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NATIONAL MISSILE DEFENSE — 21ST CENTURY LONG WALL?

BY

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National Missile Defense—21st Century Long Wall?

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ABSTRACT

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The paper puts forth the thesis that the security challenges of the twenty-first century require the addition of National Missile Defense (NMD) to U.S. nuclear deterrence strategy. It discusses this issue with the help of an historical analogy that compares the U.S. decision to build NMD to the Athenian decision in 479 BC to build its "Long Walls" linking Athens and its major seaport. First, the paper defines the three elements of U.S. nuclear deterrence posture: retaliation, defense, and dissuasion. Then, the paper establishes the current state of those three elements. The elements of strategic deterrence are assessed to determine their suitability to deter twenty-first century threats. To do this, current threats are examined and compared to the deterrent elements. The assessment reveals that the deterrence elements cannot meet the new security challenges, and recommends a re-balancing of the elements. Adjusting this balance will incur risks, and those risks are explored. The discussion of risks focuses on both the policy and technical risks of the suggested changes. By the end of this paper it will hopefully be clear that U.S. nuclear deterrence policy should be modified with the addition of an active defense component to meet twenty-first century security challenges.

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NATIONAL MISSILE DEFENSE—21ST CENTURY LONG WALL?

It is customary in democratic countries to deplore expenditure on armament as conflicting with the requirements of the social services. There is a tendency to forget that the most important social service that a government can do for its people is to keep them alive and free.

—J. C. Slessor

As the twentieth century drew to a close the long cold war between democratic states and communist states ended and many breathed a collective sigh of relief that the specter of a nuclear world war had diminished. Once the Cold War ended, the United States (U.S.) began dismantling its military structure so that by the turn of the century U.S. forces had been reduced by forty percent.¹ Along with this reduction in armed forces came a shift in national security strategy that de-emphasized the importance of developing missile defenses against strategic nuclear missiles and refocused instead on the threat of attack by shorter-range missiles.² This “refocus” effectively mothballed any hope the U.S. had of deploying any near term defense against strategic missiles.

Certainly the security environment had changed and the threat of nuclear war was much less, but should the U.S. have picked this time to relax its efforts to protect the nation? Noted historian Donald Kagan observed; “this is not the first time that new conditions and ideas have led many to believe that a unique prospect of lasting peace was at hand, and yet over the past two centuries the only thing more common than predictions about the end of war has been war itself.”³ Looking back more than two centuries, to 479 BC, the Greek city-state of Athens faced a similar choice to make, whether or not to allocate resources for building defenses following the successful conclusion of a long era of conflict. Athens had been part of a Greek coalition that defeated Persia in 479 BC. Following that Persian War, most Greek city-states had agreed not to refortify their cities so that all would be vulnerable to the phalanx, the *sine quo non* of the ancient world’s weapons.⁴ The Athenians, however, defied the “world opinion” of the day and constructed their walls with great haste before any other nation could stop them.⁵ The walls were later improved and linked the city of Athens to their main port of Piraeus. These walls, called “the long walls,” would stand fast and protect Athens from all opposing land forces until 404 BC, when the walls were torn down from within after the city surrendered to a coalition led by the Spartans and Persians.⁶

To preserve their security during this 75 years, the Athenians bore both the financial and political cost required to provide a defense for their society at a time when many would rather

have savored their resounding victory and enjoyed a "peace dividend." The Athenians made this sacrifice to cope with the new strategic environment created by the Greek defeat of the Persians.⁷ Today, the U.S. is faced with a similar decision about defenses as it restructures its national security posture to face the new strategic reality of the post-Cold War world. The era of cooperation with our former enemies is well underway, but as strategist Colin Gray noted the first apothegm that should be remembered when constructing national defense policy is that "bad times return."⁸ Ambassador Robert Joseph, now a key member of the Bush administration, has noted that, the U.S. would do well to use this relatively safe period of time to examine and redress its nuclear deterrence posture as it supports the national security strategy.⁹ The author believes, and this paper will examine whether the strategic security environment of the twenty-first century requires a new balance of the elements that compose our nuclear deterrence posture. The paper will also show that the new strategic balance urgently requires that the United States deploy a national missile defense (NMD) system much as Athenians needed to build their "long walls" in 479 BC.

