomb, immediately sparking a debate in India on the development of nuclear weapons. The test also led the United States to pledge their support to any nation threatened by Chinese aggression. 507 The chairman of the Indian Atomic Energy Commission, Homi Bhabha, reacted to the Chinese test by fancifully declaring that India could develop its own nuclear bomb within eighteen months. 508 Bhabha was a major proponent of an Indian nuclear arsenal, arguing that it could afford India "a position of absolute deterrence even against another having a many times greater destructive power under its control." Other Indian elites, for example the diplomat Sisir Gupta, felt that responding to the Chinese test was essential, even if China would not use the weapons against India. As he put it, "without using its nuclear weapons and without unleashing the kind of war which would be regarded in the West as the crossing of the provocation-threshold, China may subject a non-nuclear India to periodic blackmail, weaken its people's spirit of resistance and selfconfidence, and thus achieve without a war its major political and military objectives in Asia."510

Driven by this nuclear threat from China, on November 27<sup>th</sup>, 1964, Indian Prime Minister Shastri made the decision to publicly support the development of "peaceful nuclear explosives"—technology that is "virtually indistinguishable from that of nuclear weapons."

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<sup>&</sup>lt;sup>507</sup> A.G. Noorani, "India's Quest for a Nuclear Guarantee," *Asian Survey* 7, No. 7 (1967): 490.

<sup>&</sup>lt;sup>508</sup> Ibid, 213.

<sup>&</sup>lt;sup>509</sup> Ganguly, 152.

<sup>510</sup> Ibid.

<sup>&</sup>lt;sup>511</sup> Ibid, 216.

### 2. Case Overview

In 1946, even before India was independent, Nehru authorized Homi Bhabha to begin nuclear research for the soon-to-be Indian state. Despite the fact that the nominal goal of the research was to produce energy, Nehru recognized from the outset the potential military applications of the research. As he declared in 1946, "I hope Indian scientists will use the atomic force for constructive purposes, but if India is threatened she will inevitably try to defend herself by all means at her disposal."<sup>512</sup> In 1954, Bhabha unveiled an ambitious plan for India's nuclear program, where India would achieve a full uranium fuel cycle to produce plutonium, which in turn could be used in concert with India's vast thorium reserves to create uranium-233 for power. 513 Of course, as Marwah notes, "there was one problem: pure plutonium, commensurate to its fueling function, was also bomb material, and its separation process was a secret of the nuclear powers." <sup>514</sup> From this point on, India would "justify their opposition to all forms of international safeguards, as well as their desire for a plutonium separation capability, by maintaining that it was demanded for the country to fulfill its threestage plan for nuclear development."515

In 1956, India signed a deal with Canada for the construction of a "40-megawatt, heavy water-moderated CIRUS (Canadian-Indian, U.S.) research reactor,

<sup>512</sup> Kamal Matinuddin, *The Nuclearization of South Asia* (Oxford: Oxford University Press, 2002): 61.

<sup>&</sup>lt;sup>513</sup> Reiss, Without the Bomb, 218.

<sup>&</sup>lt;sup>514</sup> Onkar Marwah, "India's Nuclear and Space Programs: Intent and Policy," *International Security* 2, No. 2 (Autumn 1977): 101.

<sup>&</sup>lt;sup>515</sup> Reiss, Without the Bomb, 218.

which burned natural-uranium fuel."516 In a related deal, the United States agreed to provide heavy water for the reactor; significantly, neither of these deals included stringent safeguards—India simply pledged to only use the technology for 'peaceful purposes. '517 Two years later, in July 1958, India announced plans to build a plutonium separation facility (named Phoenix) at Trombay. Although supposedly for use in power production, this decision was suspicious to many because the heavy water reactor was not even finished yet. The actual reason, as Reiss notes, "was India's realization in May 1958 that China was developing nuclear weapons, which the prime minister was understandably hesitant to disclose." In the same year, Indian Atomic Energy Commission head Homi Bhabha privately told an English physicist friend that he wanted India to develop nuclear weapons. <sup>519</sup> As Bhabha's French friend and physicist Bertrand Goldschmidt later put it, "Bhabha always wanted the bomb." <sup>520</sup> The CIRUS reactor began operations in 1960, and construction on the Trombay facility began the next year; the facility had no safeguards since it was indigenously constructed. 521 Once the Trombay facility was completed (in 1965), India would have the theoretical capability to produce one to two nuclear bombs a year by extracting plutonium from the spent fuel from the reactor. 522

Because of the infrastructure that had already been developed (ostensibly for peaceful purposes), by the time India officially began research into nuclear explosives in late 1964, it was already technically close to a nuclear weapons capability.

<sup>&</sup>lt;sup>516</sup> Richelson, 220.

<sup>&</sup>lt;sup>517</sup> Reiss, Without the Bomb, 218-220.

<sup>&</sup>lt;sup>518</sup> Ibid

<sup>&</sup>lt;sup>519</sup> Ganguly, 150-1.

<sup>&</sup>lt;sup>520</sup> Richelson, 220-1.

<sup>&</sup>lt;sup>521</sup> Reiss, Without the Bomb, 220.

<sup>&</sup>lt;sup>522</sup> Ibid.

Recognizing this, a U.S. intelligence estimate shortly after the Chinese nuclear test "concluded that the chances were 'better than even' that within a few years India would seek to join the nuclear club. They also noted that India had the basic facilities needed for a modest program, including the Phoenix facility, and estimated that by 1970 the country could have an arsenal of about a dozen 20-kiloton weapons." Nonetheless, a CIA report in October 1964 judged that "India does not plan to commence work on the bomb as yet because GOI [Government of India] is convinced the ChiComs will not have an offensive nuclear capability for at least five years. In the meantime, should the situation change, India is relying on President Johnson's assurances to come to the aid of any nation menaced by China." A day later, acting chairman of the JCS Curtis LeMay sent a memo to Secretary of State Dean Rusk, arguing in favor of the vague assurances the U.S. had provided because of America's conflicting strategic objectives. As he wrote,

"The US assurances appear appropriate as a basis for discussions with India at which time Indian intentions can be more accurately determined. At the same time, however, the Joint Chief of Staff consider that it is most important that no actions be taken which could alienate US allies, especially Pakistan. The assurances proposed are general in nature and do not commit the United States to any specific military course of action. This will permit flexibility of response consistent with US interests and other strategic commitments." 525

<sup>523</sup> Richelson, 227.

<sup>&</sup>lt;sup>524</sup> Central Intelligence Agency, "Subject: Indian Government Policy on Development of Nuclear Weapon," October 24, 1964, in "U.S. Intelligence and the Indian Bomb," No. 5, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB187/index.htm.

<sup>&</sup>lt;sup>525</sup> Memorandum for the Secretary of Defense, "The Indian Nuclear Problem: Proposed Course of Action," October 23, 1964, in "India and Pakistan—On the Nuclear Threshold," No. 2, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

At the same time, U.S. officials recognized that the Chinese test would prompt India to consider developing nuclear weapons, resulting in a State Department memo in November 1964 that proposed increased nuclear cooperation with India as a carrot that could provide prestige that may help offset the desire for nuclear weapons. These initiatives included plutonium recycling, thorium recycling, desalination projects, Project Plowshares cooperation (where U.S. PNEs could be used in India under American supervision), construction of commercial nuclear power stations, experimental advanced prototype reactors, radioisotope research, fostering Trombay as a "regional center" for nuclear research, planning an international scientific conference for Trombay, and assigning a U.S. AEC representative to India. 526

Writing a month later in a secret report, Henry Rowen (a member of the Defense Department's International Security Affairs bureau) outlined the potential consequences of Indian proliferation for U.S. interests:

"One consequence of an Indian program is that one more national state, India, could some day be able to attack the United States with nuclear weapons...Secondly, one more national state would have the capacity for starting nuclear actions with fair chance of spreading and involving the United States...Thirdly, it follows from the above that there would be a reduction in our power to influence events in South Asia and to some extent throughout the world. Fourthly, India's economic development would suffer—and possibly at serious costs to the Indian social structure. Fifthly, pressure for further proliferation in Asia would grow. Most notably in Pakistan...A nuclear decision by India, following soon after China, would undoubtedly help to remove inhibitions to the development of these weapons—especially if it appeared that the United States and Soviet Union were unwilling or unable to prevent the spread...In short, the world may be near a basic

<sup>&</sup>lt;sup>526</sup> Letter from John G. Palfrey, Atomic Energy Commission, to Ambassador Llewellyn Thompson, "Discussion Paper on Prospects for Intensifying Peaceful Atomic Cooperation with India," November 23, 1964, in "India and Pakistan—On the Nuclear Threshold," No. 3, *The National Security Archive*,

http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

change in attitudes on the inevitability of the spread of nuclear weapons<sup>327</sup>

It was with these worries in mind that U.S. officials began considering policies to reduce the Indian motives for proliferating, considerations that initially centered on the Indian desire for a guarantee against nuclear attack.

#### **Indian Search for a Nuclear Guarantee**

In December 1964, Indian Prime Minster Shastri began seeking a nuclear guarantee for non-nuclear countries from the superpowers, traveling to London and discussing the idea with British Prime Minster Harold Wilson, who responded favorably to the idea. Shastri stated that the U.N. would be the best forum for addressing the issue, while his foreign minister stated that "one simple method... would be for the nuclear powers to agree never to use any nuclear device against a non-nuclear nation. In a New Year's Eve memo to Secretary Rusk, Ambassador at Large Llewellyn Thompson argued against making a "unilateral guarantee to India against nuclear attack" or a joint guarantee with the Soviets. As he put it, "I do not see how we could give a specific guarantee to India as a non-aligned country and not be obliged to guarantee all of our allies. In other words, even though it might have been the best way to halt the Indian program, a nuclear

<sup>&</sup>lt;sup>527</sup> Henry S. Rowen, Department of Defense, "The Indian Nuclear Problem," December 24, 1964, in "U.S. Intelligence and the Indian Bomb," No. 7, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB187/index.htm.

<sup>&</sup>lt;sup>528</sup> Noorani, 492.

<sup>&</sup>lt;sup>529</sup> Ibid, 493.

<sup>&</sup>lt;sup>530</sup> Memorandum from the State Department, Ambassador at Large, "New Delhi's 1862 of December 31, 1964," December 31, 1964, in "India and Pakistan—On the Nuclear Threshold," No. 5, *The National Security Archive*, www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

guarantee for India posed political difficulties for the U.S. in the context of its broader Cold War alliance system.

In late February, Secretary Rusk sent a memo to Ambassador-at-Large W. Averell Harriman, setting out a list of points that he should raise with Prime Minister Shastri in an attempt to convince him that India did not need to develop nuclear weapons. In order to reassure India vis-à-vis China, Rusk instructed Harriman to (1) commend Shastri for his commitment to refrain from developing nuclear weapons, (2) to assure him that the U.S. would publicly declare after the next Chinese test its intention to protect any country from Chinese aggression, (3) to remind Shastri that previous statements to the same effect from 10/64 do indeed apply to India, (4) that China's nuclear weapons will not dissuade the U.S. from responding to Chinese aggression against India, (5) that the U.S. has politically supported India in the past against China (both in 1959 and 1962) and will continue to provide military aid, (6) that the U.S. has the capability to respond to Chinese aggression promptly both with nuclear and conventional forces, (7) that the U.S. is willing to further detail the U.S. capabilities with Indian officials, and (8) the U.S. felt it was important to privately assure India of American support against China. As Rusk noted though, "we do not plan at this time to make any public statement of assurance specifically singling out India...We must...avoid, by showing too much concern, placing Indians in position to seek too high a price for their refraining from taking the nuclear route."531 In other words, despite its public support for India, the U.S. was not prepared to accept the strategic costs associated with formally guarantee India against Chinese attack.

<sup>&</sup>lt;sup>531</sup> State Department Telegram for Governor Harriman from the Secretary, February 27, 1965, in "India and Pakistan—On the Nuclear Threshold," No. 7, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

By May of 1965, India had made no real progress in achieving a nuclear guarantee for itself or other non-nuclear states. In order to press the issue further, on May 4, "in a major policy statement to the 114-Member United Nations Disarmament Commission, the Indian delegate, B.N. Chakravarti, proposed a five-point plan which included: (1) 'an undertaking not to use nuclear weapons against countries who do not possess them,' and (2) 'an undertaking through the United Nations to safeguard the security of countries who many be threatened by powers having nuclear weapons capability or embarking on a nuclear weapons capability.'"<sup>532</sup> Both the U.S. and U.S.S.R. responded noncommittally to the proposal, again signaling an unwillingness to take the steps to ameliorate India's security predicament. <sup>533</sup>

In September, India and Pakistan fought yet another short war over Kashmir, and China publicly supported Pakistan, threatening to intervene against India and "open a second front along India's Himalayan border." This led many members of parliament to press Shastri to initiate a full-fledged nuclear weapons program, to which he responded that "if the Chinese perfected their nuclear delivery systems India would be forced to reconsider its nuclear policies." Around the same time, Indian ambassador to the U.S. B.K. Nehru declared that "There is a great pressure on the Indian government to explode a nuclear bomb... The Indian government has so far resisted this pressure, but obviously India or any other self-denying non-nuclear power, if it does deny itself the position of an independent nuclear capability, must

<sup>&</sup>lt;sup>532</sup> Noorani, 494.

<sup>533</sup> Ibid.

<sup>&</sup>lt;sup>534</sup> Ganguly, 156.

<sup>&</sup>lt;sup>535</sup> Ibid.

call upon the international community to defend itself against a nuclear attack."<sup>536</sup> During the course of the war, the United States imposed an arms embargo on both India and Pakistan as punishment. <sup>537</sup> This stick, however, was unrelated to India's activities in the nuclear realm, and only exacerbated India's security problems. In October, a U.S. Special National Intelligence Estimate (SNIE) concluded,

"India has the capability to develop nuclear weapons. It probably already has sufficient plutonium for a first device, and could explode it about a year after a decision to develop one...the proponents of a nuclear weapons program have been strengthened by the Indo-Pakistani war, but the main political result has been a strengthening of Prime Minster Shastri's position. We believe that he does not now wish to start a program and that he is capable of making this decision stick for the time being...However, we do not believe that India will hold to this policy indefinitely. All things considered, we believe that within the next few years India probably will detonate a nuclear device and proceed to develop nuclear weapons."

In November, India continued its longstanding international nonproliferation advocacy by supporting a UN resolution in November which "outlined the principles an acceptable nonproliferation treaty would embody: (1) the treaty should not have any loopholes through which nuclear or nonnuclear weapons states could proliferate directly or indirectly; (2) there must be an equal balance of mutual responsibilities and obligations between the nuclear and nonnuclear weapons states; (3) the treaty should be viewed as a first step toward general and complete disarmament, with special reference to nuclear disarmament; and (4) the provisions should be designed to ensure the treaty's effectiveness." However, India also sought to protect PNEs

<sup>539</sup> Reiss, Without the Bomb, 223.

<sup>&</sup>lt;sup>536</sup> Noorani, 494-5.

<sup>&</sup>lt;sup>537</sup> Perkovich, 109.

<sup>&</sup>lt;sup>538</sup> Director of Central Intelligence, SNIE 31-1-65, "India's Nuclear Weapons Policy," October 21, 1965, in "U.S. Intelligence and the Indian Bomb," No. 9, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB187/index.htm.

under any nonproliferation treaty, a proposal the U.S. balked at since "no meaningful distinction could be made between 'peaceful' and 'nonpeaceful' nuclear explosions." A month later, Shastri explicitly authorized Bhabha to move forward from general PNE research to specific work on a "subterranean nuclear explosion project (SNEP)... This allowed Bhabha to conduct research on bomb design and its nonnuclear components up to a point where India would be three months away from detonating a nuclear device once the political decision was taken." <sup>541</sup>

The Indian nuclear program hit a roadblock in January 1966, when Shastri and Bhabha died within two weeks of one another, and the new AEC head Vikram Sarabhai ordered the PNE program to be suspended. As Richelson notes, this "limited authorized development of an atomic bomb, but did not stop it. The separation facility at Trombay continued to extract plutonium from the fuel rods used in the CIRUS reactor, although at a much slower rate than expected, while the nuclear establishment developed the expertise to transform the plutonium metal into bomb cores." In April, a new CIA report hit the mark, concluding that "The Indian nuclear policy at this time is to refrain from embarking on a nuclear weapons program, although the policy could be changed quickly. In fact, the Indians reportedly are conducting a limited amount of research devoted to reducing the time it would take to develop a weapons once a decision is made."543

<sup>&</sup>lt;sup>540</sup> Ganguly, 155.

Reiss, Without the Bomb, 221.

