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National Missile Defense: Legal & Policy Justifications for Expanding Deterrence & Preventing War in the 21st Century*

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Wouldn’t it be better to save lives than to avenge them? ... Isn’t it worth every investment necessary to free the world from the threat of nuclear war? ... Are we not capable of demonstrating our peaceful intentions by applying all our abilities and our ingenuity to achieving a truly lasting stability?¹

Ronald Reagan, 1983

64 PERCENT OF AMERICAN ADULTS BELIEVE THE UNITED STATES HAS A MISSILE DEFENSE TO PROTECT AGAINST NUCLEAR ATTACKS.²


I. INTRODUCTION

This comment will argue that National Missile Defense (NMD) is a desirable form of national defense and also compatible with international law. This comment begins with an exploration of the Anti-Ballistic Missile Treaty of 1972 and its legal significance as it has evolved over time culminating with President George W. Bush’s announcement on December 13, 2001 to withdraw from the Treaty. Next, it examines the past, current, and future forms of missile defense, including how these forms interplay with international law. In the third section, criticisms of missile defense will be evaluated and established to be unpersuasive, especially in light of the terrorist attacks on September 11, 2001. In the

fourth section, the benefits and strengths of National Missile Defense will be highlighted. In this section, through the use of an innovative hypothetical, it will be demonstrated how National Missile Defense actually discourages, rather than encourages (as many critics claim) a first strike. Finally, the comment will conclude with a discussion of National Missile Defense and its place in history, particularly given the renewed efforts amongst democracies to expand the “Rule of Law” worldwide.

I. THE LEGAL EVOLUTION OF THE ANTI-BALLISTIC MISSILE TREATY OF 1972


President Richard M. Nixon and Soviet Premier Leonid Brezhnev signed the “Limitation of Anti-Ballistic Missile Systems,” (ABM Treaty) which entered into force on October 3, 1972. Only the United States and the Union of Soviet Socialist Republics were signatories to the ABM Treaty. Experts generally agree that the ABM Treaty banned all but the most simplistic forms of defense against intercontinental ballistic missiles (ICBM), prohibiting the use of most radars, space-based sensors, and remote sites for interceptors.

More specifically, Article I, Section 2 provided the core prohibition on missile defenses: “Each party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided in Article III.” One of those exceptions is provided by Article III(a) which states that each party could deploy two limited ABM systems, one, to protect a party’s capitol, the other, an ICBM launch site. Notably, these limited sites allowed for only 100 ABM launchers and 100 ABM interceptors, with an additional provision of six ABM radar complexes for the capitol site or, in the case of the ICBM site, two “large phased-array ABM radars” and eighteen other ABM radars of lesser sophistication. Equally noteworthy because it

5. ABM Treaty, supra note 3, 23 U.S.T. at 3438.
6. Id. at 3440.
7. Id. See also Michael Krepon, Missile Defense: Not Such a Bad Idea, BULL. OF THE ATOM. SCIENTISTS, May/June 1999, at 31 (noting that the 1974 Protocol halved the allowance of interceptor missiles from 200 to 100).
supplied the impetus for the so-called "Broad/Narrow" debate fifteen years later, Article V, Section 1 explicitly forbade each party from developing, testing, or deploying ABM systems or components which are sea-based, air based, space-based, or mobile land-based. Finally, Article XV, Section 2 deserves mention, for it afforded each party the opportunity to withdraw from the ABM Treaty if "extraordinary events" related to the ABM Treaty have "jeopardized its supreme interests." In exercising Article XV, Section 2, the withdrawing party was required to provide six months notice. As will be discussed, President George W. Bush exercised Article XV, Section 2 of the ABM Treaty on December 13, 2001, thereby allowing the United States to formally withdraw on May 13, 2002 (as of publication, no official withdrawal has taken place).

Until the collapse of the Soviet Union in 1991, the ABM Treaty unquestionably bound both signatory nations. Despite such clarity, however, interpretation of the ABM Treaty provoked fierce debate on several occasions prior to 1991. This debate was most contentious in 1987, when Senator Sam Nunn, Chairman of the Senate Armed Services Committee, and Judge Abraham Sofaer, Legal Advisor to the Department State under President Reagan, engaged in the so-called "Broad/Narrow" debate, which concerned whether the ABM Treaty banned the development and testing of space-based and other mobile-type ABM components that were based on "other physical principles." Judge Sofaer argued that the United States could comply with the Treaty and do such testing. Senator Nunn disagreed. The Broad/Narrow debate was of great significance to American national security, as it would help outline National Missile Defense's legal and political justification for years to come.

At the time of the debate, Senator Nunn argued that such development and testing of components (known as the Reagan "reinterpretation") would prove incompatible with the ABM Treaty's ratification hearings before the Senate, as well as both the subsequent practice of the United

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8. ABM Treaty, supra note 3, 23 U.S.T. at 3441.
9. Id. at 3446.
10. Id.
11. See Infra Part II. B.
13. Id.
States and U.S.S.R and the negotiating history.

In response, Judge Sofaer offered a “broad” interpretation of the ABM Treaty, stating, “When [the Senate] gives its advice and consent to a ABM Treaty, it is to the ABM Treaty that was made, irrespective of the explanation it is provided.”

Upset by Judge Sofaer’s comments, the Senate rejected his position in an amendment “attached to the resolution of ratification of the INF Treaty in May 1988.”

To date, the Broad/Narrow debate remains unresolved, and although the official government position can be found in the authoritative report authored by John Norton Moore, Director of the Center for National Security Law, the report remains classified. Despite this, the Broad/Narrow debate has significantly shaped American National Missile Defense development, for, as will be explained, Congressional resistance to President Reagan’s “Star Wars System” not only characterized spaced-based missile defense research as hawkish fantasy, but also helped to establish a lasting impression of missile defense as an expensive and unobtainable pursuit. Though such skepticism has often failed to distinguish between the different forms of missile defense (e.g. the more exotic Star Wars vs. the more practical NMD), it has continued to serve as a political lightening rod in the larger missile defense debate.

B. Post-Cold War Legal Status of the ABM Treaty: Interplay of International Law & Constitutional Precedent

In 1991, the U.S.S.R disintegrated and its geographic territory evolved into fifteen independent states, all of which were recognized by the United States. Until December 13, 2001, when President George W. Bush announced that the United States would withdraw from the ABM Treaty following a six month notice period in accordance with Article XV, section 2, American politicians and scholars had debated whether the ABM Treaty remained valid—and thus, whether the United States’ missile defense efforts remained constrained—even though the Soviet Union no longer existed. In general, most scholars agreed that until the United States Senate consented to ratification, the ABM Treaty was without legal effect. At the same time, however, these scholars believed that customary international law (as stipulated by the provisions of Article XVIII of the Vienna Convention on the Law of Treaties)
prevented the United States from defeating the object and purpose of the ABM Treaty.

Notably, both President George H. W. Bush and President Bill Clinton expressed support for retaining the ABM Treaty throughout their presidencies. Indeed, President George H. W. Bush proceeded under the assumption that the ABM Treaty remained intact and never submitted it to the Senate.

Like his predecessor, President Clinton endorsed the notion that the ABM Treaty would continue with Russia. Unlike President Bush, however, President Clinton later added three other former Soviet Republics as signatories in 1996—and argued that these three nations, along with Russia—but not the eleven other former Soviet republics—somehow constituted a direct succession from the Soviet Union, thereby preserving the legal validity of the ABM Treaty and rendering unnecessary Senatorial consent to ratification. Equally noteworthy, both policy considerations and political concessions often obscured discussion of the ABM Treaty’s continuing legal merits.

Most scholars agree that Robert F. Turner, Associate Director for the Center of National Security Law, offers the determinative interpretation of the ABM Treaty’s present legal status, in light of international law and the ABM Treaty following the Cold War. Professor Turner applies the “clean slate” principle of international law, which dictates, “when one country has a bilateral ABM Treaty with another and is then ‘succeeded’ by a different state....the bilateral ABM Treaty remains in effect only if both states so affirm—the new state and its predecessor’s treaty partner.” According to this principal, the fifteen new independent states began their existence with a “clean slate” with respect to any rights and obligations from Soviet treaties, unless those states, along with any ABM Treaty partners, choose to undertake any obligations that had burdened the Soviet Union. Likewise, as noted by

18. E.g., Michael J. Glennon, Yes, there is an ABM Treaty, WASH. POST, Sept. 4, 2000, at A25 (noting that Secretary of State James Baker stated on Jan. 29, 1992, “the United States remains committed to the ABM Treaty....[W]e expect the states of the Commonwealth to abide by all of the international treaties and obligations that were entered into by the former Soviet Union, including the ABM Treaty.”).  
19. R. James Woolsey, What ABM Treaty?, WASH. POST, Aug. 15, 2000, at A23 (noting that for “dispositive treaties, such as those which dispose of territory,” succession is automatic, though such a principal is inapplicable to the ABM Treaty).  
20. David M. Ackerman & Amy F. Woolf, ABM Treaty: Legal Status and
former CIA Director R. James Woolsey: Russia (or all/some group of the former Soviet republics) had succeeded to the rights and duties of the ABM Treaty only if both Russia and the United States affirmed, for establishing a new ABM Treaty partner(s) constitutes a major revision of the original ABM Treaty. According to the Heritage Foundation, even President Clinton, in a November 21, 1997 letter ("1997 Letter") to the Chairman of the Foreign Affairs Committee, Representative Benjamin Gilman (R-NY), acknowledged that recognizing Russia as the "legal partner" of the ABM Treaty would have required fundamental changes in the ABM Treaty.

Other commentators have argued that the ABM Treaty was vitiated by fall of the Soviet Union in 1991:

[T]here is no state, or group of states—including the Russian Federation—that can both be said to have continued the Soviet Union’s international legal personality (its sovereignty) and that also is capable of implementing the totality of the U.S.S.R.’s obligations under the ABM Treaty in accordance with that agreement’s original terms, that treaty was discharged as a matter of law in 1991 and the United States is not now legally bound by it.

In their analysis, Rivkin and Casey emphasize the dicta in Terlinden v. Ames, where the Court observed that a bilateral treaty, such as the ABM Treaty, can only survive the collapse of a nation when that nation is followed by a succeeding nation and when that succeeding nation inherits the former nation’s a) international legal personality, b) sovereignty, and c) unimpaired power to execute the bilateral Treaty.
To illustrate how the Terlinden reasoning applies to the collapse of the Soviet Union, Rivkin and Casey hypothetically propose a scenario where the French colonial empire has not only dissolved over the past fifty years, but France itself has disintegrated into its ancient kingdoms, principalities, and provinces, i.e., Normandy, Brittany, Anjou, and so forth. Would Normandy alone be considered a valid successor of France? The answer is no in light of the Court’s observations in Tenderlin. Following such reasoning, the ABM Treaty cannot survive because no succeeding state(s) has inherited the former Soviet Union’s international legal personality, nor can any of the states execute the ABM Treaty in accordance with its original terms. More precisely, none of the former Soviet republics has agreed to accept the ABM obligations without alteration, and even if any of the successor states did agree to the terms of the ABM Treaty it “would so fundamentally change the bargain approved by the Senate when it consented to the ABM Treaty’s ratification, that its consent would have to be obtained again” – which has yet to occur. In short, the Executive and Senate contemplated one treaty partner (the Soviet Union) when it agreed to the ABM Treaty; to add signatory states to the ABM Treaty which were not even in existence at the time of execution essentially eviscerates the effect of the Treaty.

Though the consensus of international law commentators was that the ABM Treaty did not survive the collapse of the Soviet Union, President Clinton preferred a different interpretation. In his view, the ABM Treaty remained in effect following the Soviet Union’s collapse due to a 1978 convention that limits the application of the clean slate rule “solely to countries emerging from colonial domination.” Neither the United States nor the Soviet Union (or Russia), however, is a party to this convention—nor are ninety percent of the world’s countries (thus diffusing any possible “customary law” argument).
United States constitutional law also proves significant in this debate. Article II, Section 2 of the United States Constitution instructs that modifications to an existing treaty be treated as the creation of a separate treaty, thus, which must be submitted to the Senate for its advice and consent. According to Professor Turner, the Framers’ intent in Article II, Section 2 of the Constitution was clear: “[i]t is well established [practice] . . . that any effort by the Executive Branch to change the terms of a treaty constitutes the making of a new treaty and requires the consent of two-thirds of the Senate before it may be ratified.”

While President Clinton made clear in the 1997 Letter that the “original substance and purpose” of the ABM Treaty had been altered by dissolution of the Soviet Union, he refused to seek the advice and consent of the Senate, as required by the U.S. Constitution.

Perhaps even more remarkable than his attempt to preserve the ABM Treaty without Senatorial consent, President Clinton also attempted to transform the ABM Treaty from a bilateral to a multilateral agreement—also without advice and consent. Specifically, on September 26, 1997, he authorized Secretary of State Madeline Albright to sign the “Memorandum of Understanding on Succession” (MOU). The MOU was a unilateral amendment purporting to expand the number of ABM Treaty signatories from two to five, by adding Kazakhstan, Ukraine, and

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32. See Turner, supra note 17.

33. But see Glennon, supra note 18. Professor Michael J. Glennon of the University of California at Davis, citing a congressional law passed in 1996 that required any modifications of the ABM Treaty negotiated by the President to be submitted to the Senate for advice and consent, argues, “it would have made no sense to prohibit the president from modifying an agreement that did not exist; Congress must have believed the ABM Treaty to be in effect in 1996, or it would have had no reason to limit presidential power to amend it.”; cf. Ian Christopher McCaleb, GOP Lawmakers Threaten Suit over Missiles, U.P.I., July 10, 1996, at 1 (arguing Professor Glennon, ignoring the fact that Congress passed the legislation both out of frustration of President Clinton’s refusal to submit the ABM Treaty to the Senate, and as a less divisive substitute for suing the President on grounds of deliberately failing to adhere to a theater missile defense deployment schedule, as Senator Jon Kyl (R-AZ) and Congressman Curt Weldon (R-PA) alleged).

Belarus—apparently giving new meaning to the word “bilateral.”\footnote{35} Even the independent, non-partisan Congressional Research Service concluded that while the MOU should have been submitted to the Senate for advice and consent, “the Clinton Administration did not do so before it left office, because it feared it would be defeated.”\footnote{36} Likewise, Professor Turner highlights Article IX of the MOU, which dictates that the MOU could have become enforceable only upon the constitutionally mandated processes for treaty approval within the five nations.\footnote{37} Therefore, by refusing to submit the MOU to the Senate for consent, President Clinton only ensured that the MOU could not be ratified.

Further mistaking his interpretation of international law, President Clinton authored a letter dated May 21, 1998, to both the Chairman of the Senate Foreign Relations Committee, Senator Jessie Helms (R-NC) and to Representative Gilman (“1998 Letter”), and argued that “the United States and Russia clearly are parties to the ABM Treaty”\footnote{38} even though in the 1997 Letter, he claimed that such a conclusion would have required changes to the “substance and purpose” of the ABM Treaty.\footnote{39} To make matters more confusing, the Clinton State Department continued to list the Soviet Union as the United States’ bilateral ABM Treaty partner in all of its versions of “Treaties in Force.”\footnote{40} Not surprisingly, President Clinton left office in 2001 without ever having submitted to the Senate the successor to the ABM Treaty. Even this final point deserves mention, for on May 14, 1997, in exchange for Senator Jessie Helms allowing the Conventional Forces in Europe Flank Document to go to the Senate Floor for a vote on ratification, President Clinton agreed—in writing—that he would submit the ABM protocols to the Senate.\footnote{41}

\footnote{35. Id.}
\footnote{36. See Ackerman & Woolf, supra note 20, at 12.}
\footnote{37. Robert F. Turner, Associate Director, Center for National Security Law, Presentation on ABM’s Legal Status at New England School of Law’s International Law Forum (Nov. 8, 2001) (on file with author).}
\footnote{38. Letter from William J. Clinton to Benjamin A. Gilman (May 21, 1998), quoted in Rivkin & Casey, supra note 22, at n.3.}
\footnote{39. See Spring, supra note 31, at 2.}
\footnote{41. Jesse Helms, Amend the ABM Treaty?, WALL ST. J., January 22, 1999, at A10.}
Presuming for a moment that both the ABM Treaty and the MOU were legitimate, any future changes in the ABM Treaty would have required the signatures of five nations, rather than two.\textsuperscript{42} Consequently, as discussed by Professor Turner, the United States would no longer have comprised fifty percent of the ABM Treaty’s Standing Consulting Commission. Instead, it could have constituted only twenty percent of the Commission, with four former Soviet Republics comprising the other eighty percent.\textsuperscript{43} Moreover, as noted by Director Woolsey, requiring five signatures would have endangered American security. For example, Belarus “is ruled by the dictatorial and highly corrupt Lukashenko regime that is in league with the most unreconstructed parts of the old Soviet military-industrial complex.”\textsuperscript{44} Therefore, even though President Clinton’s 1997 Letter interpreted Russia’s succession of the Soviet Union as a “substantive” change, the 1998 Letter implicitly regarded a new nuclear defense alliance with Alexander Lukashenko as non-substantive.\textsuperscript{45} Perhaps this contradiction clarifies why President Clinton failed to send the revised ABM Treaty to the Senate for their advice and consent.

There are numerous other reasons why the current version of the ABM Treaty is illegal under United States law absent the advice and consent of the Senate. For instance, the area covered by the Clinton version of the ABM Treaty would have been 5.5 million square kilometers smaller than the area covered by the ABM Treaty that received consent by the Senate in 1972.\textsuperscript{46} Such a territorial distinction significantly impacts national security, as 5.5 million square kilometers of former Soviet topography would have become available to host advanced missile defense systems.\textsuperscript{47}

A number of key provisions were linked to the protection of key cities. For example Article III stipulated that Moscow and Washington D.C. could be protected.\textsuperscript{48} Would that protection under Article III now extend to Odessa or Kiev? In order to ensure the United States preserved the benefits of the original bargain, Article III would have required redrafting if any other party were to undertake the Soviet Union’s ABM

\textsuperscript{42} See Charles Krauthammer, \textit{The Bush Doctrine}, WKLY. STANDARD, June 4, 2001, at 23 (noting that the ABM treaty is “a relic of the bipolar world).