In order to prove the thesis that the twenty-first century security challenges require the addition of an NMD component to the United States nuclear deterrent strategy, the three elements of our nuclear deterrence posture must first be defined and understood. The elements of deterrence are: retaliation, defense, and dissuasion. These elements work in concert to deter would-be enemies from attacking the United States and its interests. Once the deterrence elements are understood, the current state of those elements will be assessed in order to examine their suitability to deter twenty-first century threats. Therefore, the current security challenges that the deterrence strategy must counter will be compared to those elements. If the assessment reveals that the deterrence elements cannot meet the challenges posed by the new security environment, adjustments to the balance of the elements will be proposed to counter those challenges. Adjusting the balance of the nuclear deterrence elements will incur risk. Those risks will also be explored. The discussion of risk will focus on both the policy and technical risks of the suggested changes. Hopefully, at the end of the discussion it will be clear that United States nuclear deterrence policy should be modified by the addition of an active defense component to meet twenty-first century security challenges.

ELEMENTS OF NUCLEAR DETERRENCE POSTURE

"Each state's fundamental goal is survival and each is the guardian of its own security and independence."¹⁰ For nearly fifty years nuclear deterrence has been a key element of United States defense policy which, arguably, has at times ensured the survivability of the United

States The founding fathers of the United States realized that survival was a vital United States interest and explicitly set out the need for the federal government to “provide for the common defense”¹¹ as a fundamental responsibility in the United States Constitution’s preamble. The United States national security strategy is designed to implement the purposes outlined in the preamble and to guide security policy decisions toward long-term goals.¹² These goals are focused on providing enduring security for the country no matter what day-to-day events bring.¹³ A key part of the military element of the National Security Strategy is the national nuclear deterrent posture. Nuclear deterrence is key because, “the security and peace of the United States and its major allies depend heavily on the deterrent effect of nuclear weapons.”¹⁴ Deterrence can be defined as “the dissuasion of adversaries from taking hostile action by convincing them that this will incur an unacceptable risk of a military counteraction that will prevent their anticipated gain or make it too costly.”¹⁵ The nuclear deterrent posture for the United States consists of three components or elements: retaliation; defense; and dissuasion.¹⁶

The first element, retaliation, is the overwhelming ability to destroy the most valued assets of an enemy in response to an act of aggression.¹⁷ To be a credible element of deterrence, retaliation, must be backed by “responsive, effective, and survivable forces.”¹⁸ “The forces must be responsive to political control and effective against the entire range of potential targets.”¹⁹ In addition, the triad “must be survivable so that no adversary perceives vulnerabilities to exploit, thus undercutting stability.”²⁰ The three retaliation characteristics (responsiveness, effectiveness and survivability) are provided to the United States by the redundant and complimentary nature of the United States nuclear triad of manned aircraft, intercontinental ballistic missiles (ICBMs), and submarine-launched ballistic missiles (SLBMs).²¹ This triad of forces provides a robust capability that complicates enemy targeting and provides survivable strategic forces to deliver a retaliatory strike if needed.²² Retaliation is the “stick” in our deterrence posture. An effective retaliation element contributes to national survival by unequivocally guaranteeing devastating destruction will be visited upon any nation that would harm the United States. No matter how well executed a first strike might be, at least some of the triad would be left to retaliate.

The second element, defense, “denies an adversary the ability to achieve his goals through military means.”²³ Defense can be thought of as having both active and passive facets. Active defense consists of measures that attack or neutralize a threat to protect an asset.²⁴ Examples of this are anti-aircraft missile batteries, space-based lasers or aircraft intercepting incoming bomber aircraft. The other facet, passive defense, strives to reduce asset vulnerability

and increase asset survivability.²⁵ Passive measures include concealment, deception, armor (or hardening), and dispersion. Defense contributes to the strategic deterrence policy by protecting the target of a would-be adversary. An effective defense element contributes to national security by making any attack against the United States futile or insignificant.