<sup>&</sup>lt;sup>542</sup> Richelson, 222.

<sup>&</sup>lt;sup>543</sup> Office of Scientific Intelligence, Central Intelligence Agency, "Indian Nuclear Plans," *Scientific Intelligence Digest*, April 1966, in "U.S. Intelligence and the Indian Bomb," No. 12, *The National Security Archive*,

www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB187/index.htm.

A month later, after China tested another nuclear bomb, Indian Foreign Minister Singh assured the parliament that India nuclear policy is "kept under constant review." A day later, Singh reminded the superpowers,

"To bring about an atmosphere of non-proliferation it is necessary that the non-nuclear powers should be assured by the main nuclear powers that if they forego the programme of going ahead with the acquisition of nuclear weapons, they would not suffer. Unless that assurance is forthcoming and there is confidence and sacrifice on the part of the non-nuclear power in steps toward disarmament, then obviously non-proliferation is not possible. The way will then be open for a large number of countries to go ahead with the development of nuclear programme even for non-peaceful purposes." <sup>545</sup>

Also in May, the State Department approved of the Indian embassy's proposal to attempt to impress upon India the massive financial costs that building a credible nuclear deterrent would entail, including a large arsenal with delivery capabilities.<sup>546</sup>

In June 1966, Undersecretary of State George Ball sent a memorandum to President Johnson outlining the possible courses of action for dissuading India from developing nuclear weapons. The memo noted that Indian "government leaders are continuing to hold the line against such a course. But a decision point is likely to be reached within a few years and, unless there is some new development, India almost certainly will go nuclear. Such a decision could start a nuclear proliferation chain reaction. This would be contrary to basic US national interest. It is therefore imperative that we take all possible promising actions to prevent it." The results of a full-fledged Indian nuclear weapons program would include "great damage to Indian development prospects," Pakistani alarm that would likely lead them to "turn to the

<sup>&</sup>lt;sup>544</sup> Noorani, 495.

<sup>&</sup>lt;sup>545</sup> Ibid, 495-6.

<sup>&</sup>lt;sup>546</sup> State Department Telegram Regarding Estimated Cost of Indian Nuclear Weapon Program, May 24, 1966, in "India and Pakistan—On the Nuclear Threshold," No. 9, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

US, Communist China, or the Soviet Union either for assistance in acquiring nuclear weapons or for support in deterring India," an increase in the probability of proliferation in states like Israel, Japan, and Germany, and in general less Indian reliance on the US and the USSR for support against China.<sup>547</sup>

In terms of the options available to the United States, the memo suggested emphasizing to India the costs of a nuclear arsenal, and hinting at the possible deleterious effects it would have on U.S. aid to India as a stick. As Ball wrote:

"We could go further and threaten to cut off economic assistance and to withdraw all assurances of political and military aid, if India decided to develop its own nuclear weapons. US fulfillment of this threat would probably impel the Indians to look at once to their own means to meet their security needs, and probably also turn to the Soviet Union. Even making the threat could have an adverse effect on Indian-American relations and on Indian confidence in the US. Perhaps the threat, and certainly the cutoff of aid, would greatly reduce American influence and enhance Soviet influence in India, and would subject India to heavy economic and political strains, which would threaten its viability as a democratic state and an Asian counterweight to China. On the other hand, less drastic use of aid, as one of a number of levers, might effectively influence an Indian decision." 548

In terms of security assurances, Ball voiced his support for pursuing a joint US-USSR nuclear guarantee for all non-nuclear states, noting that it would "probably defer an Indian decision to acquire its own nuclear weapons," but that the Soviet Union did not seem interested in such a guarantee at present. While a formal U.S.-India alliance would have the most powerful effect, Ball noted that "There are strong reasons against our undertaking a formal alliance commitment. In any event, the issue

<sup>&</sup>lt;sup>547</sup> State Department Memorandum for the President, "NSC Meeting, June 9, 1966," June 7, 1966, in "India and Pakistan—On the Nuclear Threshold," No. 10, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

<sup>&</sup>lt;sup>548</sup> Ibid.

<sup>&</sup>lt;sup>549</sup> Ibid.

is hypothetical, at least for the present, since the Indians wish to retain their nonaligned status. If such a US-Indian alliance were concluded, it might result in a
complete US break with Pakistan and in a Pakistan-Chinese Communist alliance." He
also emphasized the danger that India would soon develop a PNE, and that this must
be discouraged as well since it would be "widely viewed (in Pakistan and elsewhere)
as the beginning of an Indian nuclear weapons program and, from the technical
standpoint, would be virtually indistinguishable from weapon development."

The
memo concluded by recommending that the U.S. study in greater depth the use of
economic leverage over India, the likely effects of arms control agreements, the
lengths to which the US could go in terms of security assurances, and what other
options might be available. President Johnson approved research into these issues
on August 1st, although he did not approve any specific policy change.

As the Non-Proliferation Treaty began to take shape in early 1967, India began to intensify its search for a nuclear guarantee, arguing that India was in a similar predicament to Japan and Germany, both of whom were hesitant to sign the NPT even despite being protected by an American nuclear guarantee. William Foster, the head of the American delegation at the treaty conference, argued that guarantees against nuclear threat were already implied in President Johnson's statement of October 1964, but that "an expansion of the President' statement could be undertaken within the framework of the U.N." With specific reference in India, in April 1967 Foster "acknowledged the very genuine problem of security posed by China, but added that the Indians 'had great pride in their nonalignment. It is very difficult to

<sup>550</sup> Ibid.

<sup>551</sup> Ibid

<sup>552</sup> Richelson, 230.

work out a way in which both of these positions (the guarantee and nonalignment)—can be met simultaneously." Soon thereafter, Indian External Affairs Minister M.C. Chagla announced that India no longer sought a guarantee under U.N. auspices, but rather a joint guarantee from the U.S. and U.S.S.R. "which would stand up ahead of time to 'deter' China and which committed the guarantors to immediate reprisal in case China was not deterred." 553

In order to discuss such a guarantee, in late April the new Indian prime minister Indira Gandhi sent L.K. Jha as an envoy to Washington to meet with American officials. On April 25<sup>th</sup>, Jha (along with Indian Ambassador to the U.S. B.K. Nehru and AEC head Vikram Sarabhai) met with Secretary of Defense Robert McNamara in order to test American willingness to enter such an agreement. McNamara opened the meeting by "expressing the US awareness of the need for assurances against nuclear threats," noting the U.S belief that "parallel declarations were the best approach," and that the U.S. "welcomed such declarations by the USSR, UK, and France, supplemented by a UN endorsement." McNamara acknowledged the psychological impact of the Chinese nuclear program, but tacitly warned India against developing nuclear weapons. As he put it, "To put the matter candidly, the danger is that India will overreact to the Chinese threat. India's military forces are already too large, and India must take special care not to waste its resources." Jha responded that "the psychological effects of the Chinese nuclear program make the credibility of assurances essential, to deter both Indian expenditure and Chinese attack," to which McNamara replied "the President's statement of 1964 was a very strong one and constitutes a real deterrent...This is not to say that the 1964

<sup>&</sup>lt;sup>553</sup> Noorani, 497-8.

statement should not be altered and improved. We would welcome a parallel statement by the USSR."554

Later in the meeting, the topic of conversation shifted to the NPT, with Jha noting that "there are two major obstacles to Indian acceptance: One is the security problem vis-à-vis China; the other is the fact that India has developed nuclear technology which contributes to Indian confidence and prestige, but which appears threatened by serious curtailment if India adheres to the NPT." He complained that the NPT was "'a rough treaty'—i.e. strongly discriminatory against the non-nuclear weapons states," to which McNamara replied "the only discrimination is with respect to peaceful explosions; there is no inhibition on the development of nuclear power plants." AEC chairman Vikram Sarabhai then chimed on, pointing out that "the NPT is often spoken of as a 'first step' toward disarmament, but India does not see anything beyond the NPT. For example, India does not see any indication that the USSR or the US intend to slow down the growth of their own nuclear weapons or delivery systems...if disarmament is not to be the next step, then India is reluctant to give up the option of building the bomb." The meeting closed with McNamara promising to discuss the matter of parallel declarations with the USSR, stating that "China would be 'immensely impressed' by parallel US and USSR declarations; together they would represent 'a very credible deterrent." 555

In June, Secretary Rusk met with Soviet Foreign Minister Gromyko to discuss the possibility of assurances for India, which Rusk stated was one of three main

<sup>&</sup>lt;sup>554</sup> Memorandum of Conversation from the Office of the Assistant Secretary of Defense, "Meeting between the Secretary of Defense and Mr. L.K. Jha," April 25, 1967, in "India and Pakistan—On the Nuclear Threshold," No. 15, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

<sup>555</sup> Ibid

obstacles in the way of formalizing the NPT.<sup>556</sup> Rusk pointed out the problem of Senate approval for any treaty that provided specific nuclear assurances for India, and thus proposed something through the U.N. Security Council, which Gromyko agreed with. Furthermore, Rusk noted that "If the Indians asked for assurances, the other non-nuclear powers might ask for them," to which Gromyko responded "the statement made would not be adapted specifically to India but to non-nuclear powers in general."<sup>557</sup> These two issues—the U.S. desire to avoid a formal treaty and the Soviet desire to avoid any assurances specifically for India—proved to be deal breakers for the Indians, as "the qualified guarantees that both sides offered failed to satisfy India's requirements."<sup>558</sup>

The failure to provide India with a specific nuclear guarantee marked an important turning point in U.S. nonproliferation efforts vis-à-vis India, as the U.S. declined to consider any truly substantial carrots or sticks from this point on. Because of conflicting strategic objectives—the desire to avoid conflict with Pakistan and China, and the desire to avoid setting a precedent of providing security guarantees for nonaligned states—the U.S. declined to take the step with by far the best odds of success in reducing Indian motives for pursuing the bomb.

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Assurances to Non Nuclear Powers; Latin American Nuclear Free Zone," June 23, 1967, in "India and Pakistan—On the Nuclear Threshold," No. 16, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB6/index.html.

<sup>&</sup>lt;sup>557</sup> Ibid.

<sup>&</sup>lt;sup>558</sup> Ganguly, 157.

# The Indian Program Advances and U.S. Relations Deteriorate

For the rest of 1967 and into 1968, Prime Minster Gandhi and other Indian officials continued to express their opposition to the NPT in its current form for a host of reasons already made clear—India's lack of formal security assurances, the bias against non-nuclear states in the treaty, and the lack of explicit responsibility on the part of the nuclear powers to disarm. Contrasting India to Japan and Germany (two other states with comparable nuclear expertise, but both of whom already had formal nuclear guarantees), Gandhi stated that "We for our part may find ourselves having to take a nuclear decisions any moment, and it is therefore not possible for us to tie our hands." Based on these considerations, and supported by "public opinion polls which purportedly indicated that a majority of the Indian people wanted nuclear bombs and did not want the country to sign the NPT," India announced its intention to abstain from signing in May 1968.

Meanwhile, without authorization, a high ranking Indian nuclear scientist named Ramanna authorized a subordinate named Chidambaram "to develop the equation of state for plutonium... a task that was fundamental to determining how much high explosive was needed to compress plutonium to specified density, as well as the explosive yield of a device" As Richelson notes, "While Sarabhai eventually became aware of the efforts taken in defiance of his instructions, he did not seek to halt them. As a result, Ramanna, Chidambaram, and their associates could proceed until they were able to build and ready to test a device—provided they received

<sup>&</sup>lt;sup>559</sup> Norani, 499.

<sup>&</sup>lt;sup>560</sup> Reiss, Without the Bomb, 224.

<sup>&</sup>lt;sup>561</sup> Richelson, 222-3.

approval from the prime minister, whomever he or she might be when the time arrived."562

Throughout 1969 and 1970, India continued to make progress toward fabricating a nuclear device, with Sarabhai and Gandhi both admitting publicly in the summer of 1970 that India was researching PNEs and had the capability to produce them. 563 Responding to these statements, U.S. officials warned India that a nuclear test using plutonium from the CIRUS reactor (which operated with U.S.-supplied heavy water) would be considered a breach of the nuclear cooperation agreement between the two countries; India denied this claim, declaring that it was entitled to "any peaceful applications of nuclear energy, including peaceful nuclear explosives."564

In July of the next year, initiating the process that would lead to the Shanghai Communique of 1972, Secretary of State Henry Kissinger visited China in an effort to improve relations with the Communist regime. However, as Perkovich notes, Indian leaders viewed this development with great alarm:

"Since the 1962 war with China, India had assumed (or hoped) that the U.S. could be relied upon to defend India diplomatically and even militarily against Chinese pressure or aggression. This comforting assumption evaporated when the Sino-American breakthrough has announced on July 15, 1971. Henry Kissinger telephoned India's ambassador to Washington on July 17 and notified him that 'we could be unable to help you against China' in the event of Chinese involvement in a war between India and Pakistan. Shortly thereafter, on August 5, Pakistani president Yahya Khan threatened to go to war if an effort was made to 'take away' East Pakistani territory. Washington's deference and the Sino-American rapprochement had emboldened the Pakistani leadership."565

<sup>562</sup> Ibid.

<sup>&</sup>lt;sup>563</sup> Perkovich, 155.

<sup>&</sup>lt;sup>564</sup> Ibid. 159.

<sup>&</sup>lt;sup>565</sup> Perkovich, 163.

India responded several weeks later by signing a 20-year Treaty of Peace, Friendship, and Cooperation with the U.S.S.R., which "provided for immediate 'mutual consultations' should either party be subject to attack or threat." When Sarabhai publicly declared yet again in September that India was in the process of developing a PNE device, the United States pressed Canada to warn India against such a program, leading Canadian Prime Minister Pierre Trudeau to write to Gandhi that "use of Canadian supplied material, equipment and facilities... for the development of a nuclear device would inevitably call on our part for a reassessment of our nuclear cooperation agreement with India."

Meanwhile, conditions continued to deteriorate in East Pakistan, where an indigenous movement seeking greater autonomy was agitating. The West Pakistani military began to brutally crack down on the movement in March, leading to a refugee influx into India and eventually Indian military intervention in December. In response, the U.S. suspended military and economic assistance to India, and Secretary Kissinger and President Nixon made a calculated decision to throw U.S. support behind Pakistan in the war. On December 10th, in order to warn India against escalating the war and attacking West Pakistan, the U.S. ordered the carrier *U.S.S. Enterprise* and its nine supporting battleships to enter the Bay of Bengal. Although India soon routed Pakistani forces and decisively won the war (delivering Bangladesh its independence), the U.S. power play added to India's security

<sup>&</sup>lt;sup>566</sup> Reiss, Without the Bomb, 225.

<sup>&</sup>lt;sup>567</sup> Perkovich, 159.

<sup>&</sup>lt;sup>568</sup> Reiss, Without the Bomb, 225.

<sup>&</sup>lt;sup>569</sup> Perkovich, 164.

<sup>&</sup>lt;sup>570</sup> Ibid.

concerns, not only because the *U.S.S. Enterprise* was believed to be armed with nuclear weapons, but also because it signaled "the unwelcome prospect of greater superpower involvement in the subcontinent and Indian ocean."<sup>571</sup>

In the wake of India's victory in January 1972, the U.S. Embassy in New Delhi sent a cable to the Secretary of State updating Washington on the Indian nuclear program. The Embassy concluded that while India "holds closely its intentions in the nuclear field, on balance Embassy thinks it unlikely India will conduct underground or underwater blast in the next few weeks or months, though we do not rule it out in longer term." On a more pessimistic note, the Embassy judged,

"As on most defense/foreign policy related matters, GOI [Government of India] is not susceptible to pressure from abroad on whether to hold atomic test or to initiate nuclear weapons program. India already has sufficient nuclear know-how, and through previous and present foreign collaboration, has or will have enough nuclear materials to give GOI latitude of decision...Since international community has in past made GOI wholly aware of staggering cost of nuclear weapons program, there seems little scope for further such input. Thus, we see nothing US or international community can presently do to influence GOI policy directions in atomic field." 572

Sounding a similarly dark note, an early February memo from the Assistant Secretary of Defense to Secretary of Defense Laird warned that an Indian nuclear test "would set off a chain reaction that would be felt throughout West Asia... implications for the Near East and South Asia would be far reaching," impacting states as diverse as Pakistan, China, Iran, Saudi Arabia, Iraq, and Israel. Furthermore, although the memo stated, "The consequences of such a move for US interests—economic, military, and political—in the area and globally are incalculable," the

<sup>&</sup>lt;sup>571</sup> Reiss, Without the Bomb, 226.

