NATIONAL DEFENSE UNIVERSITY

NATIONAL WAR COLLEGE

NATIONAL MISSILE DEFENSE:
HIGH-TECHNOLOGY IN A STRATEGIC VACUUM

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The power of modern weapons has …. set our statesmanship a problem unique in our history: that absolute security is no longer possible.

Henry Kissinger,
Nuclear Weapons and Foreign Policy

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NATIONAL MISSILE DEFENSE:
HIGH-TECHNOLOGY IN A STRATEGIC VACUUM

Part One: Introduction

In 1998, a bipartisan commission led by former Secretary of Defense Donald H. Rumsfeld issued a report warning that, within five years, North Korea and Iran could conceivably reach the United States with long-range ballistic missiles. Rumsfeld and his colleagues also cautioned that new long-range missile threats might appear more quickly than had previously been supposed, a conclusion later supported by the National Intelligence Council.[1] Some states, the commission pointed out, might be satisfied with deploying a rather primitive missile of uncertain reliability after only a very small number of tests. Such a rudimentary missile system, if armed with a nuclear warhead or other weapon of mass destruction, might well be considered by its owner to be good enough to deter potential adversaries, including the United States.

Six weeks later, North Korea added weight to the Rumsfeld Commission's findings by testing a three-stage missile with perhaps enough range to hit parts of North America. The increased prospect that "rogue-states" such as North Korea and Iran might soon be in a position to threaten United States' territory by means of nuclear-armed ballistic missiles impressed a previously skeptical White House. It decided to support, at least conditionally, the idea of deploying an anti-missile interceptor system intended to protect the whole of the United States from the sort of small-scale missile attacks that some rogue-states might soon be able to mount. Accordingly, in the summer of 1999,

[1] "Foreign Missile Developments and the Ballistic Missile Threat to the United States through 2015," National Intelligence Council, September 1999 (available through the CIA Office of Public Affairs, Langley, VA).

President Clinton signed into law the National Missile Defense Act of 1999, which requires the United States to field such a system "as soon as technologically feasible." By the end of 1999, the administration had added another $2.2 billion, over five years, to the program to develop the national missile defense (NMD) system. It had also promised that the President would decide by the summer of 2000 whether it would be feasible to deploy a system that would enter into operation by 2005.

The concept of deploying defenses against intercontinental ballistic missiles has always been controversial, from the "ABM" debates of the 1960s through the Reagan Administration's "Strategic Defense Initiative," to the present day. Perhaps the most striking feature of the current discussion of NMD deployment, however, is the lack of attention paid to how the deployment of NMD might affect the overall security of the United States. Analysts outside the U.S. government frequently ask how NMD deployment might affect individual aspects of U.S. strategy, such as arms control agreements, great-power relationships or the NATO Alliance. They rarely, however, try to place NMD within the context of overall U.S. security strategy.

Within the U.S. government, debate is largely focused on the purely technical issue of how well NMD might be able to defend the U.S. against the specific threat of rogue-state intercontinental ballistic missiles (ICBMs). This is clear from the criteria by which the administration has stated it will make its decision on whether or not to deploy NMD: 1) the threat[2], 2) our technological capability, 3) the cost of deployment and 4)

[2] It is clear from statements by Administration officials that they define "threat" narrowly, as the technical capability of rogue nations to develop and deploy ICBMs capable of hitting U.S. soil (see, for example, President Clinton's "Statement on National Missile Defense Legislation," White House Press Release, March 17, 1999). This narrow definition is consistent with the usage of the word "threat" in the NIC report cited above. A broader definition of the term would also encompass an evaluation of circumstances in which given rogue-states would find it to their advantage to attack U.S. territory with ICBMs, coupled with

arms control.[3] Three of the four criteria are either technological or financial, while issues of strategy are lumped together, in last place, under "arms control." Even this modest attention to national security strategy is too much for some proponents of NMD deployment. For example, in the Senate debate over the National Missile Defense Act of 1999, the criteria on cost and arms control were added as amendments that were declared by Senator Thad Cochran (R-Miss.) to be "unimportant."[4]

Administration spokesmen do not seem to take the "arms control" criterion much more seriously than their congressional opponents. For example, in testimony before the House Armed Services Committee in October 1999, Under Secretary of Defense Walter Slocombe stated that the administration sought to negotiate with Russia those changes to the 1972 ABM Treaty necessary to allow the deployment of NMD. Slocombe warned, however, that if Moscow refused to do so, "we will not permit any other country to have a veto on actions that may be needed for the defense of our country." He suggested that, in the absence of Russian acquiescence in NMD deployment, the President might decide to withdraw from the ABM Treaty.[5] On the whole, it is not much of an exaggeration to say that the debate over NMD deployment is proceeding in a strategic vacuum.

Yet surely national security strategy – those policies in various areas which, taken together, are meant to safeguard the United States, its citizens and their interests – must be central to any debate over how best to protect the United States homeland from foreign attack. For decision-makers on the national level, security cannot be reduced to a

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an estimate of the probability of those circumstances occurring. Such a broader concept of "threat" would be more meaningful than the narrow one, but also, of course, harder to estimate.