The last element of the nation's nuclear deterrence posture is dissuasion.²⁶ Dissuasion is any effort taken to persuade other parties *not* to do something that would be against United States interests. Dissuasion is produced by "a range of capabilities that, collectively" act to persuade other nations to behave as the United States desires.²⁷ This element includes treaties (arms control and others) and cooperative agreements. The "objective of arms control is to increase the stability of the military relationship of the nuclear powers, thus reducing the risk of nuclear war."²⁸ The element of dissuasion is not the sole province of military power, it also brings the diplomatic and economic coercive power to bear to influence the conduct of other nations and enhance our national security. If retaliation can be thought of as the "stick," then dissuasion can be thought of as the "carrot" in our deterrence strategy. Dissuasion contributes to national security by keeping would-be adversaries from undertaking policies that would cause harm to the United States or its interests by agreements rather than force.

These three elements of deterrence have been present in varying proportions through out our nation's history. The three elements maintain a dynamic equilibrium in response to defense postures that are adopted to meet the geopolitical environment and which should be constantly evolving.²⁹ When the proportions of each are appropriate for the geopolitical environment the nations security is preserved. When the proportions are not appropriate, a nation's security might be threatened and conflicts could result.

CURRENT NUCLEAR DETERRENCE POSTURE

Understanding the components of the nuclear deterrence posture provides a basis for assessing the current posture. While not wishing to provide a historical review of deterrence, the current posture can be defined by examining how much the United States nuclear deterrence posture has changed since the end of the Cold War. It has, in fact, remained remarkably stable since the end of the Cold War. Our strategic defense posture evolved during the Cold War to cope with the events of the mostly bi-polar strategic environment.³⁰ And that evolution during the Cold War's forty-odd years maintained a peaceful world. But, in the ten or so years since the Cold War ended though, many changes have occurred in the geopolitical environment. Yet, "United States nuclear forces are the result of Cold War strategic concepts. These concepts include nuclear deterrence...they were designed for the United States—Soviet

rivalry...These concepts remain intact today."³¹ Today's forces still operate the same equipment they used in the Gulf War and are still organized according to the blue-print laid out in 1986 Goldwater-Nichols Act.³² Our deterrence forces, passive defense measures and dissuasive agreements remain focused on dealing with a nuclear threat from the now defunct Soviet Union.

The retaliatory forces were more robust during the Cold War, but the United States still has almost the same number of nuclear warheads, "7,519 nuclear warheads on missiles, submarines or bombers."³³ The United States still has all three legs of the strategic triad: manned bombers; Inter-continental Ballistic Missiles (ICBMs); and nuclear ballistic missile submarines. No new bomber, ICBM, or SLBM system has been acquired in the last ten years, and "no replacement programs are underway for any of today's nuclear forces."³⁴ The numbers and readiness postures of each have been reduced, but not significantly restructured or re-oriented to a new threat.³⁵

Similarly, passive defense measures and dissuasive agreements have not been altered significantly since the end of the Cold War. No improvements have been made to the United States strategic forces to improve their survivability in the last ten years.³⁶ And, no new arms control agreements have entered into force³⁷ since the end of the Cold War. The dissuasive agreements of the past continue to command the strategic environment. As an example, the United States Under Secretary for Policy, Walter Slocombe, wrote of the 1972 ABM Treaty: "President Clinton and this administration are committed to...maintaining the ABM Treaty as a cornerstone of strategic stability and a key element in our relationship with Russia."³⁸ This is remarkable since this agreement between the United States and the Soviet Union was signed almost thirty years prior, in a far different security environment.

Even though almost ten years has passed since the end of the Cold War, the United States nuclear deterrence posture remains frozen in a Cold War reality that no longer exists. United States strategic deterrence elements—retaliation, defense and dissuasion, remain virtually intact despite changing geo-political realities. Eliot Cohen recently observed, "American strategy still relies on a Cold War-derived understanding of military power and fails to focus on the challenges of the new century."³⁹ Certainly, some changes need to be made to the balance of deterrence elements to meet the new security challenges presented by the twenty-first century. Before suggesting changes, we should first explore those new security challenges that confront the United States in the twenty-first century.