Airgram A-20 From the Embassy in India to the Department of State, No. 211, January 21, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3, http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

Assistant Secretary felt that there was "little that we can do at this time to affect this situation." Several weeks later, a State Department report concluded that an India "probably has undertaken research directly related to the development of nuclear weapons, and may well have fabricated one or more nuclear devices...Regarding the prospects of an Indian decision to proceed with a nuclear test, it is our judgment that such a decision is unlikely during the next few months and may well be deferred for several years."

By early 1972 the U.S. had concluded that it no longer had any ability to influence the Indian nuclear program, an assessment that persisted until India tested its first bomb in 1974. The rapprochement with China and support for Pakistan in the 1971 war had certainly constrained U.S. policy options, as once again broader strategic objectives led the U.S. to adopt policies with deleterious impacts on its nonproliferation efforts. The Indian treaty with the Soviet Union, which was driven by U.S. policies, essentially removed any remaining U.S. leverage over India.

#### The Final March Toward the Bomb

In May of 1972, the new AEC chairman, Homi Sethna, authorized scientists to begin work on India's first nuclear device. <sup>575</sup> Further cementing its regional dominance in the wake of the 1971 war, in July India signed the Simla Agreement

Memorandum From the Assistant Secretary of Defense for International Security Affairs (Nutter) to Secretary of Defense Laird, No. 222, Washington, February 4, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3, http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

Memorandum From the Director of the Bureau of Intelligence and Research (Cline) to Director of Central Intelligence Helms, No. 228, Washington, February 23, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3, http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

<sup>575</sup> Richelson, 224.

with Pakistan, which "offered some hope for 'a friendly and harmonious relationship'" between the two states. <sup>576</sup> The next month, in a meeting of State Department officials on the Indian program, "There was much discussion whether our non-proliferation interests were 'overriding.' The consensus was that these were important but not overriding, especially as our influence was limited...it was agreed that we should proceed with efforts to strengthen the position internationally of our view regarding the indistinguishability of PNE's and military explosions. It was also agreed that it would be useful to stimulate a further discussion in India regarding the costs of developing a nuclear weapons and missile delivery system." <sup>577</sup>

Later in August 1972, a joint intelligence report on the Indian program that estimated that "India is capable of detonating a nuclear device within a few days to a year of a decision to do so...The chances are roughly even that India will conduct a test in the next several years and label it a peaceful explosion. It will certainly keep open the option to do so." The report noted that a nuclear test would be very popular domestically, but that India was aware that it could bring adverse foreign reactions, especially with regard to economic aid. In addition, "The USSR is opposed to nuclear proliferation, and would no doubt prefer to see India avoid testing. But Moscow would probably see its continued close ties with India as too important to jeopardize by very vigorous opposition to an Indian program." In regard to U.S. options, the report judged that "Private demarches and counsels well in advance of a decision might possibly have some effect. However, pressures by the US and other Western

<sup>576</sup> Reiss, Without the Bomb, 225-6.

<sup>&</sup>lt;sup>577</sup> Memorandum for the Record, No. 296, Washington, August 1, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3, http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

Powers would probably not have a decisive impact on New Delhi if Mrs. Gandhi was convinced that a test was required to serve important Indian interests. Indeed, given present Indian resentment of US policies, unilateral pressures by the US would probably prove counterproductive."<sup>578</sup> In other words, the U.S. was no longer in a position to slow the Indian program.

In addition to Indian resentment of the U.S., the report elaborated that that "with the end of the PL-480 food program, of even limited arms sales, and with suspension of new increments of economic aid, US does not have much tangible leverage on the Indian Government." While Japan and other Western countries would be in a better position to influence India, "it is very doubtful that any one or all of these countries could persuade New Delhi not to go the course of nuclear proliferation, if a firm conclusion had been reached that it would be in India's interest to do so. Not only is it doubtful that these countries could or would offer enough inducements, e.g., security guarantees and money, to divert India from this path, but India would probably calculate that they would not, in the event, engage in serious punitive sanctions."

An extended report completed the next month came to similar conclusion, noting that U.S. policy options "divide between things we can do before and after an Indian nuclear explosion. In both instances US ability to influence events is marginal. Indeed, given the present poor state of Indo-US relations, an overly visible US effort could hasten, rather than delay, the day India explodes a nuclear device. Multi-lateral

<sup>&</sup>lt;sup>578</sup> Special National Intelligence Estimate, No. 298, Washington, August 3, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3, http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

<sup>579</sup> Ibid

and non-US bilateral efforts, especially if joined by the Soviets, have somewhat better prospects of affecting Indian actions, but would probably not per se be decisive." <sup>580</sup>

Meanwhile, the treaty with the U.S.S.R. and the warming U.S. relations with Pakistan and China were causes of concern for India's nonalignment policy, making a nuclear test attractive for a host of reasons. As Reiss notes, a test would express "symbolically India's freedom from external pressures...It would act as a rebuke to the Nonproliferation Treaty regime, which had been crafted by the United States and the Soviet Union, would illustrate the limits of Moscow's influence with New Delhi, and would remind China that India could develop nuclear weapons if it wished. A single test only would not invite a punitive response, and had greater likelihood of being viewed as the political signal New Delhi intended." Perhaps driven by these concerns, along with popular opinion in favor of nuclear weapons, Indira Gandhi gave the final authorization for the fabrication of a nuclear device in September. 582

While the United States made efforts to improve relations with India in early 1973, these efforts were hampered by the punitive aid cutoffs enacted during the 1971 war and the Indian opposition to U.S. policy in Vietnam. In March of 1973, the U.S. officially recognized Bangladesh as an independent state, and later that month the U.S. ended the suspension of an \$87.6 million development loan to India. However, at the same time the U.S. also announced new military sales to Pakistan—"albeit nonlethal weapons and spare parts"—which angered India and helped to offset any

<sup>&</sup>lt;sup>580</sup> Response to National Security Study Memorandum 156, No. 300, Washington, September 1, 1972, U.S. Department of State, *Foreign Relations of the United States*, Nixon-Ford Administrations, Volume E-7, Ch.3,

http://www.state.gov/r/pa/ho/frus/nixon/e7/48214.htm.

<sup>&</sup>lt;sup>581</sup> Reiss, Without the Bomb, 226-7.

<sup>&</sup>lt;sup>582</sup> Perkovich, 171-2.

diplomatic gains from resuming economic aid. 583

In March 1973, the non-nuclear components of the first device were tested, and in September preparations for the nuclear test site began. S84 In February of 1974, Indian officials began their final meetings on the planned nuclear test, and on May 13, 1974, Indian scientists began to assemble the nuclear device. S85 On May 18, India conducted a nuclear test at Pokharan with plutonium derived from the CIRUS reactor, declaring it a "peaceful nuclear explosion." The United States responded calmly to the test, even increasing economic assistance in the short term and continuing nuclear fuel shipments. In the longer run, however, the U.S. eventually cut off nuclear cooperation with India with the passage of the 1978 Nuclear Non-Proliferation Act. S88 Despite India's claim following the test that it was not manufacturing nuclear weapons, the reality is that India began producing plutonium cores for nuclear devices quickly thereafter, with the only brief hiatus occurring in 1975 before production resumed in 1976.

### 3. Analysis

1. Strength of United States motivation: The United States' prime reason for opposing an Indian nuclear weapons program was the harm such a program would do to the emerging Non-Proliferation Treaty and nonproliferation norms, and

<sup>&</sup>lt;sup>583</sup> Ibid, 166.

<sup>&</sup>lt;sup>584</sup> Ibid, 172.

<sup>&</sup>lt;sup>585</sup> Richelson, 225.

<sup>&</sup>lt;sup>586</sup> Reiss, Without the Bomb, 228.

<sup>&</sup>lt;sup>587</sup> Perkovich, 184; Reiss, Without the Bomb, 232.

<sup>&</sup>lt;sup>588</sup> Ganguly, 160-1.

<sup>&</sup>lt;sup>589</sup> Gaurav Kampani, "From Existential to Minimum Deterrence: Explaining India's Decision to Test," *Nonproliferation Review* 6, No. 1 (Fall 1998): 14.

especially the fear that an Indian arsenal would lead to a global proliferation chain reaction. India's non-aligned status meant that an Indian nuclear arsenal posed little direct threat to the United States, resulting in a relatively low U.S. motivation.

2. Asymmetry of motivation favoring the United States: The asymmetry of motivation in this case clearly favored India, as nuclear weapons were seen as essential to deterring Chinese aggression and preserving Indian nonalignment and regional preeminence. For the United States, on the other hand, preventing an Indian nuclear weapons capability was simply one of many goals the U.S. was pursuing within the broader framework of the nonproliferation regime and the Cold War.

Moreover, the U.S. never made any real effort to close the gap in motivation by offering India sufficient carrots or threatening sufficiently potent sticks. The United States declined to provide India with the formal nuclear guarantee it desired as a substitute for an indigenous nuclear weapons capability in 1967, and it was unwilling to consider the use of substantial sticks in this period due to the fear that American pressure would simply drive India into the arms of the Soviets. The U.S. rapprochement with China and support for Pakistan in the 1971 war ended up crippling any U.S. hopes of influencing the Indian nuclear program, as these events led India to sign a treaty with the USSR and actually increased the Indian motives for acquiring nuclear weapons while simultaneously reducing American leverage over India. The strongest carrots the U.S. offered India were increased nuclear cooperation and a vague UN security pledge without specific reference to India; meanwhile, the strongest sticks were the threats to cut off nuclear cooperation and the vague warning that an Indian nuclear weapons program could have deleterious effects on U.S. aid to

India. The U.S. could have offered to end the 1965 arms embargo on India as a carrot, but likely feared that this would alienate Pakistan, leading the Pakistanis to embrace closer relations with China. Any threat to cut off aid became impossible after all U.S. assistance was suspended during the 1971 war with Pakistan.

- **3. Clarity of American objectives:** The U.S. consistently made clear its opposition the Indian nuclear weapons program, it simply declined to take strong enough steps to achieve this objective.
- 4. Sense of urgency to achieve the American objective: U.S. policymakers never seemed to act based on a sense of urgency; rather, they continuously deferred the issue, whether because of a relatively low motivation to achieve the objective, conflicting policy priorities (formalizing the NPT, improving relations with China and Pakistan), or after 1971 the largely accurate (and entirely self-fulfilling) belief that the United States lacked the leverage to influence the direction of the Indian nuclear program. After the joint U.S.-U.S.S.R. offer of a vague UN guarantee failed to convince India to sign the NPT in 1968, the issue was essentially dropped, and the U.S. failed to take any serious steps after this to halt the Indian program. Between 1968 and 1971, the U.S. missed a major opportunity to influence Indian decisionmaking, as the explicit political decision to build a nuclear device had still not been made, and the U.S. still retained considerable leverage over India in the form of economic aid, political support against China, and the possibility of military aid as a carrot. However, no major effort was pursued, and by the end of 1971 this leverage had completely evaporated.

- **5. Adequate domestic political support:** The only indication that a lack of domestic support may have been a barrier to U.S. efforts to restrain the Indian nuclear program is that U.S. policymakers refrained from offering India an explicit nuclear guarantee partially because this would require a treaty that would need to be ratified by the Senate. However, the more likely reason was that the United States did not want to be in a position, as Rusk worried, where they would need to provide nuclear guarantees for every single Cold War ally.
- **6. Usable military options:** Presumably due to the potential repercussions of military action (namely, an alliance with the Soviet Union) and the initial desire to maintain positive relations with India, military options were never really considered—nor usable—in the Indian case.
- 7. Opponent's fear of unacceptable escalation: Considering that the U.S. never threatened any form of severe consequences (for example, military action, economic sanctions, etc.) if India did not halt its nuclear weapons program, it is highly unlikely that India feared any unacceptable escalation. However, the Indian decision to label the 1974 test a peaceful nuclear explosion and the subsequent decision to keep the nuclear weapons program covert indicates that India sought to minimize the negative international consequences from acquiring a nuclear weapons capability.
- **8.** Clarity concerning the precise terms of settlement: One of the main problems in the Indian case was that the U.S. never really proposed a comprehensive deal in an effort to halt the Indian nuclear weapons program. The closest the U.S. came was the offer of a joint UN pledge with the USSR to guarantee non-nuclear

states from nuclear attack or blackmail, but this vague assurance did not satisfy India's desire for an explicit guarantee designed to deter a Chinese attack, nor was it explicitly linked to India's nuclear weapons development, but rather implicitly, through an effort to obtain India's accession to the NPT.

# 4. Conclusion

The presence of conflicting strategic objectives greatly hindered U.S. nonproliferation efforts in the Indian case. Because of the U.S. desire to maintain positive relations with Pakistan and later China, the U.S. did not consider substantial carrots for India that could have ameliorated their security dilemma, most notably the formal guarantee against Chinese nuclear attack that India sought from 1965 to 1967. At the same time, the U.S. desire to keep India out of the Soviet sphere of influence meant that policymakers were unwilling to threaten India with any serious sticks. From 1968 to 1974, the U.S. made almost no serious effort at all to halt the Indian program, as the 1971 tilt toward China and Pakistan largely removed any remaining influence the U.S. might have held over India.

# 9. North Korea: Failure at Every Turn

Driven by a nuclear threat from the U.S. and a desire for greater autonomy from its superpower protectors, North Korea began a nuclear weapons program in the late 1970s. The U.S. did not truly respond until the early 1990s, insisting that North Korea verifiably halt its program subject to IAEA inspections prior to negotiating on issues of interest to North Korea. This policy, later coupled with the threat of sanctions and implicit threat of war, refused to address North Korea motives for proliferating and thus failed to reverse the asymmetry of motivation favoring North Korea. After Jimmy Carter's intervention, the U.S. signed a package deal that froze the North Korean nuclear program. However, by this time North Korea had already assembled a small nuclear arsenal.

### 1. Motives

Although a dedicated program did not begin until significantly later, North Korea's nuclear ambitions most likely originated in the Korean War. During the war, the United States made several threats to use nuclear weapons against the North, and after the war ended in 1953, the U.S. deployed tactical weapons in South Korea. <sup>590</sup> Tens of thousands of U.S. soldiers remained in South Korea, and North Korean leader Kim Il Sung, "Fearing the collapse of his regime...turned North Korea into a military fortress heavily supported by Soviet and Chinese allies." <sup>591</sup> In addition to deterring the use of nuclear weapons by the U.S, a North Korean nuclear arsenal would help hedge against a possible South Korean conventional superiority, provide valuable

<sup>&</sup>lt;sup>590</sup> Mazarr, 93

<sup>&</sup>lt;sup>591</sup> Solingen, *Nuclear Logics*, 118.

diplomatic leverage, and would act "as insurance against the loss of North Korea's traditional allies, China and Russia, and thus increase Pyongyang's freedom of action." Despite the Cold War alliances with China and the USSR, Kim Il-Sung was obsessed with achieving "autarky and self-sufficiency," a principle known in North Korea as "juche." As Solingen puts it: "As Kim Il-Sung's crucial instrument of domestic political control, juche precluded any perception of North Korea as subordinated to an external force." Nuclear weapons would also serve what many observers have identified as Kim Il-Sung's (and later Kim Jong-Il's) primary objective: namely, regime preservation. 595

### 2. Case Overview

The North Korean quest to develop nuclear weapons began in the early 1960s, when Kim Il-Sung approached the Soviet Union to obtain assistance in the nuclear weapons realm. His request was denied, but the Soviets did agree to train North Korean nuclear scientists and provide North Korea with a small research reactor in 1962. North Korean officials also unsuccessfully sought assistance from China in the wake of their 1964 nuclear test, and from East Germany in the mid-and late 1960s, reportedly declaring, "We need the atom bomb." In 1974, North Korea again sought nuclear assistance from China, even asking for Chinese tactical nuclear weapons. Like the Soviets before them, the Chinese denied the request but agreed to train North Korean scientists. Such efforts continued throughout the 1970s, and in 1976, "North

<sup>592</sup> Mazarr, 100.

<sup>594</sup> Ihid

<sup>&</sup>lt;sup>593</sup> Solingen, Nuclear Logics, 121.

<sup>&</sup>lt;sup>595</sup> Ibid; Mazarr, 100.