\textsuperscript{43} See Turner, supra note 37.

\textsuperscript{44} See Woolsey, supra note 19, at A32.

\textsuperscript{45} Id.

\textsuperscript{46} Id. (noting that eleven countries that had been part of the Soviet Union would be excluded under the Clinton version—the Baltics, The Caucasus, Moldova, Kyrgyzstan, Turkmenistan, Tajikistan, and Uzbekistan).

\textsuperscript{47} See Turner, supra note 37.

\textsuperscript{48} ABM Treaty, supra note 3, 23 U.S.T. at 3446.
Treaty obligations. Until December 13, 2001, there was no determinative official United States’ position on the ABM Treaty’s legal status: the State Department had classified the ABM Treaty as “under review.” As we have seen, President Clinton’s combination of unilateral maneuvers and conflicting comments only muddied the issue. One commentator suggests that President’s Clinton’s apparent aim “was to make the ABM Treaty more enduring, at a time when it had already become obsolete.” Indeed, prior to December 13, 2001, the most tenable position was that until the ABM Treaty was submitted to the Senate for advice and consent, there could not have existed an identified ABM Treaty partner. Therefore, the ABM Treaty had lapsed and was no longer legally binding upon the United States. At the same time, some commentators maintained that customary international law (as stipulated by Article XVIII of the Vienna Convention on the Law of Treaties) bound the United States to not defeat the object and purpose of the ABM Treaty until the Senate had the opportunity to ratify.

On December 13, 2001, President George W. Bush heeded the advice of Professor Turner and others and settled the ABM Treaty’s unsettled legal status. By doing so, he paved the way for missile defense systems. Specifically, President Bush exercised Article XV, Section 2, and clearly identified three grounds for withdrawal: that new threats from rogue states constitute “extraordinary events;” that such threats could not have been contemplated in 1972; and, therefore, that the ABM Treaty “hinders our government’s ability to develop ways to protect our people from future terrorist or rogue-state missile attacks.” Consequently, the United States has provided Russia with six months notice of its intent to withdraw (as stipulated in Article XV, Section 2), thus ensuring that the clock on the ABM Treaty will strike midnight on May 13, 2002.

49. See Rivkin and Casey, supra note 22.
50. See Treaties in Force, supra note 40.
51. See e.g., Krauthammer, supra note 42, at 23.
52. See generally Turner, supra note 37.
C. The ABM Treaty & President George W. Bush: The United States Will Likely No Longer Be A Party To The Treaty After May 13, 2002

Shortly after taking office, President Bush made clear his intentions to create national missile defense (NMD), irrespective of the ABM Treaty; though he had pledged to first find a “cooperative solution” with Russia. Indeed, one may postulate that the clock on the ABM Treaty began ticking the day President Bush was sworn into office because the Bush Administration planned missile tests for Spring 2002 that, until the President’s historic announcement on December 13, 2001, would have clearly violated the ABM Treaty.54 The President’s candor on this issue was best illustrated by his comments in a press conference at the June 13, 2001 NATO Summit, when he told world leaders, “[b]efore we can lay out a specific case [for the creation of NMD,] . . . it’s necessary to set aside the ABM Treaty so we can fully explore all options available to the United States and our allies and friends. The ABM Treaty prevents full exploration of opportunity.”55 Likewise, before December 13, President Bush refused to promise to submit any actions on the ABM Treaty to the Senate for advice and consent. Instead he pledged only that he would “consult” with Congress on the matter.56 As will be discussed later in greater detail, President Bush believes firmly that the ABM Treaty “is a product of the Cold War era” (i.e. mutually assured destruction), and with the increased threat presented by nuclear proliferation and the rise of the rogue nation nuclear threat, the United States must begin immediate work on deployment of NMD.57

President Bush’s blunt intention to withdraw from the ABM Treaty prompted sharp rebuke from both foreign leaders and domestic competitors. For instance, French President Jacques Chirac chastised the President for “lightly discarding” the ABM Treaty, as Chirac

54. See Strobel, supra note 4. Deputy Secretary of Defense Paul Wolfowitz told the Senate Armed Services Committee in July 2001 that the “testing program could come into conflict with the ABM Treaty as early as February, when tests of antimissile and air defense radars are planned.” See also Barry Schweid, State Notifies U.S. of Missile Plans, A.P. ONLINE, July 12, 2001, at A15, available at 2001 WL 24711216. Also, in July, the State Department “notified its diplomats around the world that the tests will come in conflict with that 1972 ABM Treaty with Moscow in months.” Id.


believed the Treaty was an indispensable part of global security. Likewise, German Foreign Minister Joschka Fisher warned that should the United States no longer recognize the ABM Treaty, "it must be replaced only by better ones or more effective ones." Finally, one senior European diplomat lamented, "[i]f Bush has already decided to go ahead with breaking the ABM Treaty and building his project, then how are we supposed to believe that these consultations have any meaning?"

Similarly, several American politicians have criticized the President for acting on the ABM Treaty without first consulting with the Senate—a charge eerily familiar to that leveled against President Clinton. For instance, Senate Majority Leader Tom Daschle (D-MI) criticized the President's unilateral decision to withdraw from the treaty: "I think we are isolating ourselves, and in so isolating ourselves, I think we're minimizing ourselves. I don't think we are taken as seriously today as we were a few years ago." Along these lines, both Senator Joseph Biden (D-DE) and Senator Carl Levin (D-MI), Co-Chairmen of the Senate Foreign Relations and Armed Services Committees, respectively, indicated they would back the President's proposal to withdraw from the Treaty only if he did not act unilaterally.

To illustrate this opposition, on September 7, 2001, the Senate Armed Services Committee passed legislation that would have reduced spending on U.S. missile defense programs by $1.3 billion, and would have required President Bush gain congressional approval either before expending funds on NMD that could violate the ABM Treaty, or before attempting to withdraw from the ABM Treaty.

The domestic criticism of President Bush's NMD policy may have reached its apex on the very day he formally announced the United

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60. See Drozdiak and Milbank, supra note 58.
62. *Id.*; see also Ivo H. Daalder, *Online Interview with Washington Post Online*, at 1 (May 2, 2001) available at http://www.washingtonpost.com/wp-srv/liveonline/01/world/worlddaalder050201.htm. Ivo H. Daalder, a Senior Fellow of Foreign Policy Studies at the Brookings Institute, argues that the President is "abandoning a core piece of international law" and defining the interests of world peace all by itself by setting aside the ABM Treaty." *Id.*
States' intent to withdraw from the ABM Treaty. In fact, only hours after President Bush's historic declaration on December 13, 2001, Senator Robert C. Byrd compared President Bush to a king because by withdrawing from the ABM Treaty without the Senate's consent, he "effectively undermines the intent of the framers of our Constitution. Monarchs make treaties; presidents propose treaties." 64

From the standpoint of international law, Senator Byrd's comments were incorrect for at least three reasons. First, the President does not need the consent of the Senate to withdraw from a treaty. In Goldwater v. Carter, 65 Justice Brennan's dissent concluded that President Jimmy Carter had the constitutional right to withdraw from the 1954 Taiwanese Mutual Defense Treaty without the consent of the Senate, emphasizing, "the President's well-established authority to recognize, and withdraw recognition from foreign governments." 66

Second, presidents do more than just, in the words of Senator Byrd, "propose treaties." For example, as stipulated by Article II, Section 2, Clause 2 of the United States Constitution, the Senate, with a 2/3 majority, provides the President with its advice and consent to ratification. However, the President—not the Senate—elects whether to ratify a treaty. It is possible for the President to submit a treaty to the Senate for consent to ratification; for the Senate then to consent to the treaty's ratification; for the Senate then to return the treaty with the Senate's consent to the President; and for the President then to decide not to ratify the treaty. Therefore, if we employ Senator Byrd's flawed logic, presidents are monarchs because they do make treaties.

Third, though Senator Byrd believes that President Bush has, "undermined the intent of the Framers of our Constitution," the actual words of the Framers strongly suggest that they intended for the President to have tremendous powers in foreign affairs. In addition, the first President, Chief Justice, and Congress all believed that the president should play the predominant role in foreign affairs. 67 Textually, Article II, Section I makes clear that the "Executive Power shall be vested in a President." 68

Despite the inaccurate legal arguments proffered by some in Congress, President Bush has nevertheless received enthusiastic support from

64. Mufson & Milbank, supra note 53, at A40.
66. Id. at 1006. In Goldwater, the majority of the Supreme Court dismissed the complaint as they viewed the Taiwan treaty question as a not justiciable political question. Id. at 996-1005.
numerous members of Congress and from foreign leaders regarding his
decision to opt out of the ABM Treaty. Generally, these officials have
emphasized that while the United States should first seek to establish a
"cooperation solution" with Russia, the United States properly maintains
the right to withdraw from the ABM Treaty to proceed with NMD.\footnote{69}

Several influential Republican members of Congress have provided
unequivocal support for the President. For example, Senator John
Warner (R-VA) recently stressed, "the ABM Treaty has outlived its
purposes\footnote{70} and even led a failed effort to regain $1 billion of the $1.3
billion that the Senate Democrats rescinded on NMD spending.\footnote{71}
Similarly, Senator Jeff Sessions (R-AL) has emphasized that by forcing
the President to gain approval from the Senate on either ABM Treaty
issues or NMD spending, the Senate has only "complicated the
President’s ability to negotiate."\footnote{72}

Foreign leaders have also buttressed President Bush’s NMD efforts by
recognizing both that the ABM Treaty has outlived its purposes, and that
NMD works to the advantage of the entire global community. For
instance, Jack Straw, the British Foreign Secretary, recently noted, "the
world has changed in 30 years . . . there has been a development of
weapons of mass destruction by third countries.\footnote{73} Likewise, leaders
from Hungary, Italy, Poland, and Spain have all voiced approval for
NMD.\footnote{74}

Although the debate concerning the ABM Treaty remains contentious,
the United States can formally withdraw from the Treaty on May 13,
2002. By authorizing the United States to take such action, President
Bush will render mute those who persist in venerating an outlived treaty
based on antiquated logic. Indeed, President Bush began his
administration with a crystal clear approach to the ABM Treaty—that it
would not preclude NMD—and, since that time, has only cultivated it to
one of unprecedented conviction. By doing so, President Bush has

\footnote{69. See, e.g., Ackerman & Woolf, supra note 20, at 11. “Deputy Secretary
Wolfowitz has said frequently during testimony on Capitol Hill that the United States
would not violate the ABM Treaty.”; see also Curl, supra note 61, at 1. Dr. Condoleezza
Rice, National Security Advisor to the President, emphasized that the ABM Treaty
“prevents us from carrying out research, development, testing and evaluation of
defensive technologies.” Id.}
\footnote{70. Curl, supra note 61, at A1}
\footnote{71. See Whitesides, supra note 63.}
\footnote{72. Id.}
\footnote{73. See Schweid, supra note 54.}
\footnote{74. See Drozdiak & Milbank, supra note 58, at A1.}
illustrated an essential principal of governance voiced by Dr. Rice: “choose goals that are optimal, even if they seem at the time politically infeasible.”

II. NATIONAL MISSILE DEFENSE SYSTEMS: PAST, PRESENT, FUTURE

A. Earlier Attempts

Following the Senate’s consent to ratification of the ABM Treaty in 1972, the United States has remained engaged in the development of national missile defenses. Indeed, the United States has already taken advantage of explicit opportunities for missile defense systems provided by the ABM Treaty.

1. Safeguard System

As noted earlier, Article III of the ABM Treaty permitted both the U.S. and the Soviet Union to deploy two limited missile defense systems, one to defend the capitol city, the other to defend an ICBM field. The Soviet Union was first to capitalize on Article III, having already constructed the “Galosh” ABM system around Moscow by the late 1960s. Primitive by modern missile defense standards, Galosh contained sixty-four long-range nuclear-armed high-altitude interceptors supported by two large surveillance radars and twenty-four scanning radars to guide the interceptors.

Conversely, while the Soviets erected a missile defense system around Moscow to protect its regime elites, the United States constructed its missile defense system far away from its national leaders. On March 14, 1969, President Richard M. Nixon publicly announced his intent that the Pentagon begin developing a system to “protect our land-based retaliatory forces against a direct attack by the Soviet Union;... [defend] the American people against the kind of nuclear attack which Communist China is likely to be able to mount within the decade; [and protect] against the possibility of accidental launches from any source.” From that point in time, the Department of Defense developed the “Safeguard” system at Grand Forks Air Force Base in


Nekoma, North Dakota. Safeguard was designed as a missile defense system to protect the Base’s 150 Minuteman missiles.

Recently, declassified documents, however, confirm that by 1972, Secretary of Defense Melvin Laird had sought vigorously to persuade President Nixon to pursue a second site around Washington D.C. that would have, according to Secretary Laird, provided the President with “additional valuable time for decision-making.” 79 Although President Nixon was receptive to the notion of a second site around Washington D.C., Congress refused to fund such a program in 1974. 80 The refusal of Congress to fund a second site prompted President Nixon to seek an agreement with the Soviet Union on limiting each parties ABM capacity to one site. Both nations agreed to this amendment to the ABM Treaty on July 3, 1974. 81

On October 1, 1975, Safeguard became operational. 82 From research and development to operational implementation, the total cost of Safeguard was $25 billion. 83 Significantly, although Pentagon officials believed that Safeguard could preserve a portion of the nation’s nuclear arsenal in the event of a Soviet first-strike, recently declassified documents reveal that those same officials privately conceded, “even four Safeguard sites might not be enough to counter a mass attack by advanced Soviet ICBMs.” 84 Simply put, Safeguard was a very limited system, though it did offer a first step towards utilizing missile defense, both to deter a Soviet first-strike, and to protect against an accidental or unauthorized launch.

Despite the initial promise offered by Safeguard, its technology, like that supporting the Galosh, became obsolete as the superpowers altered their nuclear arsenal in response to the SALT I Treaty. Specifically,

79. See Id. at 8 & 10. In the document, Secretary Laird notes that subsequent to initial deployment of Washington D.C. defenses planned for early 1979, “[a] Safeguard site at Washington under an arms control agreement permitting ABM defenses of national capitals might need to provide for a ‘reinforced’ deployment of 3-4 radars deployed by late 1979”. Id. at 10.
82. See Mitchell, supra note 76, at 9.
83. See Thompson, supra note 59, at 23.
84. Office of the Secretary of Defense, supra note 78, at 8 & 9.
soon after the parties agreed to SALT I’s limitation on each side’s number of ICBMs (rather than the number of warheads), the superpowers began to place multiple warheads atop their ICBMs (a.k.a. “mirving”) as a way to preserve their destructive capacity. For instance, “the number of U.S. ballistic missile-delivered warheads grew from roughly 1,700 in 1968 to roughly 8,500 in 1986.” During that same time period, the Soviets developed the SS-18 force, a nuclear arsenal consisting of more than 300 highly accurate missiles, each containing 10 warheads—a force theoretically powerful enough to destroy all American ICBMs.

As a result of mirving, neither Safeguard nor Galosh presented a useful defense against a missile attack, for neither would be able to defend against a series of mirved missile attacks. In addition, Safeguard was plagued by large “easy to destroy” radars that would have been particularly vulnerable during an attack.

On the other hand, advocates of Safeguard noted that while it would have failed to effectively defend against a mirved attack, its capacities would have been improved over time, provided it received adequate support. Instead of attempting to improve Safeguard, however, Congress elected to sever its funding entirely in the 1976 budget process. On October 2, 1975—only one day after Safeguard became operational—the House of Representatives elected to eliminate Safeguard’s $85 million budget, ordering that the Grand Forks site be “completely torn down.” By November 1975, the Senate concurred with the House of Representatives and sought the elimination of the nation’s only defense against nuclear missiles. Specifically, Senator Edward M. Kennedy (D-MA) authored an amendment in the 1976 budget process stipulating that all ABM funding was to be “used only for the purpose of the expeditious termination and deactivation of all operations at [Safeguard].” More bluntly, Senator Kennedy believed that his amendment “require[s] that the facility at Grand Forks would effectively be mothballed, with the exception on the PAR radar system.”

Some critics found the mothballing of Safeguard undesirable because the mothballing process might not “[protect] the technical expertise in the ABM area that is considered a national asset.” By refraining from

85. See Lewis and Postol, supra note 77, at 19.
88. Staff Writer, Army Widens Ballistic Missile Research, AVIATION WK. & SPACE TECH., Dec. 8, 1975, at 17.
89. Id. at 18.
90. Id.
NMD development, the United States effectively precluded scientific research on defenses that could have saved tens of millions of lives if the nation was ever attacked either deliberately or accidentally.

Equally significant, as argued most vehemently by Secretary of Defense James R. Schlesinger, the Senate’s actions essentially conferred a benefit to the Soviets without receiving any return benefit as its amendment enabled the Soviets to continue their development of NMD technology while "relinquishing our ABM posture without attempting to extract any concession from the Soviets." Not surprisingly, one senior Defense Department official lamented, "the Soviets must be laughing up their sleeves at what we are doing to ourselves in the name of detente." Some in the Department of Defense argued that the dismantling of Safeguard weakened U.S. posture in negotiating with the Soviets. At about the same time, newly appointed Secretary of Defense Donald Rumsfeld was forced by Congress to order Safeguard shut down. All the while, the Soviets preserved Galosh and later expanded it to the more sophisticated "Gazelle" System which remains operational today.