TWENTY-FIRST CENTURY SECURITY CHALLENGES

The United States finds itself standing upon the threshold of a new century in a multi-polar world with many new and emerging security challenges.⁴⁰ The rapid pace of change that technology has enabled is a two-edged sword, it can bring good as well as bad. Today's technological and scientific proliferation has given many nations the capability to construct a nuclear weapon.⁴¹ In fact, the United States State Department has assessed that 44 nations have the capacity to construct nuclear weapons.⁴² This highly dangerous world no longer has a bi-polar framework to unite under, yet our strategic force posture remains built upon just such an anachronistic arrangement. For a nation to build a nuclear weapon two things should exist: first, the technological capability and; second, the will to build such a weapon. In the twenty-first century security environment the United States has little hope of limiting the spread of the technology required for strategic weapons. Instead, United States policy must focus on influencing the "will" of the nations to build nuclear weapons.⁴³ The will of these nations may be influenced by diplomatic, economic, or as a last resort with military means. Many nations have signed agreements not to develop and proliferate this technology. But, there are two groups of nations that still pose a grave threat to United States survival: Nations outside our collective security agreements with large existing nuclear arsenals (China and Russia); and States of Concern (SOCs) that operate outside the community of nations framework and have the will to acquire a nuclear capability.

The first group of nations that pose a significant security challenge to the United States strategic posture are those that could be viewed as peer competitors to United States interests and possess a substantial nuclear capability. China and Russia meet both of these criteria. The latest unclassified National Intelligence Council (NIC) report confirmed that China and Russian strategic forces have "the potential for catastrophic, nation-killing damage."⁴⁴ Neither of these nations are linked with the United States in collective security arrangements. The United States level of concern is increased when nations exhibit the will to use their nuclear arsenals coercively. An editorial published in China bluntly threatened a nuclear strike against the United States if the United States continues to support democracy in Taiwan. The editorial warned, "The United States will not sacrifice 200 million Americans for 20 million Taiwanese."⁴⁵ This sobering rhetoric is coupled with what appears to be a robust program to modernize China's strategic forces. The modernization plan "includes development of two different ground-based mobile missiles and a new class of ballistic missile submarines."⁴⁶ Russia has not been as ready as China to rattle its nuclear saber, but it has the latent capability to do so.

The second group of nations that threaten the United States strategic posture are those nations outside the pale of international cooperation. These states, listed under the rubric of SOC, include Iran, Iraq, and North Korea. All have exhibited the intent to acquire nuclear weapons and missiles to deliver them.⁴⁷ The previously quoted NIC report on ballistic missile threats states: "We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq."⁴⁸ The threats from Russia and China are known to exist, but the threat from these SOCs is especially troubling because these nations do not conform to international norms. Since these states operate outside many economic and diplomatic circles, the amount of diplomatic and economic influence the United States may exert on them is very limited. United States overwhelming nuclear superiority should keep them from attacking the United States with these weapons, but a shadow of doubt surrounds SOCs using their ICBMs. More importantly, if SOCs develop ICBMs they gain leverage on the international scene far exceeding any power they ever had. Secretary Slocombe noted, "Acquiring long-range ballistic missiles armed with WMD will enable weaker countries to do three things that they otherwise might not be able to do: deter, constrain, and harm the United States."⁴⁹ This coercive power could be used on the United States and other allies.⁵⁰ The United States is relatively defenseless (except for preemptive direct action strikes) in the face of such coercive threats, no matter how few or simple the weapons.

TOWARDS AN IMPROVED STRATEGIC DETERRENCE POSTURE

In the face of these new threats a new construct must be developed that will guarantee the nation's survival. The new construct would use the same three elements: retaliation, defense, and dissuasion; but would rebalance the elements. This new construct would evolve the United States strategic deterrence posture to one more relevant to and appropriate for the post-Cold War strategic environment.

The first element to be evolved, the retaliation forces, could be reduced. By reducing these nuclear weapons in line with, or even deeper than the inventory levels called for in the current strategic arms reduction talks (START), the United States could gain the moral high ground in future arms control talks without surrendering much in the way of military advantage.⁵¹ Former Director of the National Security Agency, Lieutenant General (retired) William E. Odom, "said he believes the United States could accomplish any conceivable military mission with as few as 1,000 to 1,500 strategic nuclear warheads."⁵² This is sharply below the current START III agreement that fixes inventories at 2,000 to 2500 strategic nuclear warheads.⁵³ This decrease

in strategic warheads on alert would provide some cost savings over our current strategy and according to a study group at the National Institute for Public Policy, would not decrease our deterrence posture.⁵⁴ In order to increase the deterrence value of this smaller number of warheads, improvements in active and passive defense measures could be made.