Korea allegedly threatened to suspend economic relations with the Soviets unless it supplied it with a nuclear power plant, a demand that the Soviets again rejected. Czechoslovakia was approached with a similar request in 1979." By the end of the decade, Kim Il-Sung authorized an indigenous nuclear weapons program, and in 1979 he ordered a gas-graphite reactor to be constructed that would be capable of producing plutonium. <sup>596</sup>

#### The U.S Watches and Waits

By 1982, construction had begun on the reactor at Yongbyon, which the CIA noted in a July report. S97 As Richelson notes, the reactor was well suited to the production of plutonium, requiring neither enriched uranium nor heavy water, which North Korea could not easily or cheaply acquire. North Korea had adequate graphite and natural uranium for the reactor within its own borders. Despite U.S. awareness of the North Korean reactor, it was not for several years until policymakers became concerned about a possible North Korean nuclear weapons program. In a January 1985 State Department briefing paper, it was noted that the U.S. government had "requested help from Western supplier nations in denying the DPRK sensitive nuclear materials. Their reactions were positive; responses from the PRC and the USSR to the same general request were less so. The reactor was finished in 1986, and in the same year the Soviets convinced North Korea to sign the NPT in exchange

<sup>596</sup> Solingen, *Nuclear Logics*, 127-8.

<sup>&</sup>lt;sup>597</sup> Richelson, 346.

<sup>&</sup>lt;sup>598</sup> Ibid, 333.

<sup>&</sup>lt;sup>599</sup> Reiss, Bridled Ambition, 234.

<sup>&</sup>lt;sup>600</sup> Department of State Briefing Paper, January 5, 1985, in "North Korea and Nuclear Weapons: The Declassified Record," No. 5, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/

for "agreements with the Soviets for a nuclear power plant, and for trade and economic cooperation." An extended CIA report in September 1986 on the North Korea nuclear program concluded that although there was no concrete evidence of North Korean intent to develop nuclear weapons at the time, "whether the current nuclear developments in North Korea reflect a nuclear weapons program, they represent a considerable developing capability."

By April 1987, the CIA judged that "the North's expanded nuclear program could include an effort to develop nuclear weapons." Raising further worries, by 1988 North Korea had still not signed a safeguards agreement with the IAEA, and U.S. intelligence officials had obtained evidence that North Korea was constructing a reprocessing facility at Yongbyon, which would give them the capability to extract plutonium for bombs from the reactor's spent fuel. Reacting to these developments, a May CIA report concluded that "the possibility that Pyongyang is developing a reprocessing capability and its footdragging on implementing NPT provisions, suggest close scrutiny of the North's nuclear effort is in order." Six months later, the CIA noted that North Korea "is developing a nuclear capability for undetermined final use... Also, is footdragging on negotiations for safeguards on new construction that appears to have nuclear-related characteristics, which raises questions about the

<sup>601</sup> Solingen, Nuclear Logics, 129.

<sup>602</sup> Central Intelligence Agency, "North Korea: Potential for Nuclear Weapon Development: The Declassified Record," September 1986, in "North Korea and Nuclear Weapons," No. 7, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.

<sup>&</sup>lt;sup>603</sup> Central Intelligence Agency, "North Korea's Nuclear Efforts," April 28, 1987, in "North Korea and Nuclear Weapons: The Declassified U.S. Record," No. 8, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.

<sup>&</sup>lt;sup>604</sup> Central Intelligence Agency, "North Korea's Expanding Nuclear Efforts," May 3, 1988, in "North Korea and Nuclear Weapons: The Declassified U.S. Record," No. 10, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.

final application."<sup>605</sup> In addition to the reprocessing facility, U.S. intelligence sources discovered that North Korea was "conducting conventional high-explosive tests of the sort required to design and build an implosion-style nuclear warhead."<sup>606</sup> In 1989, the gas-graphite reactor shut down for approximately one hundred days, indicating that North Korea was unloading the spent fuel, which could then be reprocessed to obtain plutonium for nuclear weapons. When taken together, the mounting evidence "convinced U.S. officials that North Korea was intent on secretly acquiring an indigenous, self-contained nuclear weapons capability."<sup>607</sup>

The realization that North Korea was developing nuclear weapons was very troubling to U.S. officials, for an array of reasons. North Korea was a "rogue" state well known for its aggressive actions; since achieving its independence in 1948, North Korea "had managed to invade South Korea, seize a U.S. intelligence ship in international waters, shoot down a U.S. electronic reconnaissance aircraft, killing all aboard, and engage in assorted acts of terrorism and abduction." The United States was still technically in a state of war with North Korea following the Korean War, and after the war the U.S. signed a Mutual Defense Treaty with South Korea in 1953, committing the U.S. to the defense of the South in the event of an attack. A North Korean nuclear arsenal would undermine the ability of the U.S. to deter a North Korean attack, or any other actions "that undermine U.S. or South Korean

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 <sup>605</sup> Central Intelligence Agency, "Nuclear Proliferation Survey: The Next Generation,"
 November 1988, in "North Korea and Nuclear Weapons: The Declassified U.S. Record," No.
 12, The National Security Archive, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.
 606 Mazarr, 94.

<sup>&</sup>lt;sup>607</sup> William Drennan, "Nuclear Weapons and North Korea: Who's Coercing Whom?" in *The United States and Coercive Diplomacy*, ed. Robert Art and Patrick Cronin (Washington: United States Institute of Peace Press, 2003), 164-5.

<sup>608</sup> Richelson, 317.

<sup>&</sup>lt;sup>609</sup> Drennan, 160-1.

interests."<sup>610</sup> A North Korean nuclear weapons capability could lead to a South Korean nuclear weapons program, a Japanese program, a regional arms race, and perhaps North Korean export of sensitive nuclear technologies to other proliferating rogue states. Also potentially at stake was the strength of nonproliferation norms enshrined in the NPT and IAEA. Perhaps the worst-case scenario involved a "North Korean attack to unify the country under Kim II-Sung's control, with nuclear weapons used to deter the United States from responding."<sup>612</sup>

### The Bush Administration's Half-Hearted Efforts

Despite the serious dangers of a North Korean nuclear arsenal, the Bush administration initially made little effort to dissuade North Korea from the nuclear path. According to Engelhardt, this was largely because the Bush administration felt it had little leverage with North Korea, whose economy was based on trade with China and the Soviet Union, and whose military the United States had little desire to engage in a conflict that could lead to a second Korean War and great damage to Seoul. Upon discovering the North Korean reprocessing facility, Secretary of State James Baker did attempt to enlist the Soviet Union's aid in halting the North Korean program, but apparently to little avail. Attended that directly confront North Korea about its nuclear weapons program, the Bush administration instead made an effort to gradually improve relations with North Korea, engaging in meetings with the North Korean diplomats in China. Based on these contacts, the U.S. advised North Korea of

<sup>&</sup>lt;sup>610</sup> Cirincione et al., 280.

<sup>611</sup> Reiss, Bridled Ambition, 232-3.

<sup>612</sup> Engelhardt, 33-4.

<sup>613</sup> Ibid.

<sup>614</sup> Richelson, 357.

five conditions they would need to fulfill before the U.S. would engage in more formal diplomatic relations: "(1) tone down the anti-U.S. rhetoric; (2) halt all terrorist activities; (3) help with returning the remains of the more than eight thousand U.S. servicemen missing in action from the Korean War; (4) engage in a dialogue with the South; and (5) agree to IAEA safeguards on all its nuclear activities." From 1989 to 1991, North Korea made progress in all of these areas except for IAEA safeguards; before signing a safeguard agreement, North Korea demanded that US nuclear weapons be removed from South Korea, and that the US provide North Korea with a negative security assurance (that is, promise non-use of nuclear weapons against North Korea).

Complicating matters for North Korea, events in the early 1990s undermined the special relationships North Korea had long enjoyed with the Soviet Union and China. By 1991, the Soviet Union (North Korea's primary arms supplier) had collapsed, and China and Russia both moved to formally recognize South Korea for the first time, while North Korea failed to achieve "cross-recognition" from the U.S. and Japan. In fact, the Soviets had begun improving ties with South Korea in 1990, leading the North Korean foreign minister to warn "that North Korea would embark on a 'nuclear development' program if Moscow further improved ties to Seoul and that it would recognize Japan's claims to four northern islands occupied by the Soviet Union." In response, the Soviet Union "threatened to cut off all nuclear cooperation if the North's nuclear facilities were not placed under IAEA safeguards, a threat it repeated during the coming months." In early 1991, Japan too made IAEA

<sup>615</sup> Reiss, Bridled Ambition, 235-6.

<sup>616</sup> Ihid

inspections a precondition for improved relations with North Korea, refusing to "establish diplomatic relations, provide reparations for its occupation of Korea before World War II, offer financial assistance, or permit Japanese investment until the North implemented IAEA inspections."

In September 1991, a resolution was put forward at the IAEA Board of Governors meeting pressing North Korea to sign a safeguards agreement as required by the NPT; however, North Korea reacted angrily to this public pressure, rejecting the resolution outright. With the end of the Cold War in sight, on September 21<sup>st</sup> the U.S. government publicly announced that it was removing all tactical nuclear weapons from Europe and Asia (including South Korea), precipitating a North Korean statement intimating that North Korea would soon conclude an IAEA safeguards agreement.

Despite these reciprocal moves, however, the U.S. made a calculated decision to have South Korea take the lead on the nuclear weapons issue. In a November memo to Secretary of Defense Dick Cheney, Secretary of State Baker made this quite explicit, writing to Cheney that he had assured South Korean President Roh that "whatever we would do with the major powers would be in support of the North-South talks and would not undercut South Korea's lead on security and political issues in dealing with the North."<sup>620</sup> Baker also emphasized the U.S. position against

<sup>&</sup>lt;sup>617</sup> Ibid, 230-237.

<sup>618</sup> Robert Carlin, "North Korea," in Nuclear Proliferation After the Cold War, 135.

<sup>619</sup> Ibid

<sup>620</sup> Department of State Cable, Secretary of State James Baker to Secretary of Defense Richard Cheney, "Dealing with the North Korean Nuclear Problem; Impressions from My Asia Trip," November 18, 1991, in "North Korea and Nuclear Weapons: The Declassified U.S. Record," No. 16, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.

linking U.S. force levels in South Korea with the North Korean nuclear issue, and informed Cheney that his "slow-down on the withdrawal of US forces from the ROK, combined with enhancements to South Korea's conventional defense which you may work out in Seoul, is consistent with the messages we brought to all these capitals [Seoul, Beijing, etc]."<sup>621</sup>

On November 25, the North Korean Foreign Ministry announced that it would sign a safeguards agreement once the U.S. began removing its nuclear weapons.<sup>622</sup> North Korea also proposed "simultaneous inspections of DPRK nuclear facilities and inspections...to confirm the U.S. nuclear withdrawal... DPRK-U.S. negotiations to discuss such simultaneous inspections and 'removing the nuclear danger' to the North...[and] North-South negotiations on the nuclear issue." By this time, U.S. intelligence indicated that the reprocessing facility at Yongbyon was almost complete and "could be producing plutonium by mid-1992," increasing U.S., Japanese, and South Korean fears. 624 In mid-December, South Korean President Roh declared that there were no longer any nuclear weapons in South Korea, leading North Korea to confirm its intention to sign a safeguards agreement. <sup>625</sup> By the end of the month, the prospects for improved relations appeared even brighter, as North and South Korea signed two historic agreements: first was the Agreement on Reconciliation, Nonaggression, and Exchanges and Cooperation, which was meant to be a precursor to a broad political and economic rapprochement between the two states; second was the Joint Declaration on a Non-Nuclear Korean Peninsula, whereby North and South

<sup>621</sup> Ibid.

<sup>&</sup>lt;sup>622</sup> Carlin, 136.

<sup>623</sup> Ibid, 136-7.

<sup>624</sup> Richelson, 358.

<sup>&</sup>lt;sup>625</sup> Carlin, 137.

Korea pledged to abstain from developing nuclear weapons and to work out strict bilateral inspection arrangements (in addition to IAEA inspections) in each state in order to verify this. 626

On January 7, in another move intended to improve relations with North Korea, the U.S. and South Korea canceled the joint "Team Spirit" military exercise the two states had traditionally held annually, and North Korea again signaled its intention to sign an IAEA safeguards agreement in the near future. 627 Also in January, the U.S. agreed to hold a single diplomatic meeting with North Korean officials, during which Under Secretary of State Arnold Kanter "made it clear that that any improvement in U.S.-DPRK relations was conditioned on the North's implementation of IAEA safeguards and the South-North reciprocal nuclear inspections regime." On January 30, North Korea finally signed the IAEA safeguards agreement, although it still needed to be ratified by the North Korean Supreme People's Assembly. Also around this time, South Korea began planning a summit with North Korea to discuss a broad range of issues; however, the United States objected, pressing South Korea to focus on working out the bilateral nuclear inspections first.

As North Korea delayed ratifying the safeguards agreement, evidence mounted that despite the denuclearization pledge, North Korea was moving forward with its nuclear weapons program. In February, U.S. reconnaissance satellite images showed construction activity at Yongbyon indicating that North Korea was attempting to reinforce the site against potential attacks, and that North Korea was

626 Ibid, 137-8; Reiss, *Bridled Ambition*, 238-9; Mazarr, 95.

<sup>&</sup>lt;sup>627</sup> Drennan, 165.

<sup>628</sup> Ibid, 165-6.

<sup>629</sup> Carlin, 139.

<sup>630</sup> Reiss, Bridled Ambition, 240.

moving equipment out of the reprocessing facility prior to inspections.<sup>631</sup> In the same month, CIA head Robert Gates informed the House Foreign Affairs Committee that North Korea appeared to be persisting in its clandestine nuclear activities, and that North Korea was likely "a few months to as much as a couple of years" away from possessing a completed nuclear device (based on the assumption that North Korea had adequate fissile material from the 1989 reactor shutdown).<sup>632</sup>

On April 9, North Korea finally ratified the IAEA safeguards agreement, and on May 4, North Korea presented the IAEA with its initial declaration of nuclear materials and activities. <sup>633</sup> The declaration was actually more detailed than expected, and it unexpectedly revealed that North Korea had succeeded in producing a very small amount of plutonium. <sup>634</sup> Soon thereafter, IAEA chief Hans Blix arrived in North Korea for a visit prior to formal inspections. Despite the North Korean claim that "we have no plutonium reprocessing facility," Blix was given access to the suspected reprocessing plant at Yongbyon, after which he stated that "if it were in operation and complete, then it would certainly in our terminology be called a reprocessing plant." <sup>635</sup> According to Blix, the massive facility was 8 percent finished, but was missing equipment that suggested North Korea might have removed some components in order to hide the fact that the completed portion of the facility was already operating. <sup>636</sup> On May 25, the first IAEA inspections began in North Korea, during which inspectors found numerous inconsistencies with the declaration North

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<sup>631</sup> Richelson, 519.

<sup>&</sup>lt;sup>632</sup> Ibid, 521-2.

<sup>&</sup>lt;sup>633</sup> Carlin, 141.

<sup>634</sup> Richelson, 517.

<sup>635</sup> Ibid, 517-8.

<sup>&</sup>lt;sup>636</sup> Ibid.

Korea had provided.<sup>637</sup> When Blix asked for access to two undeclared sites that U.S. intelligence indicated were storing nuclear waste, North Korea refused, claiming the sites were military, not nuclear.<sup>638</sup> Making matters worse, IAEA lab analysis of samples taken during the inspections indicated that North Korea had lied when it claimed it had only produced a small amount of plutonium on just one occasion.<sup>639</sup> Rather, the analysis showed that North Korea had separated plutonium in 1989, 1990, and 1991, "strongly suggesting that the North had more weapons material than it had declared, perhaps enough for one or two crude nuclear weapons."<sup>640</sup> The U.S. and IAEA believed that the waste resulting from the plutonium separation was stored at the two undeclared sites, which seemed to be connected to the reprocessing facility by underground pipes that the North Koreans had tried and failed to conceal.<sup>641</sup>

While this nuclear controversy was simmering, North Korea's international position continued to turn for the worse. Between 1990 and 1992, North Korea's gross national product had declined three to five percent annually, while its volume of trade had dropped nearly fifty percent. In June and July 1992, Russia, the United States, the entire European Community, and the G-7 all publicly called on North Korea to comply with its IAEA obligations and conclude the bilateral inspection arrangement with South Korea it had pledged itself to in late 1991. Later in the summer, China established formal diplomatic relations with South Korea, destroying North Korean hopes of achieving cross-recognition from Japan and the U.S.

Furthermore, China informed North Korea that in order for their alliance to continue,

<sup>&</sup>lt;sup>637</sup> Carlin, 141.

<sup>638</sup> Ibid; Drennan, 167

<sup>&</sup>lt;sup>639</sup> Cirincione et al., 285.

<sup>&</sup>lt;sup>640</sup> Drennan, 167.

<sup>&</sup>lt;sup>641</sup> Cirincione et al., 285-6.