2. Strategic Defense Initiative (SDI)

Eight years after Secretary Rumsfeld was forced to place Safeguard in "caretaker" status, President Reagan announced that the United States would begin work on the Strategic Defense Initiative (SDI). SDI was a complex mostly abstract notion of space-based technology that would one day employ lasers in outer space to destroy nuclear missiles. In fact, during his address, President Reagan openly acknowledged SDI's enormous technological challenge: "I know this is a formidable technical task, one that may not be accomplished before the end of the century." Nevertheless, the initial promise of SDI was evident in the early 1980s, when a team of scientists led by Dr. Edward Teller of the Lawrence Livermore National Laboratory developed the nuclear-pumped x-ray laser. The x-ray laser was a technological landmark signifying a first step towards the creation of short-wavelength atomic transitions that

93. Id. (citing Secretary of State Henry A. Kissinger).
94. Thompson, supra note 59, at 23.
95. See President's Speech on Military Spending and a New Defense, supra note 1, at A20.
could be used to explode nuclear missiles in outer space.\textsuperscript{96} Unlike either the relatively modest Safeguard or even modern conceptions of missile defense, SDI was designed to defend against a massive nuclear onslaught. Because of its seemingly exotic capabilities, SDI perplexed even some of President Reagan's most hawkish advisors.\textsuperscript{97}

Almost twenty years later, SDI remains only a vision, for its requisite technology has proven frustratingly elusive. In addition, over $25 billion has been spent on its development, though funding has declined precipitously over the past decade.\textsuperscript{98} NMD borrows from the knowledge obtained during the development of SDI research. For example, by 1992 SDI scientists had shifted much of the research from space-based lasers to land-based missiles, renaming the project "Brilliant Pebbles." The goal of Brilliant Pebbles was to acquire the technology whereby "100 ground-based missiles could have been deployed at a single site by 1996."\textsuperscript{99} As we will now see, however, President Clinton had other plans for missile defense.

3. The Clinton NMD "Pursuit"

Essentially, President Clinton avoided NMD until it became politically impossible to do so. Although he promised in his 1996 State of the Union Address to work towards a world where "not a single Russian missile is pointed at America's children" and where North Korea has "frozen its dangerous nuclear weapons," his actions painted an unmistakably different picture of American deterrence.\textsuperscript{100} In fact, a number of key events demonstrate how his symbolic, if not token gestures at building NMD have likely resulted in delaying its deployment by as many as five years.

First, as mentioned, in 1995, President Clinton, reasoning that no present threat justified NMD deployment, vetoed legislation that would have mandated the deployment of a limited national missile defense


\textsuperscript{97} See e.g., R. Jeffrey Smith, \textit{SDI Plan Draws Military Critics}, \textit{Wash. Post}, June 28, 1987, at A4 (noting that senior Army, Navy, and Air Force Joint Chiefs of Staff officials privately discouraged President Reagan from seeking SDI because, in their opinion, it was too complicated to create); George P. Shultz, \textit{From Turmoil and Triumph: My Years as Secretary of State}, published as a special book excerpt, May 10, 1993. Secretary of State George P. Schultz privately acknowledged to President Reagan before his address, "we don't have the technology to do this."


\textsuperscript{99} Id.

\textsuperscript{100} Curt Weldon, \textit{An Urgent Need for a Strong Missile Defense}, \textit{USA Today Mag.}, May 1997, at 12.
By 1996, however, President Clinton shifted his position on NMD primarily due to political considerations. After realizing that a large number of Republicans and Democrats in Congress would have overridden another veto of the same legislation, President Clinton announced the “3+3” compromise program, which stipulated that if no threat justified deployment after three years, then “development would continue so that the system would always be three years from deployment with up-to-date technology.” Essentially, President Clinton assumed that the United States would always have three years of warning before a country would have the capacity to launch a missile at the United States. President Clinton’s three year assumption was not only proven wrong by North Korea, but, more importantly, it ignored the importance of extended deterrence—that is, President Clinton based his decision based on expected threats to the United States, not on allies as well. Notably, even NMD opponents, such as Dr. Lisbeth Gronlund and Dr. David Wright, Research Fellows at the Massachusetts Institute of Technology’s Security Studies Program, believe that the real purpose behind the 3+3 program was not so much policy as it was, “designed to undercut the Republican bid to require deployment by 2003.”

Prior to 1998, the presence of the ABM Treaty (and President Clinton’s unyielding belief in it) acutely restrained any actions towards development of NMD. As noted by Samuel Berger, Clinton’s National Security Advisor, the Clinton Administration “remain[ed] strongly committed to the 1972 ABM Treaty as a cornerstone of our security.” The practical effect of President Clinton’s allegiance to the ABM Treaty, however, meant that deploying even the most limited missile defense would have required permission from Russia to revise the ABM Treaty. Essentially, such negotiation would be tantamount to bartering with

101. See Cordesman, supra note 4 (responding to the question: “Is the risk of attack, and the need for an NMD, greater now than it was during the Cold War?”).  
104. See Helms, supra note 41, at A10 (quotations omitted).
Russia over whether the United States could protect itself against a North Korean missile. To illustrate this point, in 1996, President Clinton refrained from pursuing the deployment of a limited land-based NMD site in Alaska partly out of concern that Russia would not acquiesce.

Two important events occurred during the summer of 1998 that dramatically changed the NMD debate and essentially forced President Clinton to adopt a more receptive view to NMD. These two events exposed his “3+3” belief (i.e. the United States would be assured three years warning of a missile threat) as wholly inaccurate. First, the “Rumsfeld Commission,” a non-partisan Commission of experts on national security headed by former (and current) Defense Secretary Rumsfeld, released a report that North Korea or Iran could develop an ICBM within five years and with little warning. Second, North Korea unexpectedly launched the three-stage Taepo-Dong I missile over Japan, demonstrating the prescience of the Rumsfeld Commission, as well the naiveté of the Clinton Administration’s reliance on 3+3. The confluence of these two events evidenced both the feverish pace at which rogue states were developing nuclear missiles and exposed, how, by delaying a response to these threats, the Clinton NMD policy was remarkably shortsighted. Moreover, it showed how an administration could choose to ignore past warnings, thereby inviting future perils. To illustrate this point, as far back as 1989, Jane’s Defence Weekly concluded North Korea could manufacture nuclear devices in five years’ time, and the means to deliver them soon afterward.

Sensing a heightened public urgency for NMD following the 1998 events, President Clinton quickly demonstrated a newfound affection for NMD. By January 1999, President Clinton requested an additional $6.6 billion in new money for research and development of NMD, as well as pledging to make a definitive decision on NMD by as early as June.

105. Id.
106. See Barry, supra note 75, at 9. Cf. Frank Gaffney, Clinton’s Missile Defense Misfire, NAT’L REV ONLINE (Sept. 1, 2000), available at http://www.nationalreview.com/comment/comment090100c.shtml. Frank J. Gaffney, J.R., Director for the Center of Security Policy and Assistant Secretary of Defense in President Reagan’s Defense Department, unfavorably compares President Clinton’s reluctance to anger foreign leaders on NMD development with the determined resolve exhibited by President Reagan on deployment of Pershing Missiles in 1983: “If Ronald Reagan had caved in the face of... these [political] campaigns and the Pershings and cruise missiles were not deployed in Western Europe in 1983 as agreed by NATO, the Cold War might have ended very differently.”
107. See Lewis, Gronlund & Wright, supra note 102, at 121-22.
Some observers suggested that the President's decision reflected either the desire to "co-opt a Republican hobby horse that was likely to win congressional approval" or to provide Vice President Al Gore with "political cover" in his the 2000 Presidential election.109

President Clinton, however, refused to agree to the enactment of NMD "as soon as technologically feasible" for, as noted earlier, he feared Russian and European reaction. Instead, one commentator believes that President Clinton followed the "politically cautious middle path" by requesting additional funding for the short-term, but avoiding any long-term decisions.110 Both Democrats and Republicans in Congress, however, sensed the impending threat presented by the proliferation of nuclear weapons, and in July 1999, by a wide margin, passed the National Missile Defense Act of 1999, stipulating that NMD would be deployed "as soon as technologically feasible." Foreseeing an overridden veto, Clinton signed the Act that same month.111

In August 2000, in what served as his final presidential act relating to NMD and the ABM Treaty, President Clinton, in one sweeping decision, seemed to offer a microcosm for all of his related decisions on NMD/ABM policy: he elected to opt-out of a decision to deploy NMD, instead deferring it to his successor. Citing three reasons, all of which were likely self-induced by eight years of political posturing, both on the domestic and international political arenas, President Clinton essentially announced that the best NMD policy was no NMD policy until his successor could review the issue.

First, President Clinton claimed the technology was not ready, though his restrained approach to NMD development likely contributed greatly to the absence of sustained technological advancement.112 Second, President Clinton believed that more time was needed to educate the Russians and allies on NMD. As noted by Gaffney, however, the

109. See Mitchell, supra note 76, at 254.
110. Id. (quoting Mark Thompson, Star Wars: The Sequel (Feb. 15, 1999) and also noting argument by William Hartung, an analyst at the World Policy Institute, that Clinton finally caved into the idea of NMD because it would have provided Vice President Al Gore "some political cover" in the 2000 Presidential election), available at http://www.cnn.com/ALLPOLITICS/time/1999/02/15/star.wars.html.
112. See Lewis, Gronlund & Wright, supra note 102, at 122.
113. See e.g., Krauthammer, supra note 42, at 22-23. "President Clinton went to great lengths to constrain and dumb down the testing of high-tech weaponry (particularly on missile defense) to be 'ABM Treaty compliant.'" Id.
Russians and allies had intensified their opposition because of Clinton's "hapless diplomacy and slavish devotion to the obsolete and defunct 1972 ABM Treaty." Third, President Clinton alleged that China could respond to NMD by building up their nuclear arsenal, though, as discussed later, most experts agree that China will undoubtedly expand their nuclear arsenal irrespective of NMD.

B. Current & Future Variations of NMD

The future of NMD will likely include a combination of land, sea, and space technology. Over the past two decades, all three of these technological avenues have provided promise, albeit with significant disappointment along the way. The benefits and drawbacks of each of these three options, as well as an examination of "theater missile defense" systems will be discussed next. Theater missile defense may provide an important nexus linking the three forms of NMD technology, thereby offering the most expansive global deterrence against nuclear missiles.

1. Land Based NMD

By itself, land-based national missile defense has often been regarded as the United States' "selfish option." That is, the most recent plan on land-based NMD included two sites, one in Alaska and one in North Dakota, which, collectively, would have the combined capacity to defend only the United States and Canada. Despite its geographic limitations, land-based NMD was embraced by the Clinton Administration. Specifically, the Administration proposed to construct an initial site in Alaska, where one acquisition radar and five early-warning radars would support one-hundred interceptor missiles. Soon thereafter, missile defense would return to the home of Safeguard, as one-hundred interceptors and a second acquisition radar would be placed in Grand Forks, North Dakota, representing the second land-based NMD site. According to John Deutch, former Director of the Central Intelligence Agency, a best-case scenario under the Clinton plan would have found the Alaska site fully operational in 2005, with the North Dakota site following in 2008.

Equally notable, the Clinton Administration's proposed land-based NMD focused on "midcourse" technology, whereby a combination of satellite sensors and radars detect and analyze an enemy attack,

114. See Gaffney, supra note 106, at 24.
115. See Thompson, supra note 59, at 25.
including the detection of any decoys. Upon detection, the system launches interceptor missiles from the United States in an attempt to destroy incoming warheads in outer space roughly halfway through their flight. Once near the enemy missile, the interceptor releases its Exoatmospheric Kill Vehicle (EKV), employing both infrared and visible light sensors to help it distinguish the missile from decoys and thereby "hit" and destroy the missile.

Simply put, the Clinton Administration’s system would have defended the United States from nuclear attack by launching ground-based interceptors to collide with nuclear missiles. Importantly, though some critics of NMD lump this form of NMD technology together with previous, more extravagant forms, Professor George Lewis, Associate Director of the Security Studies Program at the Massachusetts Institute of Technology, notes that this limited system should not be confused with President Reagan’s Strategic Defense Initiative (SDI) which was intended to create a massive, space-based shield that employed laser technology to conceivably thwart a large Soviet nuclear attack.

Along these same lines, the scope of the Clinton Administration’s land-based NMD system would have been deliberately narrow and deployed slowly over the course of fifteen to twenty years. In fact, the Administration purposely created three levels of "capability" that would have been achieved over that time period. Particularly, Capability 1 (C1), with the deployment of one-hundred interceptors in Alaska, would have been able to defend against a maximum of thirty nuclear warheads. Notably, Alaska was selected as the first site because North Korea was deemed to serve as the most imminent missile threat. With limited radar capacity and only one-hundred interceptors based in Alaska, however, C1 would have had little, if any, capacity to intercept a missile launched from the Middle East aimed at an East Coast city.

117. MICHAEL E. O’HANLON, DEFENSE POLICY CHOICES FOR THE BUSH ADMINISTRATION 2001-05 144-45 (2001); see also Lewis, Gronlund & Wright, supra note 102, at 123. According to the authors, the NMD system would then use different sensors to detect the missile and any objects it releases, track these objects accurately enough to guide the interceptors, and attempt to discriminate between the real warhead and decoys or other false targets. These sensors include five existing early-warning radars in California, central Alaska, Great Britain, Greenland, and Massachusetts.
118. See Lewis, Gronlund & Wright, supra note 102, at 123.
119. Id.
120. Id. at 123-24.
121. See O’Hanlon, supra note 117, at 156.
Capability 2 (C2) would have maintained the number of interceptors at one-hundred in Alaska and complemented them with increased radar technology to distinguish decoy missiles, thereby providing increased capacity to intercept an attack by a Middle Eastern nation. Finally, Capability 3 (C3) would have brought the total number of interceptors in Alaska and North Dakota to over two hundred, and would have added space based weapons, provided that the technology was available in 2015-2020. Importantly, the Clinton Administration’s plan would not have had the capacity to provide defense to any allies outside of Canada and Mexico during C1 and possibly during C2.

Not only has land-based NMD been criticized for its failure to provide extended deterrence to our allies, but its technological test record has proved mixed. In fact, under the Clinton Administration, three land-based NMD tests yielded two failures following one success. Optimism for the system was heightened after Integrated Flight Test-3 (IFT-3) successfully destroyed a mock warhead. Some critics, however, claimed that the test was not a complete success, alleging that the interceptor mistakenly pursued one of the missile’s decoys, and only accidentally hit the missile. Professor Gordon Mitchell of the University of Pittsburgh argues “subsequent disclosures revealed that a faulty star map caused the exo-atmospheric kill vehicle (EKV) to drift off course and hone in on a decoy until the very last second, when the interceptor inexplicably veered into the missile.” Likewise, Jane Nolan, Foreign Affairs Expert at the Eisenhower Institute and former Foreign Affairs Advisor to 1988 Democratic Presidential Nominee Michael Dukakis, asserts that rogue states can “easily and cheaply employ decoys.”

Only four months after IFT-3, the Clinton Administration carried out a second test of land-based NMD systems. In IFT-4, however, Raytheon-built EKV infrared seekers malfunctioned, causing the interceptor to

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122. See Lewis, Gronlund & Wright, supra note 102, at 125; see also O’Hanlon, supra note 117, at 159 (noting that the increased radar technology includes the usage of three x-band radars).
123. See Lewis, Gronlund & Wright, supra note 102, at 124; O’Hanlon, supra note 117, at 159.
124. See, e.g., Mark Helprin, The War of Lights, NAT’L REV., Feb. 22, 1999, at 36 (noting that during the presidency of George H. W. Bush, a land-based NMD test produced a successful result, despite employing now-antiquated computer technology. Specifically, in January 1991, a Minuteman ICBM was launched from California and, at as it neared its target in the South Pacific, an interceptor was launched and its EKV successfully distinguished the warhead from the decoys and obliterated the warhead).
125. Mitchell, supra note 76, at 260.
126. Id. (citing James Glanz, Military Experts Debate the Success of Warhead Missile Interceptor Test, NEW ORLEANS TIMES-PICAYUNE, Jan. 14, 2000, 3A).
miss the missile. In July 2000, the Administration tried IFT-5, but the interceptor failed to separate from its second-stage booster, thereby allowing the mock enemy missile to complete its course. Taken together, these failed tests seemed to corroborate the earlier admonitions of Air Force General Larry Welch (ret.), who in his 1998 Report of the Panel on Reducing Risk in Ballistic Missile Defense Flight Test Programs maintained that NMD was being “rushed to failure.” On the other hand, even critics of NMD have noted that IFT-5 was not a fair indicator of land-based NMD because “some components were not ready in time to be included in the experiment.” Moreover, IFT-5 yielded some positive findings as the X-band radar provided accurate information to the interceptor and the “Battle Management/Command, Control, Communications system” (i.e. land-based NMD’s software component) performed well.

Last summer, advocates for land-based NMD and its “hit-to-kill” technology received an enormous boost when, on July 15, 2001, the Bush Administration conducted its first successful test. In this trial, a target ICBM was launched from Vandenberg Air Force base in California and was successfully destroyed by an interceptor that had been launched from the Kwajalein atoll in the Pacific Ocean. Importantly, according to Army Major General Willie B. Nance, Jr., the test represented “further confirmation of the feasibility of ‘hit-to-kill’ technology.” Perhaps even more significant, the test gave further credence to President Bush’s hope to expedite the construction and deployment of a land-based NMD system to as early as 2004. According to a State Department memo from July 2001, “deployment of an interim ground-based system in Alaska could be completed as early

128. See Mitchell, supra note 76, at 261.
131. See Mitchell, supra note 76, at 261.
132. See Lowry, supra note 129.
135. See generally Curl, supra note 61.
Critics of land-based NMD, however, regard the July 2001 test as a farce, and one that was preordained to succeed because of overly simplistic and unrealistic test conditions. According to Professor Theodore A. Postol, a leading missile defense critic at the Massachusetts Institute of Technology, the test was “meaningless” because the existence of both a dummy warhead and a decoy were pre-programmed, essentially allowing the interceptor to begin its mission having already distinguished the missile from the red herrings: that is, there was no “real-time” discrimination as would be required in an actual missile attack assuming decoys are used by the adversary. Put bluntly, Professor Postol belittles the Bush Administration’s initial land-based NMD test as “basically demonstrating that they have the guidance and the control to hit a cooperating target.”

Similarly, Dr. Richard Garwin, a physicist and member of both the Council on Foreign Relations and the Rumsfeld Commission, offers equally derisive language by characterizing the enemy missiles fired during both July 2001 tests as “puppy dogs, wagging their tails, and wanting to be slapped with hit-to-kill interceptors.” Even General Nance, a proponent of NMD concedes these tests do not stress discrimination between warheads and decoys. In response, however, other supporters of land-based NMD note that decoys are hard to deploy along side missiles, as evidenced by the failure of the decoys during the July 2000 test, and that it is likely that United States will have information on an adversary’s attack and decoy weapons prior to their launch—“the same way silhouettes of enemy airplanes are provided with anti-aircraft batteries”—thus challenging the “decoy” criticism often promulgated by NMD opponents.