The second element of our strategic deterrence posture, defense, should be increased and improved.⁵⁵ This change might be driven, not only by the need to provide protection for our smaller deterrence force, but also to cope with the reality of the SOC ICBM threat mentioned earlier. What change to the defense posture is dictated by the threat? A limited NMD system that protects the entire United States would bolster the strategic defense posture to face the reality of the threat today and into 2015. A limited NMD system might also slow or halt ICBM proliferation by reducing the incentives nations currently have to build ICBMs, by rendering them futile.⁵⁶ As Dr. Henry Kissinger so eloquently wrote:

One of the reasons ballistic missiles are attractive to so many countries is that there are currently no defenses against them. They are almost guaranteed to arrive at their targets...History teaches us that weakness is provocative and, in a real sense, the absence of missile defense provokes others into seeking such weapons.⁵⁷

The limited NMD system proposed by the Clinton administration will not negate the overwhelming nuclear arsenal possessed by Russia, but will free the United States from the coercive tyranny the SOC hope to gain from building a few crude ICBMs.⁵⁸ What would the architecture of the proposed system be?

A system consisting of 80 – 100 ground-based interceptors (GBI) based in Alaska. These non-nuclear, kinetic-kill interceptor missiles would be controlled by a battle management/ command control and communications(BM/C3) system based in Cheyenne Mountain Colorado. The control system would use a high powered X-band radar, also located in Alaska to guide the interceptors to their targets. The targets would first be discovered by orbiting surveillance satellites (current Defense System Program satellites that would later be replaced by Space Based Infrared System satellites) and tracked by a world-wide network of five Upgraded Early Warning Radars (UEWR).⁵⁹

Such a system would have sufficient strength to negate an incoming strike on the order of "a few tens of reentry vehicles."⁶⁰

The third and final portion of the United States strategic deterrence posture that needs to be enhanced is the United States arms control agreements. The ABM Treaty should be either abrogated or modified to allow the limited NMD system previously discussed. The ABM "treaty was signed with an eye to an environment that simply does not exist today."⁶¹ The treaty is out of step with a world that has moved beyond the bi-polar Cold War environment. Russia and the

United States should work together to meet the SOC threats that face both nations. Russia's military recognizes the emerging threat SOC pose, and Russian generals privately acknowledge to United States counterparts that they are "worried by the prospect of missile proliferation around its southern rim."⁶² An editorial in the Jerusalem Post recently addressed the ABM treaty with: "The security posture of the West should not be made to fit an outdated treaty, but the other way around."⁶³ If the ABM Treaty has outlived its usefulness and the START agreements do not go far enough, what is the role for arms control in a United States strategic defense posture?

Arms control still plays an important role in United States strategic defense posture to define the boundaries of policy and to secure agreements and cooperative relationships with friends and foes alike. "This is what arms control, as opposed to disarmament, is really all about: regulating and restraining the use of military force in peacetime for political objectives."⁶⁴ These restraints can help conserve the resources of a nation and allow meaningful progress to be made in areas of mutual concern. In so doing, stability is achieved and both nations benefit from the agreements. What agreements do the United States and Russia have that could be expanded to improve stability while working towards a lasting peace?

The United States and Russia have agreements aimed at "strengthening cooperation to prevent accidental missile launchings on both sides."⁶⁵ These agreements grew out of the aftermath of a Russian near-launched counterstrike in 1995, when a Norwegian civilian rocket was mistaken for an incoming ICBM.⁶⁶ The United States and Russia now share early warning data to lessen the chances of accidental launch. This cooperation is a perfect example of the confidence building measures that international stability can be built upon. The United States and Russia must build on these agreements and forge new ones that help bound the policy issues of strategic defense posture.