North Korea would have to end its nuclear weapons program, a demand North Korea allegedly agreed to. In November, Russian President Boris Yeltsin announced an end to all military aid to North Korea and declared that the Russia-DPRK defense pact must be "either canceled completely or drastically revised," stating that "we do not intend to render such military assistance." Yelstin also made clear that Russia would suspend nuclear cooperation with Pyongyang until North Korea fully complied with the IAEA.<sup>642</sup>

Despite the positive steps taken in 1991 and 1992, North Korean actions soon proved the issue would not be easily resolved. While the U.S. had provided North Korea with a carrot by removing its nuclear weapons from South Korea and canceled a military exercise, this clearly did not remove the American nuclear or conventional threat to the North. The U.S. had not offered North Korea a negative security assurance, and it had made the discussion of any additional carrots conditional on full North Korean compliance with the IAEA. In other words, the U.S. was essentially asking for a verifiable halt to North Korea's nuclear weapons program *prior* to taking any steps to ameliorate North Korea's political and security dilemmas.

#### Clinton and the NPT Withdrawal Threat

By the time Bill Clinton entered the White House in January 1993, U.S. and international efforts to halt the North Korean nuclear weapons program looked increasingly bleak, leading the U.S. and South Korea to turn to the stick. After suspending the exercise the previous year, on January 25 South Korea announced that Team Spirit 1993 would take place in March, citing North Korea's failure to allow

<sup>&</sup>lt;sup>642</sup> Reiss, Bridled Ambition, 241-3.

full inspections and conclude the promised bilateral inspection agreement. In February, Blix presented evidence at an IAEA meeting of North Korea's efforts to cheat and hide nuclear facilities from inspectors, leading the Board of Governors to call on North Korea to allow special inspections of the two sites along with the "full and prompt implementation of the safeguards agreement," with a de facto thirty-day grace period before referring the matter to the UN Security Council. North Korea dismissed the resolution, declaring that it may need to employ "self-defensive measures" to protect its independence. 643

The Team Spirit exercise began on March 9, and on March 12, North Korea declared its intention to withdraw from the NPT in ninety days, "citing the 'grave situation' created by Team Spirit and the February 25 resolution demanding special inspections." After North Korea again refused to allow the IAEA to inspect the two suspected nuclear waste sites, on April 1 the Board of Governors announced that "the agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded" and referred the issue to the Security Council. However, China (with its veto power) was opposed to any UN sanctions against North Korea, a position it made clear when it voted against the Board of Governors resolution referring the matter to the Security Council. Recognizing this, the U.S. again chose diplomacy as a means of resolving the issue, promising to hold direct talks with North Korean as a means of forestalling withdrawal from NPT. The U.S. offered to discuss issues of interest to North Korea, including "security assurances, inspections of U.S. military bases in the South, and the cancellation of Team Spirit," but made clear that negotiation on these issues would only occur once North Korea cooperated in the

<sup>&</sup>lt;sup>643</sup> Ibid. 247-50.

nuclear realm. In other words, substantial carrots would be withheld until after North Korea gave up its nuclear weapons program. The first direct meetings since 1992 were scheduled for June. 644

As a result of these direct talks in June, the U.S. and North Korea reached an agreement to suspend North Korean NPT withdrawal the day before it was scheduled to occur. In exchange for this suspension, the U.S. agreed to hold continued talks with North Korea, although offered no real carrots upfront. The two sides released a joint statement that affirmed "the principles of assurance against the threat and use of force, including the use of nuclear weapons; peace and security in a nuclear-free Korean peninsula, including impartial application of Full-Scope Safeguards; mutual respect for each other's sovereignty, and noninterference in each other's internal affairs; and support for the peaceful reunification of Korea." Significantly, the issue of special inspections of the two wastes sites was omitted from the quid pro quo, despite the fact that this was the spark of the crisis was and would be required to verify the extent of the North Korean nuclear program. After further talks in July, the two sides reached another quid pro quo whereby the U.S. pledged to help North Korea obtain light water reactors (ostensibly to replace the current reactor at Yongbyon) in exchange for the North's promise to begin working out inspection agreements with the IAEA and South Korea. The head U.S. negotiator, Robert Galluci, stated that the U.S. would not start a third round of negotiations until North Korea made progress in its discussions with the IAEA and South Korea. 645

<sup>&</sup>lt;sup>644</sup> Ibid, 250-3. <sup>645</sup> Drennan, 169.

Continuing on the path that had been set by the Bush administration, U.S. officials under Clinton insisted that any substantial carrots (those that would be needed to reduce North Korean motivations for pursuing the bomb) would not be negotiated until after North Korea fully complied with its NPT obligations.

Meanwhile, Chinese opposition undercut the threat of a UN sanctions stick, and the desire to appease South Korea and the IAEA reduced U.S. maneuverability. This policy stalemate soon led the U.S. to reverse its policy for the first of many times.

## **Policy Reversals and Worsening Intelligence Estimates**

After North Korea failed to make significant progress in these negotiations, the United States announced that it would suspend the scheduled meeting with North Korean officials in September. Meanwhile, the IAEA continued to clamor for special inspections, and in October North Korea asked for direct talks with the U.S. and a package deal to resolve the nuclear issues. The U.S. pushed the IAEA to allow a compromise inspection arrangement offered by North Korea, but the IAEA refused to budge, leading U.S. officials to inform North Korea that they had until the end of the month to allow "ad hoc" inspections before the issue would be referred to the Security Council (these inspections would allow the IAEA to verify that North Korea was not currently diverting nuclear materials, but would not give access to the two nuclear waste sites needed to verify North Korea's nuclear past). In order to induce North Korea, South Korea offered to suspend Team Spirit 1994 if the North accepted such inspections along with "an exchange of special envoys." Several days later,

China publicly made clear its opposition to U.N. sanctions, undercutting any potency of the threat of a sanctions stick.<sup>646</sup>

Into November, North Korea continued to insist on a package deal as the solution, proposing to link the IAEA's desired inspections with "with the lifting of U.S. economic sanctions against the North, negotiations on diplomatic recognition, and the cancellation of Team Spirit." On November 16, unveiling what was called the "comprehensive approach," the U.S. abandoned its previous position and agreed to resume direct talks with North Korea and cancel Team Spirit 1994 "in return for a resumption of South-North dialogue and IAEA ad hoc inspections" along with a pledge to eventually grant access to the two nuclear waste sites. In other words, the issue of special inspections of the waste sites—and the resultant ability to verify the extent of the North Korean nuclear weapons program—was again deferred.<sup>647</sup>

By this point in time, however, intelligence estimates of the North Korean nuclear program had grown considerably more pessimistic. Despite President Clinton's early November declaration on *Meet the Press* that "North Korea cannot be allowed to develop a nuclear bomb," the reality was that U.S. intelligence consensus at that time indicated this policy declaration was disingenuous at best. <sup>648</sup> In November, CIA chief James Woolsey stated that the U.S. intelligence community had judged "for some time" that North Korea "could have enough nuclear material for a weapon and perhaps two." <sup>649</sup> In the beginning of December, Secretary of Defense Les Aspin stated twice that North Korea "might have enough plutonium for 'a bomb,

<sup>&</sup>lt;sup>646</sup> Reiss, Bridled Ambition, 256-7.

<sup>&</sup>lt;sup>647</sup> Drennan, 170-1.

<sup>&</sup>lt;sup>648</sup> Reiss, Bridled Ambition, 260.

<sup>&</sup>lt;sup>649</sup> Richelson, 522.

maybe a bomb and a half,' and U.S. intelligence sources reported that there was a 'better than even' chance that North Korea had two nuclear weapons."<sup>650</sup> This judgment was based on the fact that North Korea could have obtained sufficient plutonium for two bombs from the spent fuel unloaded during the reactor shutdown in 1989, which was supported by the evidence of plutonium separation in 1989, 1990, and 1991. Around this time, talks of possible U.S. military action against the North Korean nuclear program began to circulate in the press. However, as Reiss notes:

"A military strike made little sense. If North Korea had acquired nuclear weapons, or had even separated the plutonium to build such weapons, it was highly unlikely that they would have been stored at Yongbyon. As good as U.S. intelligence may have been, it was hard to identify all of the North's possible nuclear sites and even harder to destroy them. Further, a preemptive strike would risk a second Korean war...In addition, a preemptive strike might invite the real, if low, possibility of a nuclear response from Pyongyang. But even conventional attacks on South Korea's nuclear power stations could be devastating, scattering deadly radioactivity over the peninsula and through the region...Nothing less than the military defeat, occupation, and inspection of the entire country would eliminate the North's nuclear weapons program. For better or worse, diplomacy was the only option available." 652

In February 1994, just before Blix was set to declare that the continuity of IAEA safeguards was broken due to a lack of inspections, North Korea agreed to allow ad hoc inspections. In early March, North Korea also formally agreed to the U.S. proposal of late 1993—i.e., "resumption of South-North talks in exchange for the cancellation of Team Spirit, followed by the opening of the long-delayed third

<sup>650</sup> Reiss, Bridled Ambition, 264.

<sup>651</sup> Richelson, 523.

<sup>652</sup> Reiss, Bridled Ambition, 258-9.

<sup>&</sup>lt;sup>653</sup> Drennan, 172.

round of U.S.-North Korea high-level talks."<sup>654</sup> However, when South Korea adopted an uncompromising negotiating posture in the North-South talks, North Korea responded by forbidding the IAEA team from inspecting part of its reprocessing facility, leading the IAEA to withdraw its inspectors despite a U.S. plea for the IAEA to be more patient.<sup>655</sup> On March 16, "the IAEA stated that it could not verify that diversion of nuclear material had not occurred at the reprocessing facility," and presented evidence that North Korea was continuing to advance its nuclear program.<sup>656</sup> North Korea agreed to resume talks with the South without preconditions three days later, but when South Korea persisted in its uncompromising bargaining stance, the North Korean representative angrily walked out of the meeting, declaring, "Seoul is not very far from here. If a war breaks out, it will be a sea of fire."<sup>657</sup>

Despite its repeated policy reversals, by early 1994 the U.S. was no closer to providing North Korea with the package deal of carrots it sought in exchange for full compliance with the IAEA. More concerned with preserving the integrity of the NPT and not "rewarding" rule breakers, the U.S. again relied on continued talks as the sole carrot. When combined with South Korea intransigence, this situation did little to address North Korean motives for proliferating; as a result, North Korea continued its defiant behavior. Reacting to these developments, the U.S. again turned to the stick in an attempt to coerce North Korean compliance.

<sup>654</sup> Ibid.

<sup>655</sup> Reiss, Bridled Ambition, 265-6.

<sup>656</sup> Ihid

<sup>&</sup>lt;sup>657</sup> Ibid.

# **Carter's Intervention and Capping the North Korean Arsenal**

With no progress in the North-South talks, the United States canceled the scheduled talks with North Korea, "rescheduled Team Spirit, announced the shipment of Patriot missile batteries to South Korea, and began trying to line up support for UN sanctions." Moreover, Defense Secretary William Perry ordered the Air Force to "stockpile a supply of munitions and spare parts for F-117 Stealth fighters and F-15E jets and the U.S. Army to replace antiquated helicopters with newer Apache attack helicopters." However, once again there was little credibility in the sanctions threat, as not only China, but also Japan and South Korea were hesitant to support sanctions, fearing they could lead to war. 660

The crisis escalated further on April 1, as North Korea shut down its smaller reactor, raising fears that it would reprocess spent fuel into plutonium for additional bombs. 661 At this point, Clinton administration officials began tacitly acknowledging that North Korea might already have one or more nuclear weapons; as Defense Secretary Perry declared, "Our policy right along has been oriented to try to keep North Korea from getting a *significant* nuclear-weapon capability [emphasis added]." Even more blatantly, Defense Department officials began dismissing North Korea's nuclear past, referring to any current nuclear stockpile as "Bush's plutonium." As Reiss notes, this indicated a basic shift in policy: "One or two nuclear weapons would be tolerated, as long as the North did not acquire any more."

<sup>&</sup>lt;sup>658</sup> Drennan, 173.

<sup>&</sup>lt;sup>659</sup> Reiss, 266.

<sup>660</sup> Ibid.

<sup>&</sup>lt;sup>661</sup> Drennan, 173.

<sup>662</sup> Reiss, Bridled Ambition, 268.

<sup>663</sup> Ibid.

In mid-April, South Korea reversed its previous hard-line stance, announcing that it would accept the U.S. resumption of direct talks with North Korea prior to productive North-South negotiations. <sup>664</sup> On April 20, the U.S. and South Korea announced that they would suspend Team Spirit 1994 and cancel it completely if North Korea would allow IAEA inspections. 665 North Korea rejected this offer, and in May informed the IAEA that inspectors would be allowed to observe the unloading of fuel, but would not be allowed to test the rods, preventing the IAEA from confirming North Korea's history of plutonium production. 666 The IAEA rejected these insufficient conditions. Despite U.S. threats to renounce all future high-level contacts with North Korea, unloading of the spent fuel began in mid-May. 667 After the unloading began, the U.S. shifted its position yet again, proposing another round of talks if North Korea would simply allow the IAEA to observe the unloading and storage of the remaining fuel; however, North Korea declined the offer, accelerating the unloading and storing the fuel rods in such a way as to make the IAEA's task of determining North Korea's past nuclear activities almost impossible. 668

Fears that war would break out on the Korean Peninsula peaked in early to mid June, sparked by Hans Blix's announcement on the 2<sup>nd</sup> that the IAEA had permanently lost the ability to verify whether North Korea had diverted nuclear material—in other words, North Korea's nuclear history could no longer be reconstructed. The United States responded by proposing an arms embargo

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<sup>664</sup> Drennan, 173.

<sup>&</sup>lt;sup>665</sup> Ibid.

<sup>666</sup> Reiss, Bridled Ambition, 268.

<sup>&</sup>lt;sup>667</sup> Drennan, 174.

<sup>668</sup> Ibid.

<sup>669</sup> Reiss, Bridled Ambition, 269.

followed by two escalating phases of UN sanctions against North Korea, sanctions that all involved parties except China signaled they would support. On June 13<sup>th</sup>, North Korea officially withdrew from the IAEA; soon thereafter, South Korea "announced that it would call up 6.6 million reservists for a defense drill" and U.S. intelligence indicated the "North Korean military was moving to a war footing." Three days later, President Clinton was in the process of deciding between three options for reinforcing U.S. troops in South Korea, well aware that "any such deployments might trigger a preemptive strike by North Korea," when the crisis was arrested by the intervention of former president Jimmy Carter.

Although President Clinton was aware of Carter's visit to Pyongyang and had not tried to prevent him from making the trip, neither the U.S. nor South Korea particularly appreciated his intervention into the delicate situation. Although Carter was by no means authorized to engage in diplomacy with Kim Il Sung, that is exactly what he set about doing, informing the North Korean leader that the U.S. would resume direct talks in exchange for a temporary freeze of the North Korean nuclear program supervised by the IAEA and for the North Korean pledge "to consider a permanent freeze if their aged reactors could be replaced with modern and safer ones." Kim's acceptance of a nuclear freeze reportedly was driven by China informing him that they would not veto the initial set of UN sanctions. After informing the White House of this agreement, Carter publicized the agreement in an

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<sup>&</sup>lt;sup>670</sup> Ibid, 270.

<sup>&</sup>lt;sup>671</sup> Ibid, 270-1.

<sup>&</sup>lt;sup>672</sup> Drennan, 175.

<sup>&</sup>lt;sup>673</sup> Ibid, 176.

<sup>674</sup> Ibid.

<sup>&</sup>lt;sup>675</sup> Larry Niksch, "North Korea's Nuclear Weapons Program," *Congressional Research Service Report* (October 2006): 16.

interview on CNN, and the next day "announced to Kim—again with the CNN camera rolling—something he knew to be false, that the White House had ceased all sanctions activity in the United Nations." The Clinton administration denied this false claim, but the next day conformed to Carter's policy, declaring that it would hold direct high-level talks with the North "if Pyongyang confirmed the three conditions Kim Il Sung had already offered Carter: (1) IAEA inspectors would remain at Yongbyon; (2) North Korea would not refuel the reactor; and (3) the North would not reprocess the spent fuel it had just unloaded."

This about face in U.S. policy was driven by the realization that the support in the U.N. for sanctions was undercut by Carter's rogue diplomacy, and by the unsavory possibility that sanctions could lead to war (as North Korea had long warned). As Drennan notes, "Carter had always opposed sanctions, seeing them as an insult to North Korea and its 'Great Leader' and the road to war... Carter had gone to Pyongyang determined to kill sanctions, and he had succeeded." Furthermore, the new U.S. policy reflected the fact that it was no longer possible to definitively determine North Korea's nuclear history—all that could be hoped for at this point was the prevention of future nuclear weapons activities. Despite Kim Il Sung's sudden death on July 8, his son and successor Kim Jong Il soon concluded the wideranging agreement his father had begun negotiating.