Despite the apparent drawbacks of land-based NMD, it is clear that President Bush will have to utilize it in the short-term in order to achieve a viable NMD. On the other hand, both the multiple test failures and even the qualified test successes will prove politically challenging to
President Bush in gaining Congressional funding, particularly with a Senate leadership skeptical of NMD. To further add to his challenge, any enthusiasm generated from the July 2001 successful test was dimmed in October 2001, when a computer-run simulation of the NMD failed to intercept a missile. The failure was caused by a glitch in the software evaluation station. As a result, the actual October 2001 test was postponed to late November. In November, it was postponed again and has not yet been rescheduled.

Over the long-term, however, it is expected that the Bush Administration will seek to develop land-based NMD that focuses on attacking the “boost phase” of an enemy missile, rather than the Clinton Administration’s proposed “midcourse” defense posture. As noted by Ivo H. Daalder, a Senior Fellow of Foreign Policy Studies at the Brookings Institute (and opponent to NMD), intercepting a missile’s rocket during its boost phase, instead of the missile’s warhead in midcourse, is a superior method of missile defense, for, if a missile is mirved, “all the warheads are still on the booster.”

More specifically, O’Hanlon finds that because an enemy missile during the boost phase is “essentially a large, burning gas tank ... within the atmosphere or just outside of it,” it would be “highly vulnerable and easy to see and hit.” Moreover, missiles cannot deploy decoys during their boost phase. In addition, a boost phase land-based NMD ensures that a missile launched from anywhere in Asia would be destroyed before completing its boost phase; meaning, its warhead would be unlikely to have the requisite speed to reach North America.

International political considerations may also motivate President Bush to prefer boost phase technology. Specifically, the Bush Administration’s plan to develop land-based boost phase NMD may prove diplomatically advantageous over “midcourse” NMD because ICBMs launched from deep regions within both China and Russia’s would be beyond the range of any land-based boost phase interceptors, as such missiles would have completed their boost phase before the

143. See O’Hanlon, supra note 117, at 144-45.
144. See Daalder, supra note 62.
145. See O’Hanlon, supra note 117, at 164.
146. Id.
147. Id.
interceptors could hit them. Therefore, boost phase NMD would serve as a “defense” against only a small portion of Russian and Chinese ICBMs.

Although boost phase land-based NMD offers several clear advantages over a midcourse system, some experts identify several disadvantages as well. First, as noted by former CIA Director Deutch, hitting something in the boost phase is extremely hard. More particularly, according to Daalder, intercepting a missile in the boost phase would require the interceptor to be launched from a location near the site of the enemy missile launch, i.e. “forward deployed”. As any boost phase land-based NMD would need to be within 1,000 kilometers of the location of an enemy launch, interceptors would have only two to three minutes to intercept a missile while in its boost phase. Because of the initial proximity required between the interceptor and the missile, the United States would have to rely upon the use of foreign territories for land-based NMD, a reliance that could be tested during wartime.

A related drawback to the land-based boost phase NMD’s limited range of 1,000 kilometers rests in the possible need to move such interceptors in order to counter new nuclear threats. Because the interceptors are not easily movable, and because their range is so restricted, their long-term value would therefore be questionable. Indeed, given the proliferation of nuclear weapons, as well the expressed desires of multiple authoritarian leaders to acquire such weapons, this drawback could prove significant.

A third drawback to land-based boost phase NMD pertains to the uncertainty involving attacking the rocket—the “boost”—rather than the nuclear warhead, particularly as the warhead would invariably continue onward, and at an unknown direction and speed. Without question, the warhead would at some point detonate, at which time it would spread radioactive material. Experts find it unlikely a warhead fired by an Asian nation could reach North America after losing its rocket during the boost phase. Yet, the radioactive threat posed by a detonated warhead over an unknown location would prove potentially harmful to global health.

Finally, though a land-based boost phase NMD may prove more amenable to Moscow and Beijing because it would be unable to

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148. Id. at 167-68.
149. See Deutch, Brown & White, supra note 116, at 95.
150. Id. See also Daalder, supra note 62.
151. See O’Hanlon, supra note 117, at 167.
152. Cf. Id. at 39-41 (sea-based boost phase NMD would not have this drawback).
153. Id.
154. Id. at 164.
intercept most of their missiles, the same logic holds that it would not be able to stop a number of missiles fired from inside Asia, as interceptors would need to be placed within 1,000 kilometers of an enemy attack in order to stop it. As a result, not only would such a system prove less worrisome to Russia and China, but it may also prove of no deterrence to a number of more threatening Asian nations, including Iran and Afghanistan.

Despite these possible drawbacks, land-based boost phase NMD appears to be an important component of the Bush Administration's aggressive approach to NMD development along with continuing midcourse NMD development pioneered during the Clinton Administration. To illustrate this point, while the Clinton Administration viewed arming Fort Greely with interceptors as a long-term goal, the Bush Administration, according to a recent State Department memo, “intends to place between five and 10 silo-based missile interceptors at Fort Greely for testing against missiles fired from an aircraft and perhaps from ground-based locations.” Clearly, land-based NMD will be an integral part of the Bush Administration's larger NMD system.

2. Sea Based NMD

Far less developed and perhaps less useful, sea-based NMD offers another option for the Bush Administration. Although information relating to sea-based NMD is more speculative than that available for land-based NMD, consensus suggests that such a system would involve the placement of interceptors onboard U.S. Navy's Aegis-class warships. In fact, the Heritage Foundation estimates that within the next five to ten years, Aegis-class warships could be equipped with heat-seeking missiles at the cost of $8 billion. One major advantage to such a system would pertain to the mobility of these interceptors. That is, unlike the more stationary land-based NMD, sea-based NMD could be transported across the globe in the span of days depending upon both the nature and geography of a threat. Because it is more mobile, sea-based NMD could protect allies and far away places in ways that a land-based NMD could not.

A second advantage to sea-based NMD relates to its capability to provide boost-phase interception. To illustrate this point, if the Bush

155. See Schewid, supra note 54.
156. See Murdock, supra note 2.
157. See O’Hanlon, supra note 117, at 166.
Administration sought to intercept an Iranian missile launch at its boost phase, placement of sea-based boost phase NMD may be essential.\textsuperscript{158}

Significantly, however, there are a number of important drawbacks to sea-based NMD. First, like the land-based boost phase NMD discussed above, sea-based NMD requires close proximity to an enemy launching area in order to be effective. For instance, if interceptors were placed on warships in hopes of stopping a missile fired from North Korea, those warships would need to be positioned in international waters just off the coast of North Korea.\textsuperscript{159} Following this reasoning, if a missile were fired from deep inside China, Russia, or Afghanistan, a sea-based interceptor would be unable to intercept it.\textsuperscript{160} Therefore, sea-based NMD, like land-based boost phase interceptors, offers diminished deterrence to nuclear missiles positioned throughout most of Asia.

A second drawback of sea-based NMD relates to its present and near-term technology. In short, scientists have yet to develop the capable means of deploying sea-based NMD. In fact, on December 15, 2001, the Pentagon cited “poor performance” as the reason behind its canceling of the “Area Missile Defense” program, a sea-based NMD program that had been seen by experts as the furthest along in development and was expected to protect warships and amphibious landing forces overseas from attacks by missiles or manned aircraft.\textsuperscript{161} The Area Missile Defense program, which was scheduled for deployment in 2003, was essentially designed to serve as a sea-based patriot missile system, and would have been used to protect small selected areas, if other defenses failed.\textsuperscript{162} Compared with other sea-based NMD systems, the Area Missile Defense program was seen as elementary, a reputation that has only prompted NMD critics, such as Joseph Cirincione, a missile defense critic at the Carnegie Endowment for International Peace, to hail, “this a very serious setback for missile defense programs, because it shows that even the simple stuff is difficult.”\textsuperscript{163}

The technological challenges of sea-based NMD have been most prevalent in the integration of NMD systems into naval vessels that had not been originally designed to employ such systems. In fact, one commentator has opined that Aegis-class warships “are simply not designed to launch missiles of the size and performance required... its

\textsuperscript{158} See id. at 167.
\textsuperscript{159} See Thompson, supra note 59, at 28.
\textsuperscript{160} Id. See also O’Hanlon, supra note 117, at 167 (finding that “Sea-based boost-phase systems would not be useful against missiles from all potential threats, since not all are near international or friendly waters.”).
\textsuperscript{161} See Thomas E. Ricks & Steven Mufson, Missile Defense System Canceled, WASH. POST, Dec. 15, 2001 at A01.
\textsuperscript{162} Id.
\textsuperscript{163} Id. (quoting Joseph Cirincione).
nonsense, as the Navy is the first to admit.” Therefore, deployment of sea-based NMD would require some alteration to these warships, particularly, as noted by Air Force Lieutenant Colonel Rick Lehner, spokesman for the Defense Department’s Ballistic Missile Defense Organization, in order to update their antiquated computer technology.

Because of the possible technological obstacles in achieving a viable sea-based NMD, it is likely the Bush Administration will focus more on land-based NMD. However, because of the tremendous strategic advantage of mobility provided by sea-based NMD, it is also likely the Bush Administration will devote a significant portion of its NMD research budget to sea-based NMD. If they work, “sea-based interceptors” will become part of the core of a nationwide anti-missile shield.

3. Air & Space Based NMD

Although not likely available until 2015-2020, air and spaced based NMD may provide the best security against an incoming missile attack. In fact, according to Cordesman, many Air Force officials believe that an airborne laser system would serve as the best possible boost phase NMD, for it may not be constrained by the geographic proximity requirement existent in both land-based and sea-based boost phase NMD. More importantly, such laser technology has been in development for over a decade, as discussed earlier in regards to SDI.

According to a number of experts, air-based NMD will likely be available far sooner than space-based NMD. It is expected that “the military is grooming [plane-based lasers] to play major roles in a national missile-defense system aimed at ocean-crossing ICBMs.” Simply put, such technology will prove vital in the Bush plan to employ “boost-phase” NMD. To illustrate the importance of air-based NMD to the Bush Administration, Air Force Colonel Ellen Pawlikowski of the Airborne Laser Program predicts that a jumbo jet carrying a giant high-powered laser will represent “the first U.S. capability to intercept a missile in the boost phase.”

164. See Barry, supra note 75.
165. See Ricks & Mufson, supra note 161.
166. See Graham, supra note 142.
167. See Cordesman, supra note 4.
168. See Barry, supra note 75.
169. Thompson, supra note 59, at 24.
In addition to plane-based lasers, an orbiting network of laser emanating “killer satellites” may be available as soon as 2020, though such technology remains on the drawing board. Moreover, as noted by Derek H. Chollet, a former Clinton aide on national security issues and James M. Goldgeier, an associate professor of political science at George Washington University, unlike other forms of NMD, space-based NMD would help the United States defend its space assets, including its critical satellites.

As they similarly denigrated Star Wars technology twenty years ago, critics of air and space based NMD regard it as both exotic and unrealistic. Cirincione belittles airborne NMD as “highly vulnerable. It’s a big, fat, and slow 747 [airplane]. It could be shot down with ground-to-air missiles, with interceptors or jammed from the ground.”

Like President Reagan, however, President Bush may view pursuing the best possible NMD as the worthiest and most humane of achievable goals. During this undoubtedly challenging pursuit, President Bush should gain encouragement from the guiding words of President Reagan twenty years earlier: “there will be failures and setbacks, just as there will be successes and breakthroughs. And as we proceed, we must remain constant in preserving the nuclear deterrent and maintaining a solid capacity for flexible response.” Perhaps even more inspiring, President Bush can seek encouragement from the actions of President Kennedy, who refused to let initial failures in the space program deter the country from landing on the moon.

4. Theater Missile Defense (TMD)

A “fourth” option in the NMD menu may ultimately serve as the best option, even though it is not generally classified as “NMD technology.” Theater Missile Defense (TMD) systems are those regionally based and used to defend against short and intermediate ballistic missiles. Notably, such systems are limited by the 1997 U.S.-Russian demarcation agreement, which restricts testing of TMD interceptor missiles to 3,500
The greatest advantage to TMD systems is their ability to defend against present and near-future threats. In fact, since Russia and China are the only two Asian nations possessing ICBMs, and since North Korea and possibly Iran are the only two other Asian nations likely to have such capacity by 2010, some argue that the bulk of NMD resources should be devoted to defending against short and intermediate range missiles. According to former CIA Director Deutch, short and intermediate range missiles are far more threatening to American and Allied interests abroad than are ICBMs: theater ballistic missiles have proliferated in the Middle East, South Asia, and elsewhere, can carry nuclear weapons that threaten our allies and U.S. forces stationed abroad, and are more likely to be used in conflict. In fact, if employed today, TMD systems could protect clusters of U.S. warships, bases of American soldiers, American territories overseas (e.g. Guam), and the geography of a large number of allies from short and medium range missiles.

In addition, TMD systems provide extraordinary extended deterrence, for they can positioned in a variety of ways and locations. Their operational flexibility has been highlighted by Secretary Rumsfeld who maintains that a theater system could be used to help protect “a friend or an ally or a location where we have deployed troops.”

A third advantage to TMD systems relates to their undisputed compatibility with the ABM Treaty. Plainly stated, the ABM Treaty prohibits defenses against ICBMs, not short and medium range missiles. Therefore, TMD systems do not violate the ABM Treaty. However, with President Bush’s December 13, 2001 announcement to withdraw from the ABM Treaty after a period of six months, this advantage may no longer be relevant in the near future.

177. See O’Hanlon, supra note 117, at 155.
178. See Deutch, Brown & White, supra note 116, at 93.
181. See Loeb, supra note 179. This agreement on compatibility is demonstrated by the fact that despite the ABM Treaty Russia has a TDM in place which uses “the S-300 . . . to shoot down incoming short-range missiles,” and the United States has been working on developing such systems around the world.
182. This is true unless TMD systems are demonstrated to destroy ICBMs in their boost phase.
Finally, TMD systems are versatile and readily capable of being integrated into a larger NMD network. In particular, sea-based TMD systems have been cited as readily adaptable. In fact, a recent Pentagon study concluded, “an NMD system could be upgraded by integrating the hundreds of interceptors to be deployed as part of the ship-based Navy Theater Wide missile defense system. These interceptors would be plugged into the sensor infrastructure of the NMD system.”

TMD Systems do have possible drawbacks, however. Most importantly, some experts believe TMD Systems are technologically deficient and are unable to defend against ICBMs. Specifically, Professor Mitchell argues that TMD systems generally have “limited interceptor velocities, constrained engagement software and test protocols, and lack of cueing of target trajectory information from external sensors.” As a result, such systems “have minimal capability against ICBMs.” On the other hand, some observers believe TMD systems could also be used against ICBMs as well provided that such systems were located within the requisite distance of ICBM launch sites to intercept those ICBMs during their boost phase.

Another flaw of TMD systems may be found in their inability to provide much extended protection. That is, such systems, without the co-existence of NMD systems, may not provide much protection for our allies, particularly those in Europe. For instance, because Great Britain is more than 7,000 kilometers away from southern Iran, any American TMD system capable of protecting Great Britain from Iran would be in violation of the 1997 U.S.-Russian demarcation agreement.

In further exploring the advantages and disadvantages of TMD systems, analysis of previous and current TMD systems is worth discussing. Notably, TMD systems employ a variety of technologies, be it laser-generated light beams or highly mobile air-based interceptors of short-range missiles.

First, the United States and Israel are working together on the “Tactical High Energy Laser (THEL),” a TMD system that is designed specifically to defend Israel against Katyusha rockets fired from Lebanon. Promisingly, the laser recently downed more than twenty Katyusha rockets during an exercise at the White Sands Missile Range.

183. See Lewis, Gronlund & Wright, supra note 102, at 124.
184. See Mitchell, supra note 76, at 259.
185. Id.
186. See generally Loeb, supra note 179.
187. See O’Hanlon, supra note 117, at 155 (noting that Italy is more than 3,500 kilometers from the most distant parts of Iran).
188. See Loeb, supra note 179 (noting that specifically, the laser generates “intense light beams through a chemical process that combines deuterium and fluoride.”); see also Mitchell, supra note 76, at 243.
Yet, not all observers are convinced THEL will become an effective TMD system. Most importantly, THEL’s design is geared specifically for the Israeli-Lebanese conflict, and thus may not be adaptable to other disputes. Notwithstanding, Secretary Rumsfeld has noted that the “sharing of [TMD] capability with Israel,” could lead to more and different “technologies that could be shared.” Additionally, some have criticized THEL’s test design, which, until the recent successful exercises at White Sands, had focused exclusively on shooting stationary ground targets—a test design analogized by some as “a type of strap-down chicken test, where you strap the chicken down, blow it apart with a shotgun, and say shotguns kill chickens. But that’s quite different from trying to kill a chicken in a dense forest while it’s running away from you.”

A second TMD system under development is the Medium Extended Air Defense System (MEADS), a project bringing together the United States, Germany, and Italy in the creation of a TMD system utilizing “rapid-mobility technology” to protect troops from short-range missiles. Similarly, the U.S. and Israel are working on the “Arrow” TMD system in order to improve defenses against Iran’s Shahab missiles, which have a range of 1,200 miles. Like with the test designs employed for THEL, however, critics such as Philip Coyle, the Pentagon’s former top testing official, find that testing for MEADS and Arrow involved “tightly scripted experiments that were not operationally realistic.”

As the Bush Administration develops its NMD program, most experts agree that the Administration would be well served by incorporating TMD systems into any global defensive shield. An emphasis on TMD systems may help reduce some of the opposition expressed by European allies of the Administration’s larger NMD program. While NMD has

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189. See Loeb, supra note 179; see also, Mitchell, supra note 76, at 245. Army General John Costello, commander of the U.S. Army Space and Missile Defense Command, believes the THEL system, “could revolutionize warfare by protecting troops from rockets, mortars, and other artillery.” Id.