If the United States has the will to make economical reductions of deterrence forces, deploy an effective but minimalist NMD architecture, and forge effective, relevant arms control agreements, it will have a strategic defense posture relevant for the twenty-first century. These changes cannot be made without running risks. The following section will explore the risks that the United States will run if it alters its strategic defense posture by adding the limited NMD architecture described previously.

RISKS WITH IMPROVEMENTS

The debate over adding an NMD capability to the strategic deterrence posture can be distilled into two basic questions: first, should we deploy an NMD system?; and second, could

we deploy an NMD system?⁶⁷ These two questions really capture all the sound and fury over the risks in NMD deployment. The first question, "Should we?", addresses the policy aspect of the NMD. The second question, "Could we?," addresses the technical aspect of NMD. These two questions must be explored in some detail before a reasoned decision can be made on such a controversial addition to our strategic deterrence posture.

SHOULD WE BUILD NATIONAL MISSILE DEFENSE?

Three of the main policy issues that determine the "should we" issue are: 1) Are ballistic missiles a sufficient threat? 2) Would NMD deployment destabilize international security? and 3) Is the cost of NMD proportional to the threat? These three questions must be answered before we even consider the technical feasibility of any NMD architecture.

Previously, we explored the technical estimates of ICBM capabilities that other nations may or may not have the intent to use against the United States. We have not considered other means of employing a weapon of mass destruction (WMD). Mr. Samuel Berger, President Clinton's national security adviser, recently wrote, "The fact is that a far greater threat to the American people is the delivery of weapons of mass destruction by means far less sophisticated than an ICBM: a ship, plane or suitcase."⁶⁸ Certainly a SOC or a terrorist organization could smuggle a WMD into the United States and detonate it, but to what end? The real advantage of land-based ICBMs is that their use can be threatened, and a coercive advantage can be gained. The threat of a terrorist act does not have the same coercive power. But, the terrorist threat is real and must be honored. As President Clinton remarked of NMD, "It can never be the sum total of that strategy for dealing with nuclear and missile threats."⁶⁹ President Clinton captured the idea that NMD is not an "either or" choice. We must be vigilant against domestic terrorist threats, and close off this increasingly more vulnerable avenue of approach in today's multi-nuclear environment.

The second issue, that the deployment of NMD destabilizes the international security environment, is a shibboleth long held in anti-defense camps. The logic offered is that proliferation of ICBMs would accelerate and those nations already in the nuclear "club" would rapidly expand their nuclear arsenals. Another destabilizing issue concomitant of NMD is that deployment would unravel existing arms control agreements starting with the almost sacrosanct ABM treaty. Each of these concerns are important and need to be thought through before a policy decision on NMD is rendered.

The idea that building defenses against ICBMs would encourage proliferation or ignite an arms race should be considered first. If a limited NMD system was deployed or even projected,

that might eliminate the incentive for acquiring ICBMs. The cost for a SOC or non-state actor would be very expensive without the guarantee of invulnerability that an ICBM enjoys today. The SOC might channel that effort into another means of WMD delivery, but the ICBM blackmail threat would be foreclosed. Turning to the second assertion, that a defense system would fuel an arms race among nations already armed with nuclear weapons. William Burrows asserts, "A ballistic missile defense system would in fact fuel the arms race, not curtail it, by forcing the Russians to vastly increase the number and variety of their missiles and warheads."⁷⁰ Two arguments can be made to refute this claim. First, the limited defenses that could be deployed would not alter the nuclear balance between the United States and Russia. The large number of Russian warheads permitted even under START III is between 2000 and 2500.⁷¹ This number would overwhelm the 80-100 anti-missile interceptors envisioned in the NMD system.⁷² The second argument against beginning an arms race is fiscal. Neither China nor Russia can afford to build-up their nuclear forces for such a small strategic gain.⁷³ Both are faced with aging conventional and nuclear forces that require funds from their nascent free-market economies. Simply put, both nations will not spend their scarce resources to protect a deterrent that does not exist today.⁷⁴ Instead, the author believes, both are posturing to negotiate the best agreement possible from the United States over this matter. This strategy is an effective one, other states have used it to great effect against the United States. The North Vietnamese used just such a tactic during the 1972 peace talks and only the massive LINEBACKER II B-52 strikes forced them to negotiate.⁷⁵ Once the United States shows that it is serious about deploying NMD, these nations will be more inclined to make a deal. The feared arms race will not materialize because these nations won't empty their meager treasuries to build weapons with little or no utility to their vital interests.