<sup>&</sup>lt;sup>676</sup> Drennan, 176-7.

<sup>&</sup>lt;sup>677</sup> Reiss, Bridled Ambition, 272.

<sup>678</sup> Ibid.

<sup>&</sup>lt;sup>679</sup> Drennan, 176-7.

<sup>&</sup>lt;sup>680</sup> Reiss, Bridled Ambition, 272-3.

<sup>&</sup>lt;sup>681</sup> Mazarr, 97.

The result was the October 1994 Agreed Framework, a package deal that froze the North Korean nuclear program in exchange for a range of carrots, including the provision of light water reactors and a supply of heavy oil to offset the energy production foregone by freezing the nuclear reactors. The U.S. and North Korea also pledged to "reduce barriers to trade and investment...open a liaison office in the other's capital...as progress is made on issues of concern to each side...upgrade bilateral relations to the ambassadorial level." Furthermore, the U.S. agreed to "provide formal assurances to the DPRK, against the threat or use of nuclear weapons by the U.S," and North Korea agreed to "consistently take steps to implement the North-South Joint Declaration on the Denuclearization of the Korean Peninsula" and to "engage in North-South dialogue, as this agreed framework will help create an atmosphere that promotes such dialogue." Once the contracts for light water reactors were finalized, ad hoc and routine IAEA inspections would resume. Once the reactors were largely constructed, North Korea agreed to "come into full compliance with its Safeguards Agreement with the IAEA, including taking all steps that may be deemed necessary by the IAEA, following consultations with the Agency with regard to verifying the accuracy and completeness of the DPRK's initial report on all nuclear material in the DPRK." Once the reactors were fully constructed, North Korea pledged to dismantle its nuclear facilities. 682

Because of the agreement's staggered implementation format, inspection of the two suspected nuclear waste sites—the cause of the crisis in the first place—

<sup>&</sup>lt;sup>682</sup> International Atomic Energy Agency, "Agreed Framework of 21 October 1994 Between the United States of America and the Democratic People's Republic of Korea," November 2, 1994, in "North Korea and Nuclear Weapons: The Declassified U.S. Record," No. 17, *The National Security Archive*, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB87/.

would be deferred for years. As Cirincione, put it, "This delay postponed the question of North Korea's past production of plutonium until the final stages of the agreement's implementation, leaving open the question of North Korea's nuclear capabilities while its existing capabilities were frozen."683 Considering that the U.S. intelligence community (as well as the Japanese, South Korean, and Russian intelligence services) already believed North Korea possessed at least one or two nuclear bombs, the reality is that the Agreed Framework capped the North Korean nuclear weapons capability rather than averted or dismantled it. 684 In other words, the terms of the Agreed Framework confirmed that the U.S. had failed to achieve its original objective. In 1997, a high-ranking North Korean official defected to South Korea, and he seemed to confirm this belief, informing intelligence agents "that not only did North Korea possess nuclear weapons but she had planned an underground test, which was only canceled after a warning from the foreign ministry."685 After the Agreed Framework broke down in 2003, North Korea finally tested a nuclear device in October 2006.

#### 3. Analysis

1. Strength of United States motivation: The U.S. was strongly motivated to prevent North Korea from developing nuclear weapons, not only because of the U.S. alliance with South Korea, but also because of North Korea's history of aggression, support for terrorism, and irresponsible international behavior. Following the discovery in the wake of the Gulf War that Iraq had almost developed nuclear

<sup>683</sup> Cirincione et al., 287-8.

<sup>&</sup>lt;sup>684</sup> Niksch, 13-14.

<sup>&</sup>lt;sup>685</sup> Richelson, 527.

weapons clandestinely despite being a party to the NPT, the U.S. was also anxious to restore confidence in the nonproliferation regime. <sup>686</sup> A North Korean nuclear arsenal would destabilize the Korean peninsula, possibly leading North Korea to undertake aggressive actions under the protection of a nuclear shield that could lead to a second Korean war.

2. Asymmetry of motivation favoring the United States: Although the U.S. was indeed strongly motivated to restrain the North Korean nuclear weapons program, the asymmetry of motivation in the case still favored North Korea. As Drennan succinctly puts it, "While North Korea's nuclear aspirations were a clear challenge to vital U.S. interests, the survival of the United States was never in question. The survival of the regime in Pyongyang, however, was potentially at risk in its confrontation with the United States, and it devoted its resources accordingly."687 For the North Korean leadership wary of its increasingly isolated position in the post-Cold War world, the nuclear weapons program was first and foremost an insurance policy against possible American or South Korean aggression; in addition, it was a valuable bargaining chip that could be traded in order to ameliorate North Korea's isolation if the environment looked favorable.

Because one of the main purposes of the nuclear weapons program was to ensure the North Korean regime's security in the face of the U.S. nuclear and conventional threat, U.S. threats to use force against North Korea (tacit or explicit) were in fact counterproductive, increasing North Korean resolve to develop nuclear weapons. Moreover, North Korea likely the questioned the credibility of such threats,

<sup>&</sup>lt;sup>686</sup> Reiss, *Bridled Ambition*, 233. <sup>687</sup> Drennan, 179.

both because of the Clinton administration's reputation for weakness in foreign policy, and because the U.S. would likely dread a conflict that its own Pentagon estimated could lead to a war that was estimated to produce "more than fifty thousand U.S. and nearly five hundred thousand ROK military casualties, an untold number of civilian casualties, and destruction of property running into the tens of billions of dollars, devastating the economies of South Korea and the entire region." The threat of UN sanctions had similar problems, since (at least until June 1994) China publicly opposed sanctions, destroying the credibility of the threat due to China's veto power. Furthermore, as the U.S. continuously backtracked and reversed its positions in 1993 and 1994 in order to avert escalation of the crisis, the credibility of U.S. threats weakened even further. 689

Because of North Korea's motives for proliferating, carrots were more promising than sticks for reversing the asymmetry of motivation; however, by the time the U.S. began seriously offering North Korea carrots in exchange for cooperating with the IAEA, the North Korean nuclear program had already produced sufficient plutonium for a couple weapons, giving North Korea the opportunity to have the best of both worlds: tangible benefits for limited compliance with IAEA along with a couple bombs in the basement to hedge against future uncertainty. Moreover, the benefits that North could hoped to achieve—a negative security assurance, normalization of relations with the U.S, Japan, and South Korea and an end to economic restrictions—were by no means considered guaranteed by North Korea if they cooperated with the IAEA upfront. As Reiss notes, "Pyongyang

<sup>&</sup>lt;sup>688</sup> Drennan, 191-3. <sup>689</sup> Ibid, 186.

suspected that even if these issues could be settled, others lurked in the wings—ballistic missile exports, chemical weapons, and human rights. Some may have thought that nothing short of a fundamental transformation of the North Korean regime would satisfy the United States."<sup>690</sup> Since the U.S. was reluctant to press the issue of special inspections and risk war, and since North Korea seemed to sense this, the best of both worlds arrangement for North Korea is exactly what the U.S. ended up formalizing in the Agreed Framework.

- 3. Clarity of American objectives: At the outset of the case, American objectives were clear. However, by late 1993 it was increasingly clear that U.S. objectives were shifting: no longer would the U.S. demand proof that North Korea had no nuclear weapons capability; it would simply demand that North Korea freeze or cap its existing capabilities, subject to inspections.
- 4. Sense of urgency to achieve the American objective: At various points in the case, the United States acted based on sense of urgency; for example, when North Korea was close to withdrawing from the NPT and when the North began to unload the fuel from its reactor in the spring of 1994. In the former case, the result was a reversal of U.S. policy and diplomatic agreement to suspend North Korea's withdrawal, while in the latter case the result was preparation for sanctions and war, only averted by Jimmy Carter's rogue diplomacy in Pyongyang. At other times, however, the U.S. was content to wait and watch; most notably from the late 1980s through 1992, when the Bush administration essentially left South Korea in charge of the issue, making little concerted effort to directly address North Korea on the issue other than a one time meeting in 1992.

<sup>&</sup>lt;sup>690</sup> Reiss, Bridled Ambition, 247-8.

5. Adequate domestic political support: There was domestic support for using coercive diplomacy against North Korea in order to stop the development of nuclear weapons. However, it was unlikely that the United States public would support war as a means of achieving this goal. As Reiss notes, "The Clinton administration correctly calculated that the American people would not go to war over the integrity of the IAEA or even over one or two nuclear weapons in North Korea." North Korea may have recognized this, which would have undermined the credibility of any tacit American threat to use force. There is no indication that domestic support was an obstacle to sanctioning North Korea, or buying them off through a package of benefits (essentially what occurred with the Agreed Framework).

6. Usable military options: The United States certainly had the military assets proximately deployed that would be needed for a military strike on the North Korean nuclear program. However, as mentioned earlier, there would be no way of ensuring the destruction of North Korea's small stockpile of plutonium or nuclear weapons short of a full-scale invasion and occupation that would in all likelihood result in tens of thousands of deaths on both sides and extensive damage to South Korea. Thus, while the Clinton administration was indeed considering steps to reinforce the American military in South Korea when Jimmy Carter struck a deal in June 1994, there is no indication that the United States was intending to go ahead with a military strike (although they were certainly cognizant that there own preparatory actions could lead to a North Korean preemptive strike and war).

<sup>&</sup>lt;sup>691</sup> Ibid, 282.

- 7. Opponent's fear of unacceptable escalation: While North Korea could not completely dismiss the possibility of UN sanctions or a U.S. military strike; both of these threats were of questionable credibility for the reasons discussed above.

  North Korean actions throughout the crisis (never giving up ground in the face of strong coercive threats) indicate that the regime in Pyongyang believed it could achieve a beneficial outcome to the crisis while avoiding these eventualities.
- 8. Clarity concerning the precise terms of settlement: Prior to the Agreed Framework, which precisely spelled out the terms of the settlement but in fact confirmed the U.S. failure by accepting a small North Korean nuclear arsenal, the U.S. proposed several arrangements whereby North Korea would allow inspections that would completely verify its nuclear activities in exchange for the U.S. agreeing to hold continued talks on other issues of interest to North Korea. However, the balance of benefits and costs to these agreements simply never convinced North Korea to comply.

### 4. Conclusion

Although the U.S. was highly motivated to halt the North Korean nuclear weapons program, its desire to avoid the appearance of appeasing North Korea and rewarding its "rogue behavior" conflicted with its efforts. The U.S. failed to make a concerted diplomatic push until the program was already nearing completion, and when it did finally make this push, it failed to offer significant carrots to North Korea until Jimmy Carter intervened and took the matter into his own hands, leading a package deal that capped rather than dismantled the North Korean program. With the

grave possibility of war present during the case, the U.S. ran into many difficulties implementing its coercive diplomacy strategy, continually backtracking on its previous stances, undermining its credibility, and failing to redress the asymmetry of motivation that favored North Korea. The North Korean case indicates that a high U.S. motivation is not sufficient for successful coercive diplomacy—skillful tactics and policy are needed as well.

# 10. Findings and Implications

The eight cases examined in this study highlight the difficulties the U.S. has encountered in implementing coercive diplomacy against proliferating states. Echoing previous research on coercive diplomacy, this study adds to the conclusion that it is a strategy that fails more often than it succeeds. Of the eight nonproliferation cases examined here, the U.S. succeeded in just three instances, for a success rate of 37.5 percent. This success rate is roughly in line with the 29 percent success rate found in Alexander George's seven cases and the 32 percent success rate found in twenty-two cases examined in Art and Cronin's edited volume on U.S. coercive diplomacy in the post-Cold War era. <sup>692</sup> Beyond this basic statistical observation, this chapter will expand on the following two findings:

- 1) The critical variable driving successful U.S. nonproliferation efforts was an asymmetry of motivation favoring the United States. This asymmetry was never present at the outset of the case, but rather was fostered in successful cases through the utilization of carrots and sticks sufficiently potent to reduce the proliferating state's motivation to persist in its nuclear weapons program. Conversely, nonproliferation failures were inevitably characterized by the utilization of relatively weak carrots and sticks.
- 2) In these cases where the U.S. failed in its efforts, the failure was not primarily due to a lack of leverage, but rather to the presence of *conflicting strategic* and political objectives that constrained U.S. policy choices.

<sup>&</sup>lt;sup>692</sup> Robert Art and Patrick Cronin, eds, *The United States and Coercive Diplomacy* (Washington: United States Institute of Peace Press, 2003): 387.

This chapter will proceed by (1) discussing the relative importance of the eight conditions George identified as impacting coercive diplomacy outcomes, in particular the importance of an asymmetry of motivation; (2) explain the importance of conflicting strategic and political objectives in determining whether the U.S. is able to achieve success; and (3) provide a set of policy recommendations that emerge from the findings.

## **Conditions Favoring the Success of U.S. Coercive Diplomacy**

| Failed Cases  | Pakistan | Israel | S. Africa | India | North Korea |
|---|----------|--------|-----------|-------|-------------|
| Strength of United States motivation                | Low      | Med.   | Low       | Low   | High        |
| Asymmetry of motivation favoring the United States  | No       | No     | No        | No    | No          |
| Clarity of American objectives                      | Mixed    | High   | Mixed     | High  | Mixed       |
| Sense of urgency to achieve the American objective  | Low      | Low    | Low       | Low   | Mixed       |
| Adequate domestic political support                 | Yes      | No     | Yes       | Yes   | Yes         |
| Usable military options                             | No       | No     | No        | No    | No          |
| Opponent's fear of unacceptable escalation          | Low      | Medium | Low       | Low   | Medium      |
| Clarity concerning the precise terms of settlement. | High     | High   | High      | Low   | High        |

| Successful Cases                                    | South Korea | Taiwan | Libya  |
|---|-------------|--------|--------|
| Strength of United States motivation                | High        | High   | Low    |
| Asymmetry of motivation favoring the United States  | Yes         | Yes    | Yes    |
| Clarity of American objectives                      | High        | High   | High   |
| Sense of urgency to achieve the American objective  | High        | High   | Low    |
| Adequate domestic political support                 | Yes         | Yes    | Yes    |
| Usable military options                             | No          | No     | Yes    |
| Opponent's fear of unacceptable escalation          | High        | High   | Medium |
| Clarity concerning the precise terms of settlement. | High        | High   | High   |

As the above tables indicate, in terms of the eight conditions George identified as favoring coercive diplomacy success, an asymmetry of motivation favoring the United States is the critical condition associated with success of U.S. nonproliferation efforts. While other conditions such as a strong U.S. motivation, a sense of urgency to achieve the American objective, and the opponent's fear of unacceptable escalation can be helpful to the extent that they contribute to creating an asymmetry of motivation, the Libya and North Korean cases indicate they are not essential for (nor are they guarantees of) success. While each was important in one or a couple cases, the clarity of objectives, domestic political support, usable military options, and clarity of the terms of settlement were never decisive in themselves, nor were they found to have any systematic impact on outcomes across the eight cases.

### 1. Strength of United States Motivation

The eight cases examined in this study suggest that while the U.S. is generally motivated to prevent proliferation, the strength of its motivation varies significantly by case. Moreover, while a strong U.S. motivation may increase the chances of success, it by no means guarantees it; nor does a low motivation guarantee failure.

Of the three cases where the U.S. was highly motivated (North Korea, South Korea, and Taiwan), it succeeded in halting proliferation in two (South Korea and Taiwan). In both South Korea and Taiwan, successful proliferation threatened to damage improving American relations with China, and both threatened to trigger preemptive strikes or war that would almost surely lead to U.S. involvement. In North Korea, proliferation threatened to destabilize the Korean peninsula and spark a second Korean War. While the high motivation led to an energetic American response in each case, in the North Korean case the high American motivation failed to translate into an effective policy, as the U.S. repeatedly threatened North Korea (thereby increasing their insecurity) without offering significant carrots for compliance until it was too late.

In the Israel case, the U.S. motivation was moderately high, as Israeli proliferation (it was feared) could lead the Soviets to station nuclear weapons in Arab states, thereby increasing the possibility of superpower confrontation that could escalate to nuclear war. However, due to a variety of domestic and international factors, the U.S. failed to employ carrots and stick sufficiently potent to persuade Israel to halt its program.

In the remaining four cases (India, South Africa, Pakistan, and Libya), U.S. motivation was present but relatively weak. Neither India, nor Pakistan, nor South Africa posed any direct threat to the United States, nor were they located in regions of critical strategic importance to the United States (in contrast to Israel, North Korea, South Korea, and Taiwan). In each of these cases, the U.S. failed to halt proliferation. In the Libya case, however, the U.S. was able to achieve success despite a low motivation. While successful Libyan proliferation was certainly a threat to the United States because of Libya's history of supporting terrorism and its anti-U.S. rhetoric, the U.S. motivation to stop the Libyan program remained low because its nuclear weapons program was never deemed advanced enough to pose an imminent threat. Nonetheless, the U.S. eventually achieved success in this case.