190. See Lopez, supra note 180 (quoting Donald Rumsfeld).

191. See Mitchell, supra note 76, at 245 (quoting comments by the Department of Defense’s High Energy Laser Executive Review Panel: “it would be very difficult [for systems like THEL] to acquire targets, control the HEL beam, and destroy targets.”).

192. See Loeb, supra note 179.

193. Id.

194. See Mitchell, supra note 76, at 259 (quoting Phillip Coyle).
often been regarded as an initiative to primarily boost the United States' defense against nuclear threats. Italy, Germany, Japan and Israel have shown interest in TMD. Therefore, if the Bush Administration were to include TMD systems into a larger NMD program, it would likely stimulate international support for the entire NMD program.

Perhaps most significantly, TMD systems would likely bolster “extended deterrence.” The need for extended deterrence seems clear, particularly when observing this nation’s collaboration abroad involving the expansion of democracy, the U.S. cannot leave major allies exposed to nuclear attack while protecting only itself. The fact that the United States and several European allies have joined forces on TMD projects strongly suggests that many European nations agree that missile defense simply makes sense for their own interests. Simply put, if an adversary pointed a missile at London, would that not have almost the same effect on our response as would a missile pointed at Los Angeles? Thankfully, President Bush has expressed a strong willingness to emphasize extended deterrence within his NMD program. In fact, the President has referred to a “layered” shield that, in his own words, would protect “the entire United States, as well as U.S. allies and troops abroad, from intercontinental ballistic missiles.” In doing so, the President has won over even his skeptics, such as Professor Goldgeier, who acknowledges that the President’s willingness to incorporate TMD systems into his NMD program suggests that he has made “clear that [NMD] is only one part of a broader U.S. defense strategy.”

III. ARGUMENTS AGAINST NMD: FLAWED ATTACKS ON DETERRENCE

Opponents of NMD offer an array of criticisms that, initially, seem persuasive. However, upon closer inspection, most of these criticisms fail to effectively include the importance of deterrence and extended deterrence when assessing NMD. Moreover, these criticisms invite equally persuasive counter-arguments.

195. See Loeb, supra note 179.
196. Arguably, this is why the United States has been partnering with nations around the world to develop regional TDMs. Id.
197. See Loeb, supra note 179. For greater detail, according to a senior Navy official [paraphrased by Loeb], “the Pentagon is developing a short-range missile defense system with Germany and Italy. It is working on both a medium-range theater defense and a high-energy laser with Israel. It has signed an agreement with Japan for research on advanced missile components, and it is discussing joint research with Britain on sophisticated radar.” Id.
198. Id.
199. See O’Hanlon, supra note 117, at 147.
200. See Loeb, supra note 179.
201. Chollet and Goldgeier, supra note 172 at A19.
A. Alleged Flaw I: Alternate Delivery Modalities Remain with NMD

Particularly in light of the recent terrorist attacks on September 11, 2001, critics of NMD charge that because it provides zero defense against non-missile nuclear attacks, namely suitcase bombs, it offers limited deterrence. Such critics even utilize government studies to corroborate their points. For instance, one critic finds, “even the CIA’s latest threat analysis says that [the] most likely threats are not incoming missiles but rather such portable weapons of mass destruction as truck and suitcase bombs.”202 Suitcase bombs smuggled across the border presents a difficult threat to defend against.203

A related argument to the “suit-case bomb” flaw of NMD rests in the idea that enemies could also deploy short-range missiles from ships near the United States.204 The Rumsfeld Commission acknowledged that, over the next 10 years, it might be easier “for an emerging missile state to develop shorter-range, ship-launched ballistic missiles than ICBMs. Because such missiles have short flight times and low maximum altitudes, they could not be intercepted by the NMD system.”205

Following the logic of this argument, any form of defense, unless it can defend against all possible nuclear threats, should not be supported. Applying this unrealistic reasoning to another setting, the U.S. should not spend resources on border patrol officers to inspect the baggage of those attempting to enter the United States for nuclear materials because other delivery modalities—such as ICBMs or short-range missiles—remain.

Supporters of NMD further illuminate the shortsightedness of this argument. For instance, David R. Tanks, Defense Analyst for the Institute for Foreign Policy, reminds us “doing nothing about missile defense because there are other means of delivery of these weapons is comparable to not searching for a cure for cancer because we could still die of heart attack.”206 Likewise, Deroy Murdock, a Senior Fellow at the

203. See Gronlund & Wright, supra note 103, at 49. Two of the Rumseld Commissioners, Richard L. Garwin and Barry Blechman, have separately stated that they see smuggled weapons as the greatest threat to the United States from North Korea, Iran, and Iraq.
205. Lewis, Gronlund & Wright, supra note 102, at 124.
Atlas Economic Research Foundation, provides an equally-telling analogy: "this is akin to arguing that since some hoodlum might shoot a New York Police Department officer fatally between the eyes, the entire force should discard bullet-proof vests." 207

Clearly, alternate modalities of delivery present real threats to American and international security. Therefore, methods to defend against these threats should not be overlooked. Indeed, James Lindsay, Senior Fellow in Foreign Policy Studies at the Brookings Institution, cautions "missile threats are fundamentally different from truck-delivered bombs or ship-delivered [bombs] in that they can be delivered very quickly—making them especially dangerous to the United States in crisis or wartime conditions." 208

Interestingly, however, while the United States has yet to deploy any defenses against nuclear missiles, it has already created some protection against these alternate modalities through both the Coast Guard and the border patrol. 209 Moreover, concerns that NMD will not intercept short-range missiles are alleviated by the addition of TMD systems, an addition endorsed by President Bush. To ignore the threat of nuclear missiles because of the threat of alternate modalities of delivery merely ignores the need to deter against nuclear strikes, and only leaves us vulnerable to other forms of attack.

B. Alleged Flaw II: NMD May Not Work, Thereby Offering Minimal Deterrence In “Real World” Crises

Other opponents of NMD contend that because we could never be one-hundred percent certain such a system would work, it simply cannot be relied upon during crisis. For instance, one critic notes that even NMD’s requirement of ninety-five percent effectiveness 210 is an unrealistic goal. 211 As noted earlier, some critics believe that testing for NMD has deliberately involved non-real world settings (e.g. operators knowing in advance what countermeasures they would experience), let alone actual use of the system in prior conflicts. Such an absence of information seems particularly troubling given that the, “NMD system must work the first time it is actually used. If a nuclear ICBM attack

208. Id.
209. Id.
210. See Lewis, Gronlund & Wright, supra note 102, at 126. Effectiveness is a measure of how well a system works in the real world. Critics hold that ninety-five percent effectiveness is an unrealistically optimistic achievement for NMD because such performance is not achievable in a world with countermeasures.
211. Id.
occurs, there will be no opportunity to learn on the job."\textsuperscript{212}

Admittedly, the expanding existence of countermeasures may interfere with NMD's effectiveness. As noted by the 1999 \textit{National Intelligence Estimate (NIE) on Countermeasures}, "Russia and China have developed numerous countermeasures and probably are willing to sell the requisite technologies."\textsuperscript{213} To illustrate this point, recent Chinese missile tests have included countermeasures of increasing technological complexity.\textsuperscript{214} Furthermore, countermeasures are likely to proliferate in congruence with the proliferation of nuclear weapons.\textsuperscript{215} Finally, should nations deploy countermeasures on their missiles, it would reduce NMD's capability to defend against an accidental or unauthorized launch.\textsuperscript{216}

Along these same lines, this criticism suggests that NMD would offer the President little comfort if the United States or allies were threatened by nuclear weapons. That is, even if NMD somehow possessed ninety-five percent effectiveness, the President may not rely on a system that he or she has only ninety-five percent confidence in.\textsuperscript{217} To illustrate this point, Daalder images a scenario where the United States and China were in conflict over Taiwan, yet, with or without NMD, the President would remain equally fearful of a Chinese nuclear launch: even if we had NMD, "we could never be certain that it would work and a president would be far more influenced by the possibility that it would not work than the possibility that it would. The consequences of getting it wrong are just too large. [Therefore], both the absence and the presence of defenses is likely to be less consequential than its advocates claim."\textsuperscript{218}

Another oft-heard scenario relates to a "black-mail" context, where a hostile nation threatens to launch a nuclear missile at the United States unless the United States follows the orders of the hostile leader. To appreciate how real this scenario may be, one need only look at comments made by Libyan leader Muammar Qaddafi after the American bombing of Tripoli and Benghazi in 1986:

\textsuperscript{212} Id.
\textsuperscript{213} Id. (citing 1999 Central Intelligence Agency, \textit{National Intelligence Estimate on Countermeasures} (1999)).
\textsuperscript{214} Id.
\textsuperscript{215} See O'Hanlon, \textit{ supra} note 117, at 153 (noting that "less sophisticated foes" could acquire countermeasures if "Russia or China... prove willing to transfer countermeasures in order to gain hard currency or to complicate U.S. defense planning that they perceived as aggressive and threatening to their interests.").
\textsuperscript{216} See Lewis, Gronlund & Wright, \textit{ supra} note 102, at 125-27.
\textsuperscript{217} Id. at 128.
\textsuperscript{218} See Daalder, \textit{ supra} note 61.
Did not the Americans almost hit you yesterday when you were asleep in your homes? If they know you have a deterrent force capable of hitting the United States, they would not be able to hit you. Because if we possessed a deterrent, missiles that could reach New York, we would have hit in the same moment. Consequently, we should build this force so they and others will no longer think about an attack.219

Alternatively, some critics of NMD, such as Dr. John Pike of the Federation of American Scientists, believe that NMD may “embolden the president to take diplomatic risks that would recklessly expose thousands (perhaps millions) of civilians... rather than pursuing diplomatic alternatives in a stalemated conflict, [the president] could dig in and dare a ‘state of concern’ to follow through on its promise to launch an ICBM, hoping NMD would force the adversary to back down.”220 If, however, a hostile nation proceeds with a missile attack and NMD fails, Dr. Pike warns, “you have more dead Americans than every other war put together.”221 Therefore, whether the President demonstrates either a reliance or a skepticism to NMD, critics argue, our diplomatic and militaristic activities would not receive greater “cover” with an NMD system in place.

Although this argument resonates, it, like the preceding argument concerning alternate modalities of delivery, fails to compare the likely damage of a missile attack with NMD and without NMD. First, the mere presence of NMD provides deterrence. That is, a nation with a small nuclear arsenal may be less inclined to launch an attack at the United States if it believed its nuclear missiles would be intercepted. Also an authoritarian dictator nearing his ousting may seek, as a “final act,” to annihilate an American city. With the existence of NMD, however, even he would be deterred. Such a phenomenon has been demonstrated before.222 For example, during World War II, the mere presence of the high seas fleets of Britain and Germany represented “threats in being” and such fleets, even when not engaged, impacted the other’s planning.223

Second, suggestions that the President would either completely ignore or completely rely upon NMD if the United States were threatened with a nuclear attack are overly simplistic. As noted by Cordesman, “there is no question that NMD capability would give the U.S. greater freedom of

219. See Weldon, supra note 100.
220. See Mitchell, supra note 76, at 242.
221. Id.
222. See Barry, supra note 75.
223. Id. Cf. Lewis, Gronlund & Wright, supra note 102, at 129. This logic runs counter to experience in deploying air defenses, which have not deterred deployment of fighter aircraft or bombers.
action and some immunity to blackmail." To suggest, as Dr. Pike has, that the president would invite an attack because of his reliance upon NMD proves incompatible with the actions and attitudes of every president to date. That is, can we really imagine Presidents Bush, Clinton, Bush, Reagan, Carter or any other president setting aside diplomatic negotiations and, instead, cowing a hostile leader to launch a nuclear missile at the United States because NMD would shoot it down? In reality, NMD would serve as insurance should diplomatic negotiations fail or, in the event of a surprise, accidental, or unauthorized attack.

Third, and most importantly, this argument fails on a moral level. Put simply, if NMD intercepts only seventy-five percent of incoming missiles, how many millions of lives would be saved if a hostile nation were to launch four missiles aimed at four different American cities? Even an effectiveness rate of fifty percent would still prevent incalculable damage.

To illustrate these points, keep in mind that, according to the Effects of Nuclear War, a 1979 Office of Technology Assessment study, a single one-megaton warhead detonated over Detroit would instantly kill 70,000 citizens within a 1.7 mile radius, and of the 1.32 million of citizens within 7.4 miles of detonation, 220,000 would die and 430,000 would be injured. Given the horror and destruction caused by the September 11th terrorist attacks, one can only imagine a scenario where the magnitude of damage is greater by over 250,000 American fatalities. Again, we ask, if four missiles are launched at the United States, would saving three of the four cities targeted prove the effectiveness of NMD?

C. Alleged Flaw III: NMD Is Too Expensive

Since 1962, the United States has spent over $100 billion on missile defense projects. Of that $100 billion, $60 billion has been spent since 1985. More recently, $5.1 billion has been spent on missile defense projects during the Fiscal Year 2001. Additionally, President Bush has requested $8.3 billion for Fiscal Year 2002, an increase of

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224. See Cordesman, supra note 4 (emphasis added).
225. See generally Lewis, Gronlund & Wright, supra note 102, at 130.
227. Mitchell, supra note 76, at 268.
almost 61% over the preceding Fiscal Year. Over the next five years, it is expected that more than $30 billion will be spent on these projects; cost estimates vary widely over the long-term, though the complete Bush NMD program is expected to cost over $200 billion.

Because expenditures on missile defense appear costly at first glance, some have argued that NMD is simply too expensive. For instance, Senator Barbara Boxer (D-CA) denounces NMD as a "wasteful weapons system... that wastes our tax dollars and gives no benefits to the military." Similarly, Senator Max Cleland (D-GA, Armed Services Committee member) regards NMD as "a system that doesn't work and is going to cost hundreds of billions of dollars." Another NMD opponent, Senator Richard Durbin (D-IL), warns that spending on NMD will "be the reference point for the budget debate in the future." Moreover, Daalder focuses on the "opportunity cost" of money spent on missile defense: "the opportunity costs to going ahead with defenses... means that we may have less money available for intelligence, diplomacy, and other defensive activities to try to prevent these other ways of attack." Like Daalder, Senator Cleland highlights this alleged opportunity cost: NMD "will actually weaken our defense by taking money away from the services on the projects that we know will work."

Conversely, one can make a more persuasive argument that the U.S. has not spent enough on missile defense projects. As noted by Director Deutch, the United States has spent only 1 to 1.5% of its yearly Defense budget on these projects, even though we remain defenseless against nuclear attacks. Consequently, one can contrast how the United States devoted ten percent of its defense budget to

229. Id. at 3.
230. See Deutch, Brown & White, supra note 116, at 95-96. See also Thompson, supra note 59, at 28; Lewis, Gronlund & Wright, supra note 102, at 124. As of 1998, Pentagon estimates for deploying and operating an Alaska-based C1 and C2 system for 20 years were $21.5 and $28.3 billion, respectively. However, there are no public cost estimates for the C3 system and, as for virtually all major defense programs in such an early phase of development, the actual costs are likely to be considerably higher.; see also Weldon, supra note 100 (noting that in 1997 the Congressional Budget Office estimated that a multi-layered missile defense system, with space-based sensors and tracking, could cost up to $60,000,000,000).
232. See Nightline Transcript, supra note 170.
233. See Mitchell, supra note 76, at 255.
234. See Daalder, supra note 62, at 3.
235. See Nightline Transcript, supra note 170; see also Nolan, supra note 127 (asserting "military services have been least avid proponents of missile defenses that would take money away from other programs.").
236. See Deutch, Brown & White, supra note 116, at 95-96.
defend the Persian Gulf with how little it has spent on defending its own citizens from nuclear attack.\textsuperscript{237} Similarly, one commentator has found that the already minimal amount spent on missile defense seems even miniaturized when compared with other American spending habits: "we spend three times what we spend on strategic defense on cookies and crackers, six times as much on sausages and prepared meats, and ten times as much on lottery tickets. By any humanitarian measure cost is immaterial."\textsuperscript{238}

Sadly, the "cost-effectiveness" of NMD can only be determined in certainty if missiles were launched at the United States.\textsuperscript{239} Given this, it seems the most sensible policy would be to deter missiles from being launched in the first place. In this regard, Congressman Curt Weldon (R-PA, Armed Services Committee) asks, "how much is Chicago worth? How much is Cincinnati worth? Is Philadelphia worth 100 million or 500 million?\textsuperscript{240}

History has borne out this notion. When the British parliament decided in the early 1930s that an air-defense system was too costly, it undoubtedly spent funds on other "worthwhile" programs that would have been allocated to an air-defense system.\textsuperscript{241} As evidenced by the unabated Nazi air raids over Britain in the years that followed, however, one can only wonder whether those same parliamentarians remorsefully gained a better appreciation for the "cost-effectiveness" of defending one's homeland.

More recently in history, and far more harrowingly in impact, the absurdity of the "cost-effectiveness" argument was vividly seen by the destruction caused by the September 11th attacks, where the despotic Al Qaeda Network, and its state-sponsor, the Taliban, ruthlessly orchestrated the murder of over 4,000 Americans, as well as hundreds of foreign nationals. Considering that a single nuclear warhead lofted at New York City by Saddam Hussein—or even one accidentally launched by a French nuclear submarine—would instantly kill 6,000,000 Americans, the cost-effectiveness of NMD seems undeniably self-apparent. Tragically, because of September 11th, mass casualties of

\begin{itemize}
\item \textsuperscript{237} See O'Hanlon, supra note 117, at 153.
\item \textsuperscript{238} See Helprin, supra note 124, at 37.
\item \textsuperscript{239} See generally Cordesman, supra note 4.
\item \textsuperscript{240} See Nightline Transcript, supra note 170 (statement of Representative Curt Weldon).
\item \textsuperscript{241} See Helprin, supra note 124, at 38.
\end{itemize}
Americans can no longer be regarded as either "hypothetical" or "theoretical." The very thought seems chillingly real, and one that we should do everything possible to avoid from ever happening again.