The second de-stabilizing effect of fielding an NMD system critics cite is that it would require withdrawal from the ABM Treaty. To many "the prospect of abrogating the ABM Treaty with Russia...could unravel the global arms control and nonproliferation system."⁷⁶ This arms control system is already broken. India and Pakistan's recent nuclear detonations prove that beyond a shadow of a doubt. If the arms control and nonproliferation system didn't stop these nations from joining the nuclear fraternity, how can it dissuade SOC like Iran and Iraq? Doctor Henry Kissinger wrote of the ABM Treaty: "The acceleration in the proliferation of ballistic missile and weapons of mass destruction (WMD) technologies are putting capabilities in the hands of nations that were not even remotely considered to be candidates to possess such destructive power when the agreement was concluded."⁷⁷ The author feels the treaty has outlived its usefulness to maintain stability, and in fact, it has not preserved stability for years

and is only providing a false illusion of security today. Abrogating the treaty would not make the world less stable, but it might sweep the cobwebs from the eyes of many to the reality of today's multi-nuclear power world.

The last part of the "should we build NMD" question is on the efficacy of the system in regards to its cost. Cost can be characterized in many ways, but for the purpose of this exploration it will be characterized mainly in terms of fiscal burden. There are as many estimates of the cost of an NMD system as there are sources of estimates. Once an estimate has been chosen, the real decision still lies ahead...are the benefits provided by the NMD system worth the cost? That is the real issue. One can make many cost arguments. One would be to compare the cost of an interceptor (or salvo of interceptors) with the cost of an incoming missile to arrive at a cost decision. The fault with that argument is that the value of the defended asset is not counted. The real value issue revolves around the value of the defended asset. The welfare and safety of any sovereign nation's citizens are its most priceless treasures. It is impossible to put a fiscal cost on how much the United States would pay to protect Los Angeles, California or Anchorage, Alaska from attack. But, governments have to make decisions on what to fund and what not to fund. The cost estimates for the limited NMD system discussed previously vary widely. The Ballistic Missile Defense Organization (BMDO), in June 2000, estimated the "cost for development, testing, and production and deployment is \$10-\$12 billion."⁷⁸ While estimates by other sources have been quoted as high as \$60 billion.⁷⁹ The actual cost will probably be somewhere between those two estimates. Taking the highest assumption of \$60 billion over the next six years, that comes to about 3 percent of the United States Defense budget. For only 3 percent the United States could take a positive step to defend itself against a real and growing threat that it is completely vulnerable to today. There are still other ways to attack the United States that NMD does not defend against, but there remains the other 97 percent of the Defense budget left to address those threats. Would 3 percent of the defense budget be too expensive the day after Los Angeles was leveled by a nuclear strike?

The three main policy or "should we" issues that surround NMD have been explored in some detail. There is a growing threat that could strike the United States, defenses against that threat will not de-stabilize the nuclear balance of an already multi-nuclear world, and a defense against the real threat would cost at the most 3 percent of current defense expenditures. The United States should add an NMD system to its strategic deterrence posture to meet the challenges of today's security environment.

COULD WE BUILD NATIONAL MISSILE DEFENSE?

The second question that surrounds this debate about building an NMD system is the technical aspect of "could we" build a defensive system. The technical aspect breaks down to the two issues of design and production of an NMD system. First, can a system be designed that will protect the United States? Once the design is sufficient, can it be built with today's technology and geographical constraints to protect the United States? If these two questions can be answered then the answer to the "could we" issue is yes.