In sum, a high U.S. motivation can be helpful to the extent that it facilitates fostering an asymmetry of motivation favoring the U.S., is neither a guarantee of success; nor is a low motivation a guarantee of failure. Regardless of the strength of the U.S. motivation in a given case, in order to be successful the U.S. still must form an effective policy: namely a combination of carrots of sticks strong enough to create an asymmetry of motivation favoring the United States.

#### 2. Asymmetry of Motivation Favoring the United States

Of all the factors examined in this study, an asymmetry of motivation favoring the United States was found to be the one condition that is essential to U.S. success. However, in none of the cases surveyed did the U.S. enjoy an asymmetry of motivation in its favor from the outset. This makes intuitive sense: most proliferating

states view nuclear weapons as critical components of national security and survival, whereas for the U.S. nonproliferation is simply one of many policy objectives, and in many cases proliferation does not pose a direct threat to the United States. In the cases where the U.S. has succeeded, it has only done so after utilizing a potent combination of carrots and sticks that reverse the asymmetry of motivation by reducing the proliferating state's motivation to persist in its program.

For example, while Taiwan viewed nuclear weapons as necessary to protect itself from a nuclear-armed China in the context of a weakening American security commitment, its motivation to persist in its nuclear program was consistently blunted by U.S. threats to end all military and economic support—which would have left Taiwan in a temporary position of extreme vulnerability before it had built its nuclear arsenal. Essentially the same logic held for South Korea, confronting a reduced American commitment and the overwhelming conventional threat of North Korean and China. The U.S. was again able to reverse the asymmetry by making potent threats of the complete withdrawal of the American commitment. In the case of Libya, the situation was quite different. By the 1990s, Libyan motives for pursuing the bomb were greatly reduced, as Arab conflict with Israel had subsided and the pan-Arab movement Qaddafi sought to lead had fallen by the wayside. Yet the U.S. was even less motivated to do anything about the Libyan program, refusing to even discuss it until the terrorism issues were resolved. It was only with the 2003 agreement that the asymmetry of motivation was reversed, as the U.S. saw the benefits of ending the Libyan program in the wake of the Iraq War and Libya was

finally offered tangible benefits for its cooperation: namely, an end to sanctions, restored diplomatic relations, and an end to the U.S. policy of regime change.

In the remaining five cases (Pakistan, Israel, South India, South Africa, and North Korea), the United States was unwilling to take the steps that would have been necessary to significantly reduce the proliferating states' motivation and reverse the asymmetry of motivation. In Pakistan, the farthest United States was willing to go was to provide (or withhold) arms sales and economic aid. Providing Pakistan with a formal security guarantee was never seriously considered, nor was harsher economic sanctions or military strikes. Any credible attempt to coerce Pakistan was jettisoned once the Soviet invasion of Afghanistan became the top American priority in the region. The U.S. was similarly constrained in its dealings with Israel—another informal U.S. ally. The U.S. was unwilling to formalize the security relationship with Israel, was unwilling to publicly downgrade relations with them, and certainly never considered any type of sanctions or war. As a result, arms sales and economic aid became the sole levers—as with Pakistan—and these were clearly insufficient to convince Israel to halt its nuclear weapons program. In both the Pakistan and Israel case, the leverage provided by arms sales was especially weak due to the fact that the U.S. had been withholding arms sales to each state for years because of issues completely unrelated to nuclear weapons development.

In the case of South Africa, U.S. policy was even more halfhearted than with Pakistan and Israel. Because of apartheid, the U.S. already maintained an armslength relationship (including an arms embargo) with South Africa prior to the height of their nuclear weapons pursuit. This simultaneously meant that the U.S. had little in

the way of additional sticks to threaten and that the U.S. was unwilling to offer significant carrots (for example an end to the arms embargos or the provision of security assurances). As a result, the only stick the U.S. threatened was a cutoff in nuclear fuel shipments; carrots were never considered at all. In the Indian case, the U.S. was similarly unwilling to employ significant carrots or sticks in its efforts to prevent proliferation. A formal security guarantee was rejected, arms supplies were rejected, and the largest stick the U.S. was willing to threaten was a cutoff in nuclear fuel if India tested a nuclear device.

In the case of North Korea, the U.S. was willing to threaten the strong sticks of U.N. sanctions (albeit not a very credible threat due to China's position) and hint at the possibility of military strikes. Yet this failed to reverse the asymmetry of motivation favoring North Korea for two reasons. First, the confrontational approach likely reinforced North Korean motives for pursuing the bomb in the first place (fears of U.S. aggression and international isolation); and second, it was not coupled with the promise of substantial carrots upfront—rather, North Korea was expected to back down and comply with U.S. demands before any substantial carrots would be offered.

As the above examples illustrate, a general theme in failed U.S. efforts to reverse the asymmetry of motivation is an unwillingness to provide firm security assurances as a means of preventing proliferation. Israel, India, and Pakistan all sought some form of formal security guarantee (whether to deter a conventional, or simply nuclear attack) prior to and in the early stages of their nuclear weapons programs; however, each was rebuffed. Similarly, South Africa sought security assurances in vain prior to initiating its program, and North Korea consistently sought

a negative security assurance from the Untied States, which the U.S. consistently refused until it became an important component of the 1994 Agreed Framework that froze the North Korean program. The importance of Western security guarantees to South Africa's nuclear program is further illustrated by the fact that the entire purpose of its arsenal was to blackmail the West into supporting it in the case of invasion. In the cases where the U.S. succeeded, it did so as least in part due to the high value proliferating states' placed on security assurances. An important component of Libya's agreement to dismantle its WMD programs was the U.S. agreement to end its policy of regime change. In both South Korea and Taiwan, the halting of nuclear weapons programs was driven by the need to *preserve* critical American security assurances. The centrality of security assurances to the success or failure of nonproliferation efforts should not be surprising; after all, security is generally the primary motive for proliferating in the first place. What should be surprising is the U.S. reluctance to engage these issues in so many cases, and thereby greatly reduce their leverage over the proliferating state.

On the other end of the spectrum, in the failed cases the U.S. has been generally reluctant to threaten or employ strong sticks such as broad economic sanctions, diplomatic sanctions, or military strikes. Only in the case of North Korea were any of these sticks explicitly threatened; however, these threats largely lacked credibility for reasons discussed previously. When combined with the general reluctance to provide security assurances as carrots, this has often resulted in half-baked efforts and measures that may impose enough just pressure to restrain a state from openly testing or deploying nuclear weapons, but fail completely in convincing

states to forego nuclear weapons. In cases where the U.S. has failed to dissuade proliferating states, there is a strong pattern of the use of relatively weak carrots and sticks: vague and informal security assurances, economic aid enhancements, arms sales, and increased nuclear cooperation as carrots; vague warnings, economic aid cutoffs, the continuance of pre-existing arms embargos, and cutoffs in nuclear cooperation as sticks.

In sum, the U.S. unwillingness to utilize potent carrots and sticks in order reduce the proliferating state's motivation has been a recurring theme in failed U.S. nonproliferation efforts. In contrast, successful nonproliferation efforts have been driven by the utilization of strong carrots and sticks that shift the asymmetry of motivation in the American favor by reducing the proliferating state's motivation.

### 3. Clarity of American Objectives

Given that the U.S. has publicly stated its opposition to nuclear proliferation consistently since the 1960s, American objectives have tended to be clear its nonproliferation efforts: the objective is to prevent other states from developing nuclear weapons. In five out of eight cases (and all the successful cases), U.S. objectives were consistently clear. However, in several of the cases there were instances when—either by words or by deeds—the United States undermined the clarity of its objectives.

In the Pakistan case, for example, the U.S. consistently *stated* its opposition to a Pakistani nuclear weapons program while its actions belied its words at several key points. For example, under the Ford administration Secretary of State Kissinger

communicated his sympathy for Pakistan's efforts directly to Pakistani leaders, all the while informing them that he would seek to minimize the negative sanctions they would face as a result of the nuclear weapons program. While the Carter administration made its objectives much clearer early on, the Soviet invasion of Afghanistan led to Reagan to abandon any serious nonproliferation efforts vis-à-vis Pakistan—while the U.S. publicly opposed Pakistani proliferation, their actions did little to reinforce this as they provided billions in military and economic aid despite Pakistan's continued intransigence on the nuclear issue.

Although South African leaders certainly knew the United States was opposed to proliferation as a general proposition, the fact that the U.S. did little to communicate this directly to South Africa prior to its aborted test in 1977 may have convinced them that the U.S. was willing to look the other way. Following the aborted test, however, U.S. objectives were made clear, although little was done to achieve these objectives. The clarity of objectives was also mixed in the North Korean case, where the United States initially made clear that it sought to prevent North Korea from developing a nuclear weapon, but then lowered its objectives to simply capping or freezing the program midstream.

Although a lack of clarity in U.S. objectives undermined U.S. efforts in several cases, it is doubtful that this factor had a decisive effect on the outcome. While it did not help that the U.S. was less than crystal clear in its signaling to Pakistan, South Africa, and North Korea, the more important obstacle was simply the failure to effectively address and reduce each state's motives for proliferating. Opposition to nuclear proliferation is a stated and fixed aim of U.S. policy; far more

important than openly stating this goal is taking the strong steps needed to promote this policy in an individual case.

## 4. Sense of Urgency to Achieve the American Objective

Just as rare as the U.S. being highly motivated was the U.S. acting based on a sense of urgency to achieve the objective. Part of this is probably the nature of the problem—building nuclear weapons takes years, which may convince leaders that acting promptly and strongly is less of a necessity. When combined with a relatively low motivation in most cases, the result was that the U.S. employed the "try and see" approach rather than the tacit ultimatum approach. Even worse, the United States would often sit on intelligence of a proliferating state's nuclear weapons program for literally years before taking any action (South Africa, North Korea) or wait years in between distinct efforts to bring the program under control (Israel, Pakistan). Then there were cases where the U.S. never made a proactive, concerted effort to end the state's program at all (India, Libya).

By contrast, in the successful cases of South Korea and Taiwan, the United States acted swiftly and strongly whenever it received new intelligence of either state's efforts in the nuclear weapons realm. In both cases, this required distinct campaigns of coercive diplomacy, as the proliferating state would accede to U.S. demands and stall its program only to restart it several years later. By being persistent and timely in its efforts, however, the United States communicated to South Korea and Taiwan that this was viewed as an issue of utmost urgency. However, having a sense of urgency clearly does not in itself guarantee success. In the North Korean

case, the United States made several ultimatums with deadlines for North Korean compliance that utterly failed. Conversely, a *lack* of urgency does not guarantee failure. In the Libya case, the U.S. felt literally zero urgency to stop the Libyan nuclear weapons program, essentially refusing to discuss the issue with Libya for twenty years. Yet the U.S. managed to succeed in the end by responding favorably to a Libyan initiative and offering significant carrots to induce Libyan cooperation.

Even if the U.S. is acting based on a sense of urgency, if it fails to reduce the proliferating state's motives for developing nuclear weapons this sense of urgency in itself will accomplish little. A sense of urgency can be helpful to the extent that it drives the U.S. to adopt strong U.S. measures; however, it is these measures themselves that are important more so than the urgency.

## **5.** Adequate Domestic Political Support

Compared to other variables, domestic political support played a less decisive role in most of the cases. Mainly this is because, in line with U.S. declared policy, domestic sentiment (especially in Congress) has been quite consistently opposed to nuclear proliferation, and has been generally supportive of whatever bilateral efforts the president and his advisors choose to employ. When Congress has played a larger role—for example by passing the 1976 Symington Amendment of 1978 Non-Proliferation Act—it has tended to strengthen U.S. nonproliferation efforts rather than undercut them.

The one case where a lack of domestic support may have interfered with the U.S. coercive diplomacy strategy is Israel. Unwilling to provide Israel with a security

guarantee (which many members of Congress would have supported), Kennedy and later Johnson initially chose to instead focus on diplomatic pressure as the means of halting Israel's nuclear program. However, due to the strong domestic political support for Israel in America (and especially in the Democratic Party's constituency), the coercive options that could be employed against Israel were severely limited—hence why the United States never publicly pressed Israel on the issue, never publicly criticized the Israeli nuclear weapons program, nor even publicly noted that existence.

In several other cases, domestic political support existed for the objective of nonproliferation and for the administration's efforts to achieve this objective, but simultaneously constrained the possible policy options that could realistically be implemented. For example, although carrots would have almost certainly been more effective in restraining the South African and Libyan nuclear programs than sticks, Congress almost certainly would have opposed any significant inducements offered to these states due to issues of apartheid and terrorism (the Lockerbie bombing was a particularly thorny domestic issue in Libya's case). It was only when Libya renounced terrorism and began providing compensation for the families of Lockerbie victims that the U.S. government felt comfortable enough to offer Libya a package of incentives for agreeing to end its nuclear weapons program. In these two cases, domestic support existed for nonproliferation efforts, but domestic sentiment dictated the policy options that were available to policymakers.

In sum, while domestic political support has generally existed for U.S. nonproliferation objectives, in several cases it has limited the feasible measures available for U.S. policymakers to employ. In such cases, the lack of domestic

support may have indirectly contributed to the failure to redress the asymmetry of motivation favoring the proliferating state.

#### 6. Usable Military Options

The only case in which U.S. had a truly usable military option was Libya. In every other case, the use of force was either prohibitively risky or costly (North Korea) or politically impractical (Pakistan, Israel, South Africa, India, South Korea, and Taiwan). The U.S. did not explicitly threaten force in any case, although it was nonetheless an implicit threat both for Libya and North Korea, as in North Korea the United States made moves to reinforce its troops in South Korea and in Libya as the United States introduced a doctrine of preventive counterproliferation against "rogue" states in 2002 and invaded Iraq because of its supposed WMD programs in 2003.

In neither of these cases, however, did the implicit military option seem to have a decisive impact. In the North Korea case, this may have been because the threat was not deemed credible—not only had the U.S. repeatedly backed down from its demands and ultimatums, but it had a long history of responding to North Korean provocations in a restrained manner and the Clinton administration had a reputation and track record that suggested a strong reluctance to place American troops in harm's way. Moreover, it was unclear how a military strike would have halted the North Korean program without a full-scale occupation and war, and given that the U.S. already believed North Korea had one or two bombs, it is quite possible that the threat of force increased North Korean motivations to advance its program as a means of creating uncertainly about its capabilities and deterring U.S. aggression.

In the Libyan case, the 2003 invasion of Iraq signaled that the U.S. was serious about nonproliferation, but given that Libya had approached the U.S. about ending its WMD program for a package of incentives several times in the 1990s, it seems dubious that the implicit threat of force was decisive. In the cases of Israel, Pakistan, South Korea, and Taiwan, formal or informal alliances made military force an almost unthinkable option. In the case of South Africa, the military option was unusable due to strategic interests the U.S. held in the country.

The fact is that prior to the 2003 invasion of Iraq, the U.S. never proved a willingness to use or explicitly threaten force for the purpose of halting proliferation. Moreover, just because the U.S. has a military option does not mean that it is willing to use it, or that it was responsible for success in the case. Despite the fact that the U.S. could have struck Libyan nuclear facilities relatively easily, it never threatened to do so, and in the end it achieved success largely by offering substantial carrots, not by explicitly threatening significant sticks. Largely due to the potential political costs, the U.S. has historically been simply unwilling to make military force a significant part of its nonproliferation efforts, and this has meant that it has had little impact on the differential outcomes from case to case.

#### 7. Opponent's Fear of Unacceptable Escalation

Related to the proliferating states' perception of U.S. motivation and sense of urgency is the state's perception that U.S. efforts could escalate to an unacceptable level, which in turn can contribute to creating an asymmetry of motivation favoring the United States. This fear was likely instrumental in the decisions of South Korea

and Taiwan to halt their nuclear weapons program, as complete American abandonment was clearly an unacceptable escalation. The fear of unacceptable escalation was present, albeit to a lesser extent, in the cases of Libya, Israel, and North Korea, indicating that such a fear is not always decisive.

In the cases of Israel and North Korea, it appears that unacceptable escalation was feared, but not enough to convince either start to halt their programs. In the case of Israel, America's threat to end its informal commitment to Israeli security in 1963 led to a long and serious debate in the Israeli government about the proper way to move forward. While the United States had no formal commitment to Israel, and providing very little in the way of arms at the time, it was nonetheless Israel's most important ally in terms of political, economic, and diplomatic support. However, while the loss of this support was certainly feared and deemed unacceptable, the Israeli leadership—correctly, in retrospect—judged that the United States would not follow through on such a threat so long as Israel provided some minimal level of compliance. Similarly for North Korea, the possibility of war was almost certainly seen as an unacceptable escalation. But while the possibility could not be completely dismissed, it was probably deemed unlikely given the lack of American coercive credibility. Like Israel, North Korea consistently made minor concessions as a means of avoiding escalation, and like with Israel, this counter-strategy proved successful.