The cost-effectiveness argument seems even more unpersuasive when we include the global economic devastation directly caused by the September 11th attacks. Economists have found that the attacks triggered a $1.2 trillion decrease in the capital markets in the immediate aftermath of attack.242 Specifically, the financial services industry expects a loss of $77 billion directly attributable to September 11th; insurance companies expect a loss of $75 billion; media and advertising companies anticipate a loss of $6 billion; real estate agencies fear a loss of over $15 billion; retailers and automobile dealers expect a loss of $16 billion; telecom companies are preparing for a loss of $25 billion; numerous tourism agencies are beginning to go bankrupt with an expected loss of over $16 billion; and airlines and travel industries have already felt the effects of a $15 billion loss.243

Such a precipitous and unprecedented economic drop has real, tangible effects on the lives of people around the world. As noted by Supreme Court Justice Stephen G. Breyer, the author of *Breaking the Vicious Cycle: Toward Effective Risk Regulation*, only a one percent increase in unemployment rates over a five year period will generate 19,000 more heart attacks over that time; under the same conditions, the suicide rate increases by 1,100 over five years.244 Therefore, although September 11th will have devastating and long-lasting effects on the lives of people from across the globe, imagine the costs—human, financial, spiritual—of one nuclear attack on one American city. If we can obtain any benefit from September 11th, let it be by the dismissal of the increasingly pernicious and transparently deceiving "cost-effectiveness" argument against NMD. It is clear: NMD is unquestionably defensible on economic cost-effectiveness grounds.

**D. Alleged Flaw IV: NMD Will Destabilize Global Security & Will Encourage an Arms Race in Asia**

Another commonly heard critique of NMD relates to the possible

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reactions Russia, China, and other nations would have to the creation of NMD. Specifically, some fear that NMD would trigger an escalation in nuclear missile production because nations would worry about an American "first-strike" capability. As noted by Deutch, Russia particularly worries about NMD’s effect on its second-strike retaliatory capability given the reliance it places on nuclear forces.\(^{245}\) Indeed, some NMD critics suggest that NMD would prompt Russia, "to leave more warheads on hair trigger-alert because holes in Russia’s early warning system might make it vulnerable to a U.S. first strike and missile defenses could help the United States thwart a Russian response."\(^{246}\)

Like Russia, China may also fear the effect NMD will have on its nuclear arsenal, particularly in the context of a potential dispute over Taiwan. For example, assuming China’s nuclear arsenal remains stagnant, if the United States were to reach C1 capability (100 interceptor missiles in Alaska and North Dakota), it would render China’s 20 CSS-4 (single warhead) ICBMs obsolete.\(^{247}\) Moreover, sea-based NMD (or TMD) systems to defend against North Korea could elicit Chinese concern as well.\(^{248}\) As a result, some argue that NMD may precipitate an increase in the rate at which China builds missiles, as well as encourage them to MIRV their missiles in order to overwhelm NMD.\(^{249}\)

Furthermore, experts maintain that NMD would embolden hawkish elements within Russia and China, and perhaps even unite these two nations against the “American hegemony.” As a matter of fact, such emboldenment was attempted when the “hawks” used Secretary Rumsfeld’s May 2001 statement that the Bush NMD plan serves as the “beginning stages” of American NMD, to imply that, “once built,
[NMD] will continue to expand until it is robust enough to thwart attacks from anyone. Among the fears Secretary Rumsfeld’s comment incited were those concerning space and satellite technology. Some speculate that Russian and Chinese officials fear that the “end stages” of NMD will include destruction of their satellite capabilities. In fact, the head of the Russian Security Council has recently cautioned that NMD would lead to the destruction of stability, and to a new powerful spiral of the arms race, particularly in space.

Likewise, some have interpreted the July 15, 2001 “Strategic Partnership” Treaty signed between Russian President Vladimir Putin and Chinese Leader Jiang Zemin as evidence of NMD’s encouragement of this very phenomenon. In fact, the Partnership Treaty, which signifies the first China-Soviet Treaty since 1950, vows to create “a new international order” to counter U.S. unipolarity and American NMD. As part of this “new international order,” Russia will sell to China SU-30 MKK and SU-27 fighter-bombers, four diesel submarines and two Sovremenny-class destroyers armed with Moskit anti-ship missiles—all weapons that could be used by China in the Taiwan Strait. According to Professor Vilya Gelbras of the Institute of Asian and African Studies at Moscow State University, the Partnership Treaty reflects a more receptive political audience for bellicose Chinese and Russian officials who seek to demonstrate to “the United States that there are two countries that [join] together against the United States.”

Most recently, when President Bush made his December 13th “Intent to Withdraw from the ABM Treaty” announcement, hawkish and nationalistic elements within Russia were quick to take advantage of the opportunity to decry the burgeoning “American nuclear hegemony.” For instance, Alexei Arbatov, Deputy Chairman of the Duma’s Committee on Defense, argued that because of the American withdrawal from the ABM Treaty, Russia should withdraw from the START II Treaty, and plan to build more ICBMs with multiple warheads. Similarly, Mikhail Margelov, Chairman of the Federation Council’s Committee on

250. See Thompson, supra note 59, at 26 & 28. Secretary Rumsfeld said “this is not the old Star Wars idea of a shield that will keep everything off of everyone in the world...it is something that in the beginning stages is designed to deal with handfuls of these things and persuade people that they’re not going to be able to blackmail and intimidate the U.S. and its allies.” Id.
251. See Chollet and Goldgeier, supra note 172.
252. See Schweid, supra note 54.
253. Susan B. Glasser, Presidents of China, Russia Sign Pact, WASH. POST, July 17, 2001 at A13; see also Tanks, supra note 206.
254. Id.
255. Id.
International Relations, maintained that Russia now had “a free hand” in deciding the composition of its nuclear forces, and it would now be free to reverse early decisions to eliminate missiles.\textsuperscript{257}

On the other hand, some find that both the Partnership Treaty and the ABM Treaty are, in the eyes of Beijing and, to a lesser extent Moscow, less reflective of NMD and more indicative of the general insecurities felt by Russian and Chinese leaders in a world with one superpower.\textsuperscript{258}

In addition to potentially encouraging increased missile production and enhanced unity between China and Russia, the creation of NMD would, in the belief of its opponents, trigger a “secondary” arms races as well. For instance, NMD could set off a significant ripple effect worldwide.\textsuperscript{259}

It follows that if China and Russia were to increase their nuclear production in response to NMD, buildups could then be triggered in India and Pakistan. Additionally, if NMD triggers an increase in Chinese missile production, India might feel obligated to increase its own production, which in turn would encourage Pakistan, etc.\textsuperscript{260}

On the other hand, from the standpoint of both history and common sense, the argument that NMD will somehow encourage an arms race that would otherwise not occur seems implausible. Most importantly, the greatest arms race in global history occurred when there was no defense against missiles. Indeed, the “Cold War” featured a precipitous and dangerous contest between the United States and the U.S.S.R. over which nation could possess the most powerful nuclear arsenal. In this respect, it appears hard to imagine that NMD will somehow trigger a more rapid arms race.

From the standpoint of common sense, we should ask the following two questions: a) would Russia still possess second-strike capacity even if the United States achieved C3 NMD technology; and b) would China pursue a nuclear arsenal with any less vigor if the United States elected not to pursue NMD? The answer to the first question seems obvious: if

\textsuperscript{257} Id.

\textsuperscript{258} See also Tanks, supra note 206. “For their countries to gain more leverage in the international arena, the current unipolar must change. Consequently, their declared polices are to work toward the establishment of a multipolar international structure . . . their actions in providing missile and/or other military assistance to China, India, Iran, Iraq, Syria, Libya, and other states, along with efforts to use bilateral arms control agreements to limit U.S. power, are consistent with the stated multipolar policy objectives.” Id.

\textsuperscript{259} See Landay, supra note 111, at 4.

\textsuperscript{260} See Thompson, supra note 59, at 28.
Russia never builds another missile, and the United States deploys NMD, the United States would still be unable to stop an all-out Russian first strike. 261

The answer to the second question appears equally intuitive. One commentator believes that China would take on a more aggressive disposition in pursuing a nuclear arsenal if they believed that the United States would not pursue real deterrence and therefore not make Chinese investments in missile technology “losing propositions.” 262 Moreover, some note that China would not lose a deterrent if the United States installed NMD because China does not have a deterrent against the United States today, presumably because it does not believe it needs one. 263 In other words, if Chinese leaders were sincerely worried about a nuclear attack from the United States, they would have secured a better nuclear arsenal than the one they currently possess. 264 Most practically, despite the anti-NMD rhetoric often expressed by Chinese leaders, Cordesman believes “the Taiwan Straits Crisis may do more to encourage China to increase its threat against the US than NMD.” 265

Finally, Russia and China’s belief that NMD serves as a destabilizing mechanism to global affairs seems particularly hypocritical to some, including Secretary Rumsfeld, for both nations have been active exporters of nuclear materials to questionable and unstable leaderships around the globe. Not surprisingly, Secretary Rumsfeld has remarked, “the ironic thing is that [Russia and China] are actively creating a more dangerous world through the proliferation of [missile] technology, complaining and protesting that the United States has decided that it thinks that it is in our best interest to provide a capability to defend against those various technologies. Their argument is that it is destabilizing. What is destabilizing is proliferation.” 266 Similarly, one can argue that NMD poses no threat to either Russia or China, unless either nation considers its proliferation of weapons to be an extension of national interests. 267

V. ARGUMENTS FOR NMD: EXPANDING DETERRENCE

Although one can persuasively defend NMD by refuting the claims of the critics, observing how NMD deters a variety of possible nuclear...

261. See Krauthammer, supra note 42, at 21.
262. See Gaffney, supra note 106.
263. See Barry, supra note 75.
264. Id. “China’s current nuclear arsenal consists of aging, static, highly vulnerable, liquid fuelled ICBMs is proof of that.”
265. See Cordesman, supra note 4, at 7.
266. See Lopez, supra note 180.
267. See generally Cordesman, supra note 4.
attacks on the global community may best demonstrate the critical importance of NMD.

A. Benefit I: NMD May Prevent Accidental & Unauthorized Launches

While many NMD proponents and opponents debate whether the United States needs a system of missile defense to protect against an enemy attack, fewer address an equally worrisome scenario: an accidental or unauthorized launch by any nation—friend or foe—against the United States or ally. In fact, if a British submarine were to accidentally launch a nuclear missile directed towards the United States, we would have zero defense to stop it. Not only do accidental launches present a major concern to American security, but unauthorized launches may prove even more troubling. In particular, the destabilization of the Russian military program has triggered anxiety in many observers. To illustrate how dangerous the command and control of the Russian nuclear program has become, Michael Krepon, President of the Henry L. Stimson Center, notes that in April 1999, a nuclear-powered attack submarine was temporarily overtaken by a deranged sailor who had killed several of his shipmates in order to gain control.

In fact, the Russian nuclear instability was best seen in January 1995, when Russian officials believed that they may have been under nuclear attack, and President Boris Yeltsin had to activate his “nuclear briefcase” to prepare to enter launch codes. The “attack,” however, was nothing more than a scientific research missile that had been launched by Norway. If Russia’s apparent overreaction to a Norwegian scientific research missile was not enough, the launching of the research missile was part of a routine practice, and in December 1994, Norwegian officials had told their Russian counterparts of the precise date, time, and nature of the scientific missile launch. Most alarmingly, one Russian

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268. See Murdock, supra note 2.
269. See Weldon, supra note 100, at 12. For instance, Congressman Weldon finds that, “the command and control of [Russian] nuclear weapons have grown frighteningly unstable... Russian strategic forces are so short on money they have to hire out soldiers for digging potatoes, leaving some nuclear missile sites shorthanded and requiring some crews to work double shifts [or] entrusting nuclear weapons to youths who are suffering malnutrition.... Russian soldiers possess little or no sense of loyalty to the government.” Id.
270. See Krepon, supra note 7, at 32.
271. See Weldon, supra note 100.
diplomat has chillingly acknowledged, “there are many incidents like this that no one knows about.”

Therefore, even if a rogue state or terrorist group never launches a nuclear missile at the United States or an ally, the presence of a defense against an accidental or unauthorized attack may alone validate NMD. We may ask, “is it rational to have zero defense against an accidental or unauthorized launch?” The answer seems clear, as if such a scenario actually happened, President Bush would deal with it by doing nothing because there is nothing he could do. Consequently, in order to ensure deterrence against these scenarios, NMD is needed.

Finally, NMD would provide a flexible, perhaps more moral response to an unauthorized or accidental launch. That is, imagine that a Russian nuclear submarine was seized by a group of renegade officers, and those officers decided to launch a nuclear missile at an American city. Without NMD, the President would be under enormous political pressure to retaliate against Russia—even though Russia had not authorized the attack. With NMD, however, the President could simply intercept the missile and Russia could retaliate against its own renegade sailors. NMD would not only save the innocent lives of those who would perish in the unauthorized or accidental launch, but also the innocent lives of those who would perish in the retaliation.

B. Benefit II: NMD Does Not Disturb “Security” Offered By Mutually Assured Destruction Because It Does Not Encourage A “First-Strike”

Despite the protestations of Russian and Chinese leaders, NMD will not threaten their ability to obliterate the United States. In other words, even though most experts conclude “mutually assured destruction” (MAD) no longer applies to global national security, the Bush Administration has made clear the NMD will be limited and thus unable to stop an all-out Russian or Chinese nuclear attack. In essence, as Dr. Rice makes clear, “we are not in the same environment that we were in the 1970s and 1980s [NMD is a defense against a few nuclear weapons]... [n]ow the emerging threats are from rogue states or from accidental launching.” Similarly, European leaders, such as Czech Republic President Vaclav Havel, recognize that, “the new world we are

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272. Id.
entering cannot be based on mutually assured destruction... An increasingly important role should be played by defense systems.”

Even Russian President Vladimir Putin admits, “[i]t is hard not to agree with President Bush that the world is changing rapidly and new threats are now appearing.”

Before describing how NMD deters the modern threat of rogue states and terrorist groups, it is first worth debunking fears that deterrence offered by MAD will be jeopardized by NMD. In general, MAD was a Cold War logic based upon the premise that “if either side can always launch a second strike against the other, then neither side will ever launch a first.” American concerns that Russia could gain first strike capability precipitated President Reagan’s vision for SDI, which would have, in his own words, “prevented the Soviets from gaining first strike capability and holding the world hostage.”

Even in the height of the Cold War “the idea of a first strike remained quite fantastic because it meant initiating the most destructive war in human history,” though such a scenario was not wholly unbelievable as, “the United States and the Soviet Union were mortal ideological enemies.”

Importantly, however, many feared that missile defenses (namely SDI) would tip the apparent security balance offered by MAD, and therefore change national incentives in a way to encourage a first strike (to prevent the other side from striking first). Indeed, Safeguard was engineered to deter a Soviet first strike.

To the extent MAD was a valid analysis of national security during the Cold War, and to the extent such logic remains applicable today, the Bush Administration has taken great pains to alleviate any worries that NMD will resemble either Safeguard or the concept of SDI. Most importantly, the Administration has emphasized that NMD will provide only limited defense, capable of stopping missiles in the numbers of fives or perhaps tens—but not hundreds, and certainly not thousands. That is, NMD will be designed neither to deter either Russia or China from launching a first strike against us nor enable us to launch a first

276. See Drozdiak and Milbank, supra note 58, at 5.
277. See Thompson, supra note 59, at 28.
278. See Krauthammer, supra note 42, at 22.
280. See Krauthammer, supra note 42, at 22-23.
281. Id.
strike against them.

To demonstrate that NMD will not threaten either Russia or China, American leaders have vocally expressed that NMD should not be confused with previous missile defense systems. For example, Secretary of State Powell recently attempted to pacify the Chinese by assuring that NMD will not be able to stop a complete nuclear attack by China, even going so far to note that “[China] may even double the number of their missiles aimed at the U.S.” because NMD is not being designed with a threat from a country like China in mind. Likewise, Secretary Rumsfeld has stressed, “[t]his isn’t the old Star Wars idea of a shield that will keep everything off of everyone in the world... [NMD] is designed to... persuade people that they’re not going to be able to blackmail and intimidate the U.S. and its allies.” In fact, officials in the Bush Administration suggest that a tacit agreement with China allowing it to have enough nuclear weapons to trump NMD is the only way to show China that NMD is not a threat to its nuclear arsenal.

Even though NMD will not undermine MAD, critics of NMD, such as Professor Lewis, argue that NMD should nevertheless be avoided because it will “threaten” Russia and China and thereby endanger the United States: “NMD would provoke deep suspicion in Russia and China, likely increase the risk of a Russian accidental or unauthorized launch, and undermine existing nonproliferation efforts worldwide.”

With respect to China, some implicitly corroborate Professor Lewis’ belief by observing that since President Bush announced his NMD plans, the Chinese leadership has become more adversarial in its rhetoric towards the United States. For instance, in May 2001, a Chinese official alleged that President Bush “has [already] violated the ABM Treaty, which will destroy the balance of international security forces and could cause a new arms race.” A related concern for the Chinese rests in possible United States engagement with Russia on NMD, for it may trigger feelings of Chinese “isolation.” More specifically, even limited rapprochement with Russia on NMD would raise fears among Chinese leaders that they were being “frozen out” and that the rapprochement’s hidden purpose was to contain their modest nuclear

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283. See Thompson, supra note 59, at 32.
284. Id. at 31-32.
285. Id. See also Tanks, supra note 206 (noting that “NMD will not be capable of stopping a large attack... [but] will ensure that if China wants to threaten Los Angeles, it will have to fire enough missiles to justify the complete destruction of China when we fire back.”).
286. Lewis, supra note 102, at 130 & 132-35.
287. See Thompson, supra note 59, at 28.
force.\textsuperscript{289} Unlike Russian officials, Chinese officials have remained steadfast in their total opposition to NMD. To illustrate this point, in August, 2001, Chinese Defense Minister Chi Haotian told a group of U.S. senators that there were, “no grounds” for the development of NMD as it would be, “detrimental to trust among nations around the world.”\textsuperscript{290}

In reality, however, Professor Lewis’ concern about NMD encouraging China to rapidly increase their nuclear arsenal proves incompatible with recent trends in the Chinese nuclear program. Simply put, China will continue to develop its own nuclear program irrespective of NMD. Indeed, China deployed most of its 20 or so CSS-4 ICBMs during the Clinton Administration, and expanded its mobile, solid-fueled ICBM program, even though most observers regarded President Clinton as an NMD opponent.\textsuperscript{291} In other words, if President Bush abandoned NMD tomorrow and Congress passed a law preventing any future president from pursuing NMD, would China really halt their nuclear program? Would China, which, in the words of Director Deutch, has endeavored to “grow” their ICBM force with great speed, even delay their nuclear advancement?\textsuperscript{292} As noted by Gaffney, China will build their nuclear arsenal, “whether we remain defenseless or not.”\textsuperscript{293} Presently, in a world \textit{without} NMD, China is seeking to triple its long-range nuclear capabilities.\textsuperscript{294} More persuasively, and as noted earlier, Gaffney believes that abandoning NMD will \textit{accelerate} the Chinese nuclear program for, “China will have a greater incentive [to build their arsenal] if they need not fear defenses that will make such investments losing propositions.”\textsuperscript{295}


\textsuperscript{290} See Pan, supra note 288; see also Donald Devine, \textit{Prelude to rapprochement?}, WASH. TIMES, May 25, 2001, at 20. Even American experts, such as Donald Devine, former Director of the U.S. Office of Personnel Management under President Nixon, believe that President Bush’s true motivation is to “go to Russia to contain China. An American tie to Russia . . . stops China’s planned alliance with Russia and India.”