[3] Testimony of Under Secretary of Defense Walter B. Slocombe before the House Armed Services Committee, October 1999

[4] Quoted in O'Hanlon, Michael, "Star Wars Strikes Back," Foreign Affairs, New York, Nov/Dec 1999, page 4.

[5] Slocombe, *op cit.*

simple decision of whether or not to deploy a particular weapon. The question must always be which set of policies, taken as a whole, will best protect the United States. This is particular so for a weapon such as NMD, whose deployment has the potential to affect so many important strategic interests of the United States.

This essay is an attempt to return issues of national security strategy to the center of the debate over NMD deployment.[6] After briefly reviewing the threat to the United States from ICBMs launched by so-called rogue-states and the technical characteristics of the NMD system intended for deployment if the President so decides, I will examine the broader strategic implications of NMD deployment for the United States. I will argue that the expected benefits from NMD are outweighed by its strategic costs and that deploying it will be likely to diminish, rather than increase, American security. I will propose an alternative set of policies to NMD deployment, based on the military and diplomatic tools of statecraft. The proposed policies offer an acceptable level of security against the rogue-state ICBM threat while avoiding its strategic costs – and will, therefore, strengthen our overall national security strategy.

Part Two: Threat and Response

I. What, From Whom and Why? The Rogue-State ICBM Threat

The most authoritative recent statement of the potential threat from rogue-state ICBMs is the September 1999 National Intelligence Council (NIC) assessment cited

[6] I will not address the fundamentally different issues involved with theater ballistic missiles and theater missile defense.

earlier. According to this document, whose authors took into account the conclusions of the Rumsfeld Commission, by 2015 North Korea will most likely possess ICBMs capable of being armed with weapons of mass destruction (WMD) and of striking U.S. territory. Iran probably will have such a capability and it is possible that Iraq will. According to the NIC, the ICBM arsenals of these states are likely to be small (a few to tens in number), and both less accurate and capable of carrying smaller payloads than their Russian and Chinese counterparts. Each of the countries in question – North Korea, Iran and Iraq – is also pursuing the development of one or more kind of weapon of mass destruction that could, in principle be delivered by ICBM.

Because of their limited numbers and accuracy, the NIC believes that these ICBMs would most likely be viewed by their possessors as weapons of deterrence and coercive diplomacy than of war. As the report's authors point out,

> …. these WMD-armed weapons need not be deployed in large numbers; with even a few such weapons, these countries would judge that they had the capability to threaten at least politically significant damage to the United States or its allies. They need not be highly accurate; the ability to target a large urban area is sufficient. They need not be highly reliable, because their strategic value is derived primarily from the threat (implicit or explicit) of their use, not the near certain outcome of such use.[7]

In sum, the NIC predicts that if North Korea, Iran or Iraq develop ICBMs capable of delivering nuclear, chemical or biological weapons to United States' territory, the intent of these countries will not be to wage war with the U.S. using these missiles. Instead, they will use their ICBM arsenals to deter the U.S. from taking action against them or to compel the U.S. to take some action they desire.

[7] National Intelligence Council, September 1999, *op cit.*

II. Responding to the Threat – National Missile Defense

In order to prevent ICBMs from North Korea, Iran or Iraq from striking U.S. territory, the United States is developing a so-called "thin" network of anti-missile interceptors and sensors. This national missile defense network is intended to defend the entire territory of the United States from a small-scale ICBM attack, such as might be mounted by one of these states.[8] The NMD system is to consist, initially, of 100 ground-based interceptors based at a single site, probably in Alaska; early-warning and tracking radars in Alaska, California, Massachusetts, Great Britain and Greenland; a spaced-based missile-tracking system, called "SBIRS-Low" ("space-based infrared system – low earth orbit"); early-warning satellites; and a battle-management center in Colorado Springs, Colorado.

If a rogue-state attacked the United States with ICBMs, the missiles would be detected shortly after launch by early-warning satellites and by ground-based early-warning radars, which would transmit the news of the attack to Colorado Springs and to the anti-missile interceptor site. As the warheads, shorn of their boosters, continued their flight, ground and space-based sensors would develop precise estimates of their trajectories. Anti-missile interceptors, perhaps several for each incoming warhead in order to increase the probability of interception, would be launched toward the warhead.

[8] The description in this section of the proposed national missile defense system is based on the articles "Missile Defense Continues to Draw Friends, Fire," Washington Post, Monday, January 17, 2000, p. A1; and Lewis, George N., Postol, Theodore A. and Pike, John, "Why National Missile Defense Won't Work," Scientific American, August 1999, p. 36.

As they flew, the interceptors would continue to receive updated information on the warhead's trajectories. Finally, the interceptor's own warhead (called an "exo-atmospheric kill vehicle," or EKV) would detect the incoming warhead to which it was assigned, using on-board sensors. These