In the case of Libya, the invasion of Iraq may have raised the fear of unacceptable escalation in Qaddafi's mind, as the U.S. signaled its seriousness about counterprolfieration. Yet viewed within the overall chronology of the case, Libya's decision to end its nuclear weapons program in 2003 appears to have been driven less

by the desire to avoid unacceptable escalation than by the effort (which began in the early 1990s) to escape isolation and reintegrate into the international community economically and diplomatically. Thus, while the fear of unacceptable escalation (war) may have accelerated Qaddafi's decision, in the end it was the carrots the U.S. offered that made the deal work. In the remaining three cases (India, Pakistan, and South Africa), the U.S. almost certainly failed at creating a fear of unacceptable escalation in its opponents simply by virtue of the fact that it never threatened penalties of any great potency.

Overall then, to the extent that the U.S. fosters an opponent's fear of unacceptable escalation, this may contribute to reversing the asymmetry of motivation by reducing the proliferating state's motives to persist in its program. This is indeed what occurred in South Korea and Taiwan, as the fear of the total loss of U.S. support led them to accede to U.S. demands. However, in some cases carrots are far more important than sticks, and in such cases the opponent's fear of unacceptable escalation is less critical to success. The Libyan case is emblematic of this. As the Israel and North Korea cases illustrate, a threat of unacceptable escalation can only expect success to the extent that it is viewed to be credible. Ending the U.S. commitment to Israel and or using military force against North Korea would likely have been unacceptable escalation; yet each threat had serious issues of credibility for a host reasons discussed earlier.

#### 8. Clarity Concerning the Precise Terms of Settlement

Only in one of the eight cases (India) did the U.S. fail to clearly define the terms of a settlement; however, this was due to the fact that the U.S. never truly proposed any sort of settlement, instead relying on vague private warnings and counsel with no carrots attached. In every other case, the U.S. proposed at least one clear deal with the aim of halting the state's program; the problem was not the clarity of the deal, but its content.

In the Pakistan case, at several junctures the U.S. offered to provide Pakistan with conventional arms if it would agree to accept IAEA safeguards on its facilities. In the Israel case, the U.S. made similar offers of arms for safeguards, also offering Israel a nuclear desalinization plant. The U.S. threatened to cut off nuclear fuel shipments if South Africa did not accept IAEA safeguards, and offered to ensure such shipments if safeguards were accepted. In the case of North Korea, the U.S. proposed countless quid pro quos designed to get North Korea to fully comply with the IAEA. With South Korea and Taiwan, the U.S. made it clear what specific support would be withdrawn if they did not comply with American demands, and in Libya the U.S. offered a number of very specific carrots in return for Libya dismantling its WMD programs. Only in the Indian case did the U.S. not propose a clear deal that sought to end India's nuclear weapons program. Too paralyzed to form a viable policy, the U.S. fell back on vague warnings and the weak threat to cutoff nuclear fuel supplies in the case of an Indian nuclear test.

Similar to the clarity of objectives variable, it seems that clarity of terms of the settlement is rarely a decisive variable impacting outcomes in the cases. While failing to propose any type of clear settlement at all is certainly a major problem (i.e. India), proposing a clear settlement in not in itself a guarantee of anything—it is the content of the deal rather than the clarity of it that is critical.

#### **Conclusion: Why Asymmetry of Motivation?**

Due to the nature of nuclear proliferation, particularly the high value proliferating states tend to place on attaining a nuclear capability, it should not be a surprise that the U.S. has tended to face an uphill climb in its nonproliferation efforts. But why is it that an asymmetry of motivation is so critical to achieving success? One possible explanation is that the high value generally attached to developing nuclear weapons in states that have made the decision to proliferate, when coupled with the fact that nuclear weapons development is difficult to observe due to secrecy measures, means that the only surefire way to halt a state's nuclear weapons program is by significantly reducing its motivation.

Unlike most of the cases that George and other scholars of coercive diplomacy have examined, in cases of nuclear proliferation it is often very difficult to definitively *verify* whether a state has indeed complied with the coercer's demands, which creates a large incentive for proliferating state to lie about their programs and cheat on agreements. In fact, to some extent every state examined in this study sought to mislead the U.S. about the nature of their nuclear programs. The difficulties with definitively verifying the proliferating state's behavior may simply mean that the only way to achieve success is by significantly reducing their motivation to persist in their programs. After all, even in the prototypical U.S. successes of South Korea and

Taiwan, it took multiple U.S. interventions and threats before the proliferating states stopped cheating on agreements and permanently halted their programs.

## **The Importance of Conflicting Objectives**

Given that the effective use of carrots and sticks is what is needed to bring about an asymmetry of motivation in the U.S. favor, why is it that the U.S. employs potent carrots and sticks in some cases, and fails to do so in others? Drawing on evidence from each of the cases, this section will argue that it is not a lack of American leverage that is primarily responsible for this, but rather the American perception of conflicting strategic and political objectives that constrain that carrots and sticks that policymakers are willing to employ. As a result, the U.S. is only able to achieve an asymmetry of motivation in its favor when nonproliferation does not conflict with other significant objectives.

Pakistan. Driven by Indian military superiority and compounded by the Indian nuclear weapons program and 1974 nuclear test, Pakistan was highly motivated to develop its own nuclear weapons, literally believing that its survival as a nation may be at stake. Despite having a formal, albeit limited, defense pact with Pakistan, however, the United States refused to provide Pakistan with a comprehensive security guarantee for fear of undermining relations with India, a state that had already migrated into the Soviet sphere. Not only that, but the U.S. refused to even sell Pakistan conventional arms from 1965 to 1977 as punishment for the 1965 war with India. In other words, during the period when Pakistan was building its nuclear infrastructure and contemplating nuclear weapons, the U.S. refused to take

any concrete steps to reinforce Pakistan's security and thereby reduce its motives for proliferating.

By the time the U.S. began using conventional arms as leverage in its nonproliferation efforts vis-à-vis Pakistan in 1975, India had already developed the bomb, making conventional arms a woefully inadequate substitute for a nuclear arsenal or the nuclear umbrella Pakistan sought from the U.S. in vain. Any chance the U.S. had of halting Pakistan's nuclear weapons program through a more coercive approach was lost when the Reagan administration decided to provide Pakistan with billions in military aid following the Soviet invasion of Afghanistan without making this aid contingent on Pakistan verifiably halting its nuclear weapons program. Rather than seizing the Soviet invasion as an opportunity for increased leverage over Pakistan, whose security was suddenly threatened on two fronts, the U.S. decided to provide massive assistance with essentially no strings attached—strategic balancing against Soviet expansion was deemed too important to be held hostage to limits on Pakistan's developing nuclear capability.

Israel. Strategic and political considerations similarly constrained the application of carrots and sticks in the Israel case. Like Pakistan, Israel felt that its survival was at stake and that nuclear weapons would provide an insurance policy against national destruction. Yet despite a close political relationship between the two states and strong domestic support for Israel in the American public and Congress, the U.S. was unwilling to provide Israel with the security guarantee that it had been seeking consistently since the 1950s for fear of damaging relations with strategically important and oil-producing Arab states. Also similar to the Pakistan case, the U.S.

had long withheld arms sales to Israel (during the period its nuclear program was developing), and then made an effort to use them as inducements to prevent Israel from going nuclear. Again, however, this was relatively weak leverage: hardly a substitute for nuclear weapons, and traded away for a vague pledge did nothing to verifiably limit Israel's nuclear program. Even more than in the Pakistan case, U.S. policymakers were unwilling to apply tough pressure on Israel through any sort of tangible sticks. While Kennedy threatened to downgrade relations with Israel unless they cooperated on the nuclear issue, he ended up accepting a very weak inspections arrangement as a compromise that could not possibly have verified the peaceful nature of the Israeli program. The perceived strategic importance of Israel as a bulwark against Soviet-allied states in the Middle East, combined with the domestic political impossibility of sanctioning Israel in any meaningful way, left the U.S. with its hands tied in efforts to credibly coerce Israel with potent sticks.

South Africa. In the case of South Africa, strategic and political imperatives greatly constrained what were perceived to be acceptable policy options vis-à-vis South Africa's nuclear weapons program. Any type of strong carrot—for example some type of security assurance against Communist attack similar to that which Pakistan enjoyed—was politically impossible due to the domestic and international opposition to apartheid; in fact, even arms sales were deemed too politically costly. At the same time, potent sticks such as economic sanctions, or the complete withdrawal of diplomatic support were also out of the question due to the economic and strategic importance of South Africa to the United States.

India. With India, the U.S. faced a similar case of policy paralysis due to conflicting objectives. Like all the other failed cases, the U.S. was unwilling to provide India with the security assurance it sought in the late 1960s as a substitute for a nuclear weapons program—in this case, for fear of alienating the U.S. allied Pakistan and of setting a precedent where states that were not even U.S. allies would seek security guarantees. Moreover, India's adherence to nonalignment and refusal to back the U.S. in the Cold War made a security guarantee specifically for India strategically and politically unthinkable. At the same time, the U.S. was concerned that India did not enter the Soviet sphere, which resulted in an unwillingness to threaten almost any sticks that could potentially lead India to tilt toward the Soviets. Ironically, the U.S. ended up bringing about just this tilt as a result of its rapprochement with China and support for Pakistan in the 1971 war, thereby eroding any U.S. leverage over India that had previously existed.

North Korea. The failure to halt the North Korean program before it had achieved a de facto weapons capability can also be largely explained through the constraints imposed by broader American strategic and political objectives. The U.S. declined to offer North Korea any of the substantial carrots that it explicitly sought prior to the 1994 Agreed Framework, largely because of the political costs of appearing to "appease" a rogue state, the desire to isolate and stigmatize states that defied the NPT rather than "reward" them by offering substantial carrots, and the need to sustain good relations with South Korea, an important ally that was initially opposed to any broad "package deal" agreement with the U.S. that appeared to leave South Korea out in the cold. These conflicting interests led the U.S. to adopt a

confrontational approach based on potent sticks that likely served to reinforce rather than reduce the North Korean motives for proliferating, especially since the threats of sanctions and war had major issues of credibility. When the U.S. finally did succeed in freezing the North Korean program (although after North Korea likely had one or two bombs), it was exactly because the United States finally did promise substantial carrots, including a promise not to use or threaten nuclear weapons.

Taiwan and South Korea. In contrast to the cases where the U.S. failed to halt proliferation, the successful cases were those where the U.S. could offer substantial carrots or threaten and employ potent sticks that were consonant, rather than dissonant, with broader strategic and political objectives. Both with Taiwan and South Korea, the U.S. was willing to threaten an end to American political, economic, and security commitments in the 1970s in the context of the broader strategic objective of reducing the American military presence in Asia and improving relations with Communist China. In both cases, the U.S. was already in the process of reducing American security commitments to the proliferating states, and thus its harsh nonproliferation efforts were in line with, rather than in conflict with, its strategic goals. The U.S. arguably had similar leverage with Pakistan when the Soviets invaded Afghanistan, began bombing targets in Pakistan, and thereby increased Pakistan's security reliance on the United States. Yet because making aid contingent on halting Pakistan's nuclear weapons program would risk, rather than support, the broader strategic objective of countering Soviet expansion, the U.S. was unwilling to do so.

*Libya*. Even more so strikingly than the South Korea and Taiwan cases, the Libya case supports the proposition that the U.S. only undertakes strong

nonproliferation efforts that are consonant with broader strategic and political objectives. For decades, the U.S. exerted almost no direct pressure on Libya to halt its nuclear weapons program, instead relying on export controls and isolation in order to starve and punish the Libyan regime. Because Libyan support for terrorism (and specifically involvement in the 1988 Lockerbie bombing) was perceived to be of overriding political importance in bilateral relations with the United States, American policymakers actually declined to bargain an end to the Libyan program even when Libyan officials proposed to do exactly that, since doing so would appear to "reward" the Libyan regime complicit in the deaths of hundreds of Americans. Once the terrorism issues were resolved in 2003, however, and Libya took full responsibility for the Lockerbie bombing and began paying out remuneration to families of the victims, nonproliferation efforts no longer were in conflict with broader American objectives. Still, it took a Libyan backchannel initiative and the Iraq Invasion of 2003 to finally solve the issue, as the U.S. could paint the Libyan rapprochement as a consequence of the harsh U.S. policy against WMD proliferating rogue states currently on display in Iraq. Following the invasion of Iraq, the U.S. was finally willing to offer Libya substantial carrots in exchange for halting its nuclear weapons program—not because it suddenly had a newfound interest in nonproliferation, but because the conflicting political and strategic objectives were finally removed.

*Conclusion.* Despite a longstanding opposition to nuclear proliferation, the history of U.S. nonproliferation efforts illustrates that policymakers have only utilized strong nonproliferation measures when such efforts have reinforced rather than interfered with broader political and strategic objectives. This general refusal to

prioritize nonproliferation has often led to weak policies that lack are insufficient to reduce the proliferating state's motivations for pursuing the bomb. Until the U.S. recognizes that nonproliferation is not an objective that can be achieved at without costs, its efforts will continue to fail in the majority of cases.

## Policy Implications: Applying the Findings to Iran

Three main policy recommendations emerge from the preceding analysis. First, to the extent that the United States wishes to stop a state from proliferating, it generally must be willing to prioritize the issue of nonproliferation above other strategic and political objectives, something it has not historically been willing to do. Second, the U.S. must be willing to utilize potent carrots and sticks that seek to reduce a state's motivation for proliferating, not simply buy them off, isolate and ostracize them, or limit their capabilities. Third, and more specifically, nonproliferation policies that fail to seriously address the security predicament of proliferating states are doomed to failure. This closing section will proceed by discussing each recommendation in turn, and applying it ongoing case of Iran to provide specific policy recommendations.

First, in terms of prioritization, ranking nonproliferation below other political and strategic objective is a recipe for policy failure. Significantly reducing a state's motivation to proliferate takes strong steps that will often conflict with other U.S. objectives, and unless policymakers are willing to accept these costs, they will continue to fail in the majority of cases. In the case of Iran, this means that in order to succeed, the U.S. may be required to risk alienating Israel. More importantly, the U.S.

must be willing to directly engage Iran despite its support for terrorism and ongoing nefarious influence in Iraq. The U.S. may have to drop its policy of not "rewarding" rogue states if it truly wishes to prevent Iran from acquiring nuclear weapons.

Refusing to negotiate because of Iran's behavior in other areas is a self-defeating policy that is doomed to fail.

Second, the U.S. cannot rely solely on weak carrots and sticks that do not seriously address the underlying motives driving states to proliferate in the first place. History shows that buying off proliferating states solely through conventional arms transfers, economic aid, nuclear cooperation, and vague assurances of support simply does not work. Similarly, history also shows that ostracizing proliferating states solely through economic sanctions, the withholding of economic aid and military supplies, and cutoffs in nuclear cooperation does not work. In the case of Iran, this means that the current policy of international ostracism, economic sanctions, and economic incentives for compliance should not be expected to succeed.

Finally, success in nonproliferation efforts require U.S. measures that address the security motives that are at the heart of almost every case of nuclear proliferation. Economic and political measures may be useful as part of a broader package deal (as in the Libya vase or the 1994 Agreed Framework with North Korea), but credible security commitments, negative security assurances, and other measures to ameliorate the proliferating state's security environments will generally be necessary as well. In regard to Iran, this means that the U.S. most likely would be required to publicly drop the "rogue state" rhetoric and regime change policy. Given that U.S. hostility to Iran is one of the key factors driving Iranian proliferation, it would simply be foolish to

assume that the U.S. could convince Iran to halt its efforts without some sort of security concessions (that is, unless the U.S. is willing to use military force). The best model for a successful policy vis-à-vis Iran would be the Libya case, where the U.S. offered a package of incentives—diplomatic and economic—in addition to ending the regime change policy. A similar policy would stand the best chance of success with Iran, with the offer to remove multilateral sanctions as added leverage. The North Korea case shows that international ostracism and refusing to negotiate until full compliance is achieved is simply not a viable policy. In the absence of military strikes, the only realistic option for halting the Iranian program is direct U.S. engagement, coupled with the offer of a wide range of incentives—economic, diplomatic, and security—in return for compliance. Unless the U.S. is willing to take these steps, in all likelihood Iran will soon become the world's tenth nuclear-armed power.

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