\textsuperscript{292} See Deutch, Brown & White, supra note 116, at 92.

\textsuperscript{293} See Gaffney, supra note 106.

\textsuperscript{294} See Helprin, supra note 124, at 38.

\textsuperscript{295} See Gaffney, supra note 106.
Russia, however, seems less embrace of either the logic of MAD or the danger posed by NMD. First, some speculate that Russian officials believe NMD is a waste of American money, and it would like to see nothing more than its former adversaries pursue another “Star Wars.” Second, as noted by Chollet and Goldgeier, President Bush’s greatest hurdle in withdrawing from the ABM Treaty and in pursing NMD may be to pitch NMD as a way to preserve Russia’s status as a superpower. Third, Russia would benefit from a relaxation of the ABM Treaty as it is presently trying to upgrade its S-300 missiles to the S-400 missiles, which would be guided by a radar system in violation of the ABM Treaty.

To the extent the Russians and the Chinese really believe that NMD will serve as a “backdoor” to American first strike capability, President Bush has pledged to link NMD with nuclear arms reduction—even vowing to unilaterally reduce the United States’ 7,200 nuclear weapon stockpile. In fact, in July, President Bush and President Putin agreed to begin negotiations on supplanting the ABM Treaty with a missile defense shield and link it to bilateral cuts in nuclear stockpiles; more recently, President Bush told Chinese President Jiang Zemin that the United States would even reduce its stockpile to a level of 1,000-1,500—a number large enough to deter a Russian or Chinese first strike, but likely too small to threaten either Russia or China with an American first strike.

The linkage between NMD and arms control reached a new level on November 1, 2001, when the United States and Russia reached a preliminary agreement that both countries would reduce their number of strategic warheads to between 1,750 and 2,250—numbers even lower than the 3,000 to 3,500 set under START II. Perhaps even more significantly, the parties agreed that the ABM Treaty would not preclude either party from engaging in vigorous missile defense testing. On November 14, 2001, both leaders signed this preliminary agreement during the leaders’ “Crawford Summit” in Crawford, Texas.

296. See Thompson, supra note 59, at 28 (noting “Russian officials also acknowledge they won’t mind if the U.S. pumps hundreds of billions of dollars into a scheme they think will never work.”).
297. See Chollet and Goldgeier, supra note 172.
298. See Sanger and Shanker, supra note 289.
299. See Curl, supra note 61. See also Barry, supra note 75 (noting that U.S. would also share intelligence and welcome joint efforts to counter proliferation).
300. See Thompson, supra note 59, at 28. See also Chollet and Goldgeier, supra note 172.
301. Walter Pincus and Alan Sipress, Missile Defense Deal is Likely, WASH. POST, Nov. 1, 2001, at A01.
The greatest evidence of Russia's recognition that MAD no longer exists may have been detected by the muted criticism President Putin offered in response to President Bush's December 13, 2001 decision to withdraw from the ABM Treaty on May 13, 2002. President Putin only stated that the United States was "mistaken" in its decision, as there would now be a "legal vacuum" in arms control. At the same time, however, President Putin emphasized that the decision would not threaten Russia's national security because Russia and the United States are now on friendly terms: "the present level of bilateral cooperation between Russia and the United States should not only be preserved but also used for quickly working out new frameworks of strategic cooperation." Most importantly, President Putin announced that Russia would offer a plan to reduce each side's strategic nuclear arsenals to a range between 1,500 and 2,200 warheads—even lower than the 1,700 to 2,200 range proposed by President Bush at the Crawford Summit in November 2001.

Observers were quick to characterize President Putin's remarks as intended to downplay the impact of the U.S. decision to abandon a treaty that the Kremlin has repeatedly called a cornerstone of nuclear deterrence. Indeed, Secretary Powell highlighted the political significance of President Putin offering arms reduction on the very same day President Bush effectively announced the development of a comprehensive ABM system that could provide extended protection for both American and Russian soil: "[an] arms race has not been set off by the United States' indicating its intention to withdraw from the ABM Treaty. Quite the contrary." To further illustrate how MAD no longer applies to U.S.-Russian relations, when President Bush visits Moscow in the Spring of 2002, he is expected to sign President Putin's arms control offer.

Significantly, even opponents to President Bush recognize the important progress achieved by the Bush Administration in removing diplomatic and political obstacles to NMD. For instance, Senator Daschle admits the President "appears to have been successful" in persuading President Putin to agree that the ABM Treaty should not

302. See LaFraniere, supra note 256.
303. See Mufson and Milbank, supra note 53.
304. Id.
305. Id.
306. Id.
interfere with NMD.  

Likewise, political commentators sense that President Bush has correctly perceived that “Russia does not define itself as our existential adversary. It no longer sees its mission as the abolition of our very way of life.” Importantly, therefore, by integrating Russia’s transformation from a repressive regime to a fellow democratic nation into his larger argument that MAD no longer proves relevant, President Bush has implicitly endorsed the Democratic Peace; a theory led by Professor John Norton Moore, which finds that democracies do not fight other democracies (e.g. since from 1816 to date, no democratic nation has initiated a major war or fought another democracy). As a result, once Russia completes its democratic revolution, the Democratic Peace will replace MAD as the means for ensuring peace.

In summary, Russia’s guarded desire to preserve MAD appears based far more on sentimental feelings than on national security concerns. In fact, Russia’s pursuit of ABM Treaty-banned missile defense technology, its avowed openness to “vigorous testing” of NMD technology, and its support for greater arms reduction in conjunction with expanded missile defense strongly suggest that it values its concerns for the 21st Century as far more important than espousing now extinct 20th Century logic. Indeed, as Russia becomes a democracy, it will only continue to acquire more and more of the Democratic Peace.

1. Illustrative NMD Hypothetical: NMD Discourages First Strikes  

As a final point to cement the notion that NMD would not disturb either the Russian or the Chinese capacity to respond to an American first-strike (and thus there is no reason to believe that NMD would encourage an American first strike), consider the following hypothetical based on probable circumstances. Assume that in the year 2008, the United States deploys a limited NMD system that, in intercepting ICBMs launched at North America, has the capacity to stop 75 ICBMs, and has an effectiveness rate of 60%; alternatively, in intercepting ICBMs launched at Europe and Asia, it has the capacity to stop 35 ICBMs and has an effectiveness rate of 45% (thus giving it some, though limited, “extended deterrence” capability). Assume also that both the United States and Russia each have 2,200 ICBMs, while China has 40, and that all three nations’ ICBMs effectively hit their targets 70% of the time. Finally, assume that because President Bush’s NMD

308. See Krauthammer, supra note 42, at 23.
309. R.J. RUMMEL, DEATH BY GOVERNMENT 2 (1994) (noting that a “major war” consists of 1,000 or more combatant deaths).
310. For Statistical & Mathematical Summary of NMD First Strike Hypothetical, please see Appendix.
system will likely employ "boost-phase" technology, that is, it will intercept ICBMs as they are launched, meaning that some of the ICBMs it destroys would not have reached their targets had they not been intercepted (since, in this illustration, ICBMs hit their targets 70% of the time).

In what will be called "Scenario I," assume that all three nations employ unmirved ICBMs. In this scenario, the United States decides to launch a first-strike at Russia. If the United States launches 200 of its ICBMs, 140 ICBMs would successfully hit their Russian targets (since American ICBMs hit their targets 70% of the time and Russia does not have NMD). If Russia responded by launching 200 ICBMs, 109 ICBMs would successfully hit their American targets (since NMD would intercept 45 ICBMs at boost phase, for it has the capacity to intercept 60% of 75 of the 200 ICBMs launched at North America. Therefore, 155 of the ICBMs would continue on their flight, and 70% of them would hit their targets). Clearly, NMD would not encourage an American first strike of Russia in Scenario 1, as this example shows how NMD offers only limited defense. Consequently, even when using single warheads, a remarkably restrained Russian response to a first strike would easily overwhelm NMD.

In "Scenario II," assume again that all three nations employ unmirved ICBMs. In this scenario, the United States decides to launch a first-strike at China. As in Scenario I, if the United States launches 200 of its ICBMs, 140 ICBMs would successfully hit their targets. If China responded by launching all of its 40 ICBMs, 11 would hit their American targets (since NMD would intercept 24 ICBMs, and, of the remaining 16, 70% would hit their targets). Therefore, as with a first strike at Russia, NMD would clearly not encourage an American first strike at China, unless an American president was willing to sacrifice 11 cities.

Alternatively, consider "Scenario III," which employs identical circumstances to Scenario II, except that let us assume the United States' first strike was able to destroy 25 of China's 40 ICBMs before China could deploy its arsenal. In this scenario, China's second strike would consist of only 15 ICBMs, and of those 15, only 4 would hit their targets (since NMD would intercept 9 ICBMs, and 70% of the remaining 6 would hit their targets). Again, however, would an American President be willing to sacrifice even 4 cities in order to launch a first strike at China? The answer seems self-evident. Furthermore, if China deployed
mirved ICBMs (which it will likely possess), carrying 10 warheads each, and just 4 ICBMs broke the NMD shield, 40 warheads—not 4—would hit their American sites.

Finally, and most telling, consider “Scenario IV,” where China decides to launch a first strike at Russia using all of its 40 weapons, all of which are mirved with 10 warheads each. Given the geographic proximity of these nations, and given that all of the Chinese ICBMs are mirved in this scenario, we shall assume that the Chinese leadership believes (probably mistakenly) that they have just enough first strike capacity to obliterate all of Russia’s 2200 ICBMs before Russia could mount a response.

In this setting, an American NMD system that provides extended deterrence would discourage a first strike: without NMD, 28 of China’s ICBMs, and 280 of its warheads would hit their Russian targets (since the ICBMs hit their targets 70% of the time, and each missile has 10 warheads each); with NMD, however, 17 of China’s ICBMs, and 170 of its warheads would hit their Russian targets (since the American NMD can attempt to intercept 35 of China’s 40 ICBMs, at an effectiveness rate of 45%, 16 ICBMs would be initially intercepted). Therefore, 24 ICBMs would continue on their flight patterns and would hit their targets 70% of the time. As a result, even an American NMD providing limited extended deterrence would stop 110 Chinese warheads from hitting Russian soil—thus likely discouraging a Chinese first strike.

Clearly, this illustration turns the “NMD will only encourage a first strike” on its head, as the numbers suggest the very opposite conclusion. In fact, the presence of NMD appears to offer no increase in incentives for either the United States or Russia to launch a first strike, as a limited NMD system would offer inconsequential defense against an even limited response to a first-strike. Instead, NMD appears to decrease incentives for a Chinese first strike on Russia, thus providing a benefit of particular importance to Russia as it continues its transformation into a democracy.

C. Benefit III: NMD Addresses the Rising Nuclear Threat Posed By Rogue States: Increasing the $$ Price of Admission to the Rogue State Club

Of all the reasons for the deployment of NMD discussed in this comment, none may be more important than bolstering the presently non-existent defense against a missile attack from a rogue state such as North Korea, Iran, or Iraq. Over the next five to twenty years, these nations will likely acquire the capacity to launch a nuclear missile at the United States or an ally, though most experts agree that these nations will possess only a handful of missiles, if not fewer. However, with zero
defense, only one missile will do the job.

Therefore, NMD, a missile defense system designed to stop a limited number of missiles, serves as the perfect deterrence to those countries with so few weapons to deploy: they would achieve greater value by holding onto their weapons rather than firing them and risk them being destroyed by NMD. Professor Nicholas Rostow of the U.S. Naval War College maintains that deployment of NMD will reduce proliferation incentives and will discourage rogue countries from acquiring potential missiles.311 Equally important, as Cordesman asserts, totalitarian regimes, such as those found in Iran and North Korea, may not be deterred by offensive retaliatory capabilities, thus placing greater value in NMD as the most effective form of extended deterrence against a nuclear attack.312

Remarkably, NMD opponents, such as Spurgeon Keeny, president of the Arms Control Association, seemingly ignore indisputable evidence that rogue states are rapidly expanding their nuclear arms programs, and instead find “a lack of a credible urgent threat from so-called rogue states.”313 Most experts agree, however, that Iraq, Iran, and, most importantly, North Korea, will soon have the capacity to launch nuclear weapons at the United States or its allies—if they do not already have the capacity to do so. For instance, Saddam Hussein, particularly as sanctions on Iraq have eroded, has begun developing missile technology that could soon allow him to hit European capitals or, more imminently, Israel.314 Notably, as Deputy Defense Secretary Paul Wolfowitz asks, “just imagine how the Gulf War would have proceeded if Saddam Hussein had long-range missiles capable of targeting the capitals of our allies in Europe or in Asia?”315

Similarly, Iran has been working at developing a nuclear missile system, and experts conclude that Iran could have a ballistic missile system as early as 2005.316 Equally troubling, Joseph A. Bosco, Professor of Foreign Relations at Georgetown University, has noted that

312. See Cordesman, supra note 4.
313. See Schweid, supra note 54.
314. See Barry, supra note 75.
315. See Nightline Transcript, supra note 170 (statement by Deputy Defense Secretary Paul Wolfowitz).
316. See Deutch, Brown & White, supra note 116, at 93.
China has transferred essential missile technology to Iran.\textsuperscript{317} Moreover, Secretary Rumsfeld believes that Russia has aided Iran by providing it missile technology and technology for weapons of mass destruction.\textsuperscript{318}

Of all the rogue states, however, North Korea and its burgeoning nuclear arms program poses the most dangerous threat to the security and safety of the Free World. Since August 31, 1998, when North Korea test launched the Taepo Dong-1 missile over the skies of Japan, the Free World learned that North Korea had the intercontinental range to launch a nuclear missile.\textsuperscript{319} In describing the magnitude of this threat, one commentator warned, "if North Korea—bankrupt, primitive, starving, isolated, paranoid North Korea—could develop something close to an ICBM, the world really was a more threatening place than it had seemed."\textsuperscript{320}

The current threat posed by the Taepo-Dong cannot be overlooked. As noted by Director Deutch, "North Korea [now] has a system that could reach the United States."\textsuperscript{321} Indeed, the Taepo-Dong test demonstrated that North Korea could \textit{currently} launch a missile (with a very small payload) capable of hitting the coast of Alaska—and even NMD opponents like Gronlund and Wright concede this point.\textsuperscript{322} Other NMD opponents, such as Professor Lewis, admit the Taepo-Dong test "fundamentally altered the missile defense debate . . . [it] undercut the [Clinton] Administration's key argument against an immediate decision to deploy an NMD system—namely, that the United States would have adequate warning before deployment."\textsuperscript{323} In fact, immediately after Taepo-Dong test, Japan quickly agreed to enter into a TMD research collaboration with the United States.\textsuperscript{324} Likewise, experts conclude that President Bush will seek to deploy a boost phase sea-based NMD system in the Sea of Japan, primarily because the U.S. intelligence community considers a potential North Korean threat most imminent.\textsuperscript{325}

The depth of the North Korean nuclear program deserves further mention. First, North Korea maintains a large quantity of uranium, with

\begin{footnotesize}
\textsuperscript{318} See Lopez, \textit{supra} note 180; see e.g., Agence France Presse Staff Writer, \textit{US Concerned about Russian-Iranian Military Ties}, \textit{Agence France Presse}, Oct. 4, 2001 (on file with author). On October 2, 2001, Russia agreed to sell to Iran $300 million worth of conventional arms, while also delivering the first reactor for the Iranian nuclear power station in Busheher, Iran.
\textsuperscript{319} See Barry, \textit{supra} note 75.
\textsuperscript{320} Id.
\textsuperscript{321} See Deutch, Brown & White, \textit{supra} note 116, at 92.
\textsuperscript{322} See Gronlund & Wright, \textit{supra} note 102, at 47.
\textsuperscript{323} See Lewis, Gronlund & Wright, \textit{supra} note 102, at 122.
\textsuperscript{324} See O'Hanlon, \textit{supra} note 117, at 149.
\textsuperscript{325} Id.
\end{footnotesize}
North Korean uranium mines offering four million tons of exploitable high-quality uranium.\textsuperscript{326} Second, North Korea has likely made progress on the Taepo Dong 2, a rocket four times as powerful as its predecessor, and with the capacity to reach the continental United States.\textsuperscript{327}

North Korean leadership's proven deceitfulness may offer the most troubling concern. Indeed, Kim Jong Il and the North Korean leadership have consistently violated treaties. Most significantly, on October 21, 1994, North Korea and the United States signed an “Agreement Framework.”\textsuperscript{328} Essentially, the Framework involved an exchange: in return for North Korea halting its nuclear weapons program, the United States would provide half a million tons of free heavy-fuel every year and the United States would fund construction of two “safe” light-water nuclear reactors, on North Korean soil, worth well over $4 billion.\textsuperscript{329} Incredibly, as Nicholas Eberstadt, author of \textit{End of North Korea} points out, the American negotiators did not require verification as a condition of the Framework.\textsuperscript{330} Not surprisingly, by August 1998, the Central Intelligence Agency had discovered “a huge secret underground complex in North Korea,” that might be “the centerpiece of an effort to revive the country’s nuclear weapons program” and since that time, North Korea has refused inspection of the facility, offering entrance to the facility in exchange for $300 million.\textsuperscript{331} And while the United States provided over $5 billion in aid and technology to the North Korean government, that same government provided the United States with yet another reason to harbor distrust towards their motivations.

Not only should this concern worry the United States and it allies, but experts note that Russia and China may already be in range of North Korean nuclear weapons. In fact, North Korea has missiles that could easily strike the Russian Far East. Interestingly, the rapid advancement of North Korea’s nuclear program owes part of its success to the Russians, who, as we have seen, are quickly becoming converts to the value of NMD. Indeed, Director Deutch finds, “the pace of [rogue state

\textsuperscript{327} See O’Hanlon, \textit{supra} note 117, at 148.
\textsuperscript{328} See Federation of American Scientists on North Korea, \textit{supra} note 326, at 3.
\textsuperscript{330} Id.
\textsuperscript{331} Id.
missile programs] depends significantly on assistance from other countries [such as] Russia and China."\footnote{332}

Undoubtedly, North Korea will continue to work towards acquiring the capability to destroy any city on Earth. As noted earlier, the North Korean leadership has consistently violated nuclear development treaties, thereby placing the government of North Korea amongst one of the most corrupt regimes in modern history. At the same time, the North Korean leadership has closely monitored the American debate over missile defense, particularly when NMD opponents are vocal in their opposition. In fact, on September 14, 2001, North Korea's Central Broadcasting Radio Station featured a segment on Senator Biden's opposition to NMD, noting that the Senate Foreign Relations Chairman stressed in a speech at the National Reporters' Club "that he still opposes Bush's plan to breach the ABM Treaty... he criticized that US President Bush's plan to withdraw from the Anti-Ballistic Missile [ABM] Treaty will become a complete disaster."\footnote{333} One can only conclude that so long as the North Korean leadership believes President Bush does not have the requisite political support for NMD, this leadership will continue to be undeterred by the non-existent American missile defense.

Should the North Korean leadership gain confidence from comments made by Senator Biden and others, the United States' fear of North Korea should only rise. After all, a great deal of evidence suggests that the North Korean leadership is one of the most paranoid and democidal in human history.\footnote{334} Should North Korea succeed in constructing the Taepo Dong 2, and thus gain the capacity to hit perhaps any U.S. city, a question posited by Tanks appears even more ominous, "[w]ho can say what a dying regime might do [if it had nuclear weapons]."\footnote{335} As a

\footnote{332. See Deutch, Brown & White, supra note 116, at 92-93; see also Helprin, supra note 113, at 34 (remarking that "most arms competitions are not simply rivalries between two parties unaffected by other influences); Lopez, supra note 180. Russia has provided financing and technology to the Iranian missile program, and Iran has done the same to the North Korean missile program—a cycle validating Secretary Rumsfeld's point that the rise of the rogue state missile threat originates mostly from Russia's nuclear proliferation: "if Russia helps Iran, Iran does not necessarily have to take an oath that they'll never take those same technologies and give them to anybody else. And over time Iran could decide to give those technologies to someone who could in fact threaten Russia."


334. See Eberstadt, supra note 329, at 35 (noting that North Korean leadership was so obstructive of their efforts to help that "Doctors Without Borders"—a private, highly respected worldwide charitable organization—withdraw its' services in the midst of government-engineered famine).

335. See Tanks, supra note 206.}
result, there are two options: hope that the habitually untrustworthy North Korean leadership never launches a nuclear missile, or, alternatively, build NMD. The choice seems clear.

Equally important, whether a dying regime or simply a sadistic one, like Iraq or Libya, launches a missile, the President would be under enormous pressure to respond by firing a nuclear weapon at the hostile nation. In that situation, the President would have no choice but to create victims out of victims: that is, the already oppressed and terrified peoples of North Korea, Iraq, Libya, or any other rogue state would invariably perish if their un-elected, unrepresentative, and autocratic leaders launched a nuclear missile at the United States. With NMD, however, the President could select a more suitable response: intercept the missile and then destroy the rogue state’s autocratic dictatorship (as we have done to the Taliban in Afghanistan). In that respect, NMD would help better distinguish regime elites from the people they oppress, and thus provide the United States with higher moral credibility in how it responds to nuclear attacks.

Finally, discussion of the threat from rogue states would not be complete without mention of the role Afghanistan played in the September 11th attacks, and how it may provide yet another rationale for NMD. As Tanks postulates, “if a state is providing sanctuary for terrorist organizations, and that state has ballistic missiles capable of reaching the U.S., they might feel emboldened to unleash the terrorist cells feeling we would not retaliate. Clearly, such a situation would make it more difficult to deter terrorist attacks.” Moreover, given Osama Bin Laden’s avowed pursuit of acquiring a nuclear weapon, the value of NMD seems almost self-evident. Clearly, he would not hesitate from using a nuclear missile to inflict even more damage on the Western World.

Americans have become increasingly supportive of NMD since September 11th as they learned in such horrific terms how terrorist groups and rogue states will employ the most deadly means necessary to murder Americans and those from our allied nations. Indeed, the Council on Foreign Relations and the Pew Research Center for the People and the Press recently found that support for NMD has risen from

336. Id.
fifty-six percent to sixty-four percent since September 11th. Even more revealing, the “gender gap” on NMD support has disappeared as women have increased their support from fifty-two percent to sixty-four percent. As a result, the most recent public opinion data suggests that Americans are united behind NMD.

However, several critics of NMD have taken the regrettable opportunity to extrapolate our inability to deter the September 11th attacks as somehow correlated to the pursuit of NMD. Most notably, Senator Biden believes we should set aside NMD until we solve the “terrorist problem”—as if it is unrelated to the threat posed by rogue states and nuclear proliferation: “we can delay the debate on whether or not we spend $100 billion or a half trillion dollars on missile defense and deal with first things first . . . we can deal with [NMD] later . . . the least likely attack on the United States is an ICBM with a return address.”

Though the more immediate threats created by both the September 11th attacks and the subsequent anthrax attacks are alarming and deserve our greatest attention, we cannot let eliminating Al Qaeda and the Taliban give us the false sense of security that rogue states are no longer threatening. In fact, one could argue that if we divert attention and resources away from NMD, rogue states will not only continue to be undeterred, but will likely gain confidence that their weapons programs can expand at faster and more dangerous rates. And despite comments by Senator Biden that we should focus on those attacks without “return addresses,” the link between rogue state (Afghanistan) and terrorist group (Al Qaeda) has never before been more evident. Should such a combination ever procure a nuclear missile, one can only wonder about their combined destructive capacity. One can only ask how America would respond if 6,000,000 people—not 6,000—were killed by a nuclear missile attack solely because we choose not to build NMD. Should that horrible event ever happen, we can look back to Senator Biden’s remark that “we can deal with NMD later,” and not only wonder whether we learned any lessons from September 11th, but wonder more loudly about those who we had entrusted to shape our future.

339. Id.
340. The Today Show (NBC television broadcast, Sept. 14, 2001); see also Lawrence J. Korb, U.S. must realize there are no quick fixes, BOSTON GLOBE, Sept. 13, 2001, at A101. Korb, Director of Studies at the Council on Foreign Relations and Assistant Secretary of Defense during the Reagan Administration, cites as “one example of our misplaced priorities is the fact that President Bush proposes to spend more on missile defense in 2002 than on the entire Coast Guard . . . missile defense systems are of little or no use against this new enemy.” Id.
VI. CONCLUSIONS: NMD & ITS PLACE IN HISTORY

As witnessed so often, history has a way of repeating itself when its lessons go unlearned. One lesson of history is that aggression tends to re-occur in far more deadly manifestations the second time around. Sadly, one need only look back in terms of months, not years or decades, for first-hand knowledge of the unprecedented horror caused by previous lessons of aggression that were disregarded.

As discovered by not deterring Osama Bin Laden following his attack on the World Trade Center, and following his attack on the U.S. Embassies in Kenya and Tanzania, and following his attack on the U.S.S. Cole, and following his repeated, unveiled declarations of abject hatred for everything we value, our leaders simply cannot turn inwards because political polls suggest that taking preventative action would be unpopular. Our leaders knew that Bin Laden freely operated terrorist camps in Afghanistan, and they knew Afghanistan was controlled by the Taliban’s ruthless and lawless government, and yet they did nothing, because the threat seemed far and distant, and perhaps because support would have been fleeting. Simply put, they did not think it could happen. And then September 11th occurred, and they learned otherwise.

Herein lies the challenge for President Bush in ensuring that September 11th never be overshadowed by another date on the calendar: he must convince—not just today, but years down the line when the triumphs in Afghanistan fade into memory—a notoriously fickle American public, a Congress often fixated on immediate political gains, and, finally, a skeptical global community, that countering the possibility of a nuclear attack should be a foremost priority. Should our leaders ignore the lessons of September 11th, destruction as much as a thousand times worse than that suffered on that day of infamy may be triggered. Thankfully, in National Missile Defense, President Bush may have the greatest tool imaginable for preventing such catastrophe.

Indeed, NMD has the unique capacity to both alter the incentives of regime elites and to expand the Democratic Peace. Regime elites are truly frightened by the prospects of NMD. Should the U.S. procure the capability to possibly intercept one or two or five of their missiles, regime elites would be unable to threaten a democratic nation. Moreover, as evidenced by the actions of the North Korean and Iraq, regime elites have devoted enormous resources to obtaining the capacity to launch a nuclear missile at a free country. By preventing them from reaching the fruits of their efforts, our leaders may very well destabilize
their holds on the innocent peoples trapped in their nations, and thereby help to contribute to their demise.

Regime elites are also worried because NMD would enable the President to achieve the moral high ground in responding to one of their nuclear threats or attacks. That is, by implementing NMD, the President could respond to a nuclear attack by intercepting the missile instead of retaliating with an American missile. Not only would it save millions of innocent Americans (or Brits or any nationals), but our leaders could localize the costs of the regime elite’s action back on the regime elite. In that situation, the missile would first be intercepted, and then the regime elites and his associates would be pursued with as much force as necessary. By doing so, our leaders separate the regime elites from the peoples they oppress, and liberate those oppressed people from the wretched hold of regime elites who wants nothing more than to externalize all possible costs on their own people.

Expanding the Democratic Peace and the Rule of Law is also facilitated by the creation of an NMD system that provides extended deterrence. This effect is evidenced no more clearly than by the recent actions of Russia and its President, Vladimir Putin. Noticeably, instead of expressing outrage following President Bush’s December 13th formal notification of the United States’ forthcoming withdrawal from the ABM Treaty, President Putin offered only muted criticism, and, in all likelihood, such tepid disapproval was served solely for domestic political consumption in Russia.

Instead, President Putin’s actions suggest that he has endorsed the notion that the Democratic Peace has replaced mutually assured destruction as the predominant world paradigm. Specifically, President Putin has offered unprecedented offers for bilateral reductions in nuclear arms; he has refused to denounce the value of extended deterrence as offered by NMD; he has worked towards increasing trade between the former adversary; and he has developed a genuinely warm relationship with his counterpart, President Bush. In other words, President Putin appears to realize that NMD would benefit Russia, as it would provide Russia protection in the event that a rogue state lofted a missile in its direction. Moreover, as demonstrated in the “NMD Discourages First Strikes Hypothetical,” NMD offers no defense against an all out Russian nuclear attack, and thus would never encourage an American first strike. With both nations now democracies, however, a first strike would likely never happen anyway.

Undoubtedly, President Bush will continue to encounter opposition to NMD. Some will point out that alternate modalities remain, though those same critics fail to recognize that proponents of NMD have never claimed it is the panacea to preventing all forms of nuclear attack. Rather, given
the proliferation of nuclear weapons and the unambiguous attempts by regime elites to acquire the means of launching such weapons, NMD would serve as a large part of the total defense against nuclear attacks.

Other critics will assert that NMD “will never work,” even though technological obstacles never stopped our drive to succeed in previous endeavors. Had our leaders adopted the “can’t do” attitude of NMD critics, it is likely that no one would have ever landed on the Moon or cured diseases that were previously considered “impossible” to cure.

When critics fail in their first two arguments, they will undoubtedly claim that NMD is simply “too expensive.” As discussed, however, the economic and moral cost of one nuclear missile detonating over an American city would be unimaginably large and impossible to quantify. Moreover, given the immense direct and indirect economic costs of September 11th on the local, national, and international economy, the thought of something perhaps 1,000 times worse seems frightening. In short, the “too expensive” argument likely lost all resonance after September 11th.

Finally, critics will be left with their classic “NMD will destabilize world order,” argument. Again, however, their logic fails to equate with the political realities of the 21st Century. If anything, an NMD system that provides extended deterrence will only bring together the nations of the democratic world, and further isolate the forty-eight remaining non-democratic leaders who can only delay the inevitable onset of democratization in the countries they purport to represent. Moreover, as the “NMD Discourages First Strikes Hypothetical” demonstrates, no nation need worry about NMD, unless that nation seeks to launch a first strike.

Ultimately, history will judge President Bush not only by his actions in remedying the destruction caused by Bin Laden and the Taliban, but also by whether he capitalized on a golden opportunity to advance missile defense. With exceedingly high approval ratings, and with international support for his actions, President Bush must use this unprecedented political moment to catapult NMD to the forefront of American national security. By announcing the United States’ withdrawal from the ABM Treaty tentatively effective May 13, 2002, and by displaying an unwavering commitment to the development of NMD, President Bush has already made a great deal of progress. And, if future generations regard September 11th, 2001 as the single most destructive day in our nation’s history, President Bush will have succeeded.
World Setting

Year: 2008
United States: 2200 ICBMs + Limited NMD System
Russia: 2200 ICBMs
China: 0040 ICBMs
Average Effectiveness of all ICBMs: 70%
Mirved/Unmirved ICBMs: Varies by Scenario

U.S. NMD System

Type: Boost phase using land and sea-based technology

Number of ICBMs Designed to Intercept
- Launched at North America: 75
- Launched at Europe/Asia: 35

Average Effectiveness in Intercepting
- Launched at North America: 60%
- Launched at Europe/Asia: 45%

Scenario I

Setting: U.S. launches first strike at Russia.
Strike employs 200 unmirved ICBMs.
Russia responds with 200 unmirved ICBMs.

U.S. first-strike effectiveness: 140 of 200 ICBMs hit Russian targets.
Math: 200 ICBMS x 70% ICBM
Russian response effectiveness: effectiveness = 140
109 of 200 ICBMs hit American targets.

Math:
Step I: NMD intercepts 45 ICBMs: NMD can only intercept up to 75 ICBMs, at an effectiveness rate of 60%.
\(75 \times 60\% = 45\)

Step II: 155 ICBMs not affected by NMD: NMD failed to intercept 30 of 75 ICBMs, and 125 ICBMs were beyond the reach of NMD.
\(75 - 45 = 30\) + 125 = 155

Step III: 109 ICBMs hit American targets: 155
ICBMs x 70% ICBM effectiveness.

Scenario II


U.S. first-strike effectiveness: 140 of 200 ICBMs hit Chinese targets.

Math: 200 ICBMS x 70% ICBM effectiveness = 140

Chinese response effectiveness: 11 of 40 ICBMs hit American targets.
Math:

*Step I:* NMD intercepts 24 ICBMs (40 x 60%).

*Step II:* 16 ICBMs not affected by NMD: NMD failed to intercept all of them.

*Step III:* 11 ICBMs hit American targets: 16 ICBMs x. 70% ICBM effectiveness.

**Scenario III**

Setting: U.S. launches first strike at China. Strike employs 200 unmirved ICBMs. China responds with 15 ICBMs (since 25 destroyed in first strike) (calculations for unmirved and mirved with 10 warheads)

U.S. first strike effectiveness: 140 of 200 ICBMs hit Chinese targets (and destroy 25 ICBMs).

Math: 200 ICBMS x 70% ICBM effectiveness = 140

Chinese response effectiveness (unmirved): 4 of 15 ICBMs hit American targets.

Math: *Step I:* NMD intercepts 9 ICBMs (15 x 60%).

*Step II:* 6 ICBMs not affected by NMD: NMD failed to intercept all of them.
**Chinese response effectiveness (mirved):**

4 of 15 ICBMs & 40 of 150 warheads hit American targets.

**Math:**

- **Step I:** NMD intercepts 9 ICBMs (15 x 60%).
- **Step II:** 6 ICBMs not affected by NMD: NMD failed to intercept all of them.
- **Step III:** 4 ICBMs hit American targets: 6 ICBMs x. 70% ICBM effectiveness.
- **Step IV:** 40 warheads hit American targets: 4 ICBMs x 10 warheads on each ICBM.

**Scenario IV**

**Setting (A):**

The United States does not have NMD. China launches first strike at Russia. Strike employs 40 mirved ICBMs.

**Chinese first strike effectiveness:**

28 ICBMs and 280 warheads hit Russian targets.

**Math:**

- **Step I:** 40 ICBMs at 70% effectiveness = 28
- **Step II:** 280 warheads hit Russian targets: 28 ICBMs x 10 warheads on each ICBM.
Setting (B): The United States has NMD. China launches first strike at Russia. Strike employs 40 mirved ICBMs.

Chinese first strike effectiveness: 17 ICBMs and 170 warheads hit Russian targets.

Math: 

*Step I:* NMD intercepts 16 ICBMs: NMD can only intercept up to 35 ICBMs (aimed at Asia/Europe), at an effectiveness rate of 45%. 
(35 x 70% = 16)

*Step II:* 24 ICBMs not affected by NMD: NMD failed to intercept 19 of 35 ICBMs, and 5 ICBMs were beyond the reach of NMD. 
(35 — 16 = 19) + 5 = 24

*Step III:* 17 ICBMs hit Russian targets: 24 ICBMs x 70% ICBM effectiveness.

MICHAEL A. McCANN
IN LIMINE

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