In the design of any system, the first step is to define what the system needs to do. The NMD system design must first start with establishing the number and type of incoming missiles the system must stop. Once those requirements are established, the area the system must defend needs to be established. These two design requirements drive the entire system design. The NMD system has been designed to protect all 50 states from a "limited ballistic missile attack from a rogue nation."⁸⁰ The limited system is "designed to counter a few tens of reentry vehicles."⁸¹

The production of the NMD system is also fairly straight forward, but with any new system there are integration issues that must be resolved as the system is moved from the design phase to deployment. The director of BMDO, Lieutenant General Kadish, characterized his challenges to congress having "more to do with "system integration" than it does with "technology development."⁸² In fact he pointed out, "the legacy of technologies employed in the NMD system can be traced back at least to the 1980s."⁸³ The real problems have come from cobbling together existing components in an effort to test the system as rapidly. The concepts and engineering techniques being used "are built upon the disciplined, proven, and scientific methods learned over more than four decades of missile development, deployment, and operations."⁸⁴ The technical challenges are being pursued and will be resolved, but the geographic locations for sensors are still being secured. One of the NMD system's five upgraded early warning radar sites is in Britain.⁸⁵ It cannot be upgraded without the consent of the British Government. The likelihood of such an agreement has increased, "cracks in the once-solid skepticism of NATO's European allies have been widening noticeably since President Bush took office."⁸⁶ President Bush and his administration have been solidly in favor of deploying NMD as soon as possible but have been open to consult with Europe as they go forward. With this "warming" of attitude, the NMD required upgrade of existing early-warning radars is very likely. Once these agreements are secured, and the NMD system matures through its disciplined development program all the "could we" questions will be answered yes.

CONCLUSION

The United States finds itself on the threshold of a new century with a strategic defense posture that was designed to cope with the bi-polar strategic environment of the last century. There is a real threat that SOC or rogue states will develop ICBMs to use in a coercive manner against the United States in the near future. A limited NMD system would diminish that coercive threat. The calculus of deterrence may not work against such states, and should not be solely relied upon. Arms control measures have not worked to keep nuclear arms from proliferating. In fact, the state with which we have the strongest and most comprehensive arms control agreements with, Russia, is doing much of the proliferation.⁸⁷ The current limited NMD system, as advocated by the Clinton administration, would do the least harm to the strategic nuclear balance since it would not skew the balance of power that exists between Russia and the United States. A limited NMD system is within our technological grasp and the development is steadily advancing. The limited NMD system is affordable in light of the threat, at less than three percent of the defense budget. Our European allies have started to warm to the idea and have stated their willingness to work with the United States on developing "an effective missile defense."⁸⁸ The limited NMD system is a needed addition to the United States strategic deterrence posture.

Just as the Athenian leader Themistocles recognized the need for the construction of walls to protect Athens and its main source of economic power, its seaport, the United States leadership must grasp this opportunity to improve the United States strategic deterrence posture with the addition of NMD. NMD is a needed addition to the retaliation, and dissuasive elements of United States strategic deterrence policy. It is needed to counter the new multi-polar strategic environment of the twenty-first century. NMD cannot provide security for the nation by itself, but just like the long walls of Athens, it is a critical element. The Athenians built their walls to be free from Spartan military coercion and to retain sovereignty. When explaining why Athens built their walls in spite of agreements otherwise with sister city-states, Thucydides wrote, "for without equal military strength it was impossible to contribute equal or fair counsel to the common interest."⁸⁹ The situation is similar to the one facing the United States today. Rogue states with ICBMs could threaten and coerce the United States in its current, undefended status. By enhancing the United States strategic defense posture with NMD, the United States will have a "long wall" equivalent that will not be the sole protector of the nation, but could remove the threat of nuclear blackmail. Having an NMD shield as part of its strategic deterrence posture will allow the United States to pursue its national goals without fear of coercion from rogue states and will allow it to prosper in the twenty-first century environment.

WORD COUNT=6,414

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³¹ Hans Binnendijk, ed., Strategic Assessment 1999: Priorities for a Turbulent World (Washington, D.C.: U.S. Government Printing Office, 1999), 286.

³² Eliot A. Cohen, "Defending America in the Twenty-first Century," Foreign Affairs, Nov/Dec 2000, 40.

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⁶¹ Kissinger, 32.

⁶² John Barry, "Looking Forward to NMD", Newsweek, 29 Jan 2001; available from <<http://ebird.dtic.mil/Feb2001/e20010201looking.htm>>; Internet; accessed 1 Feb 2001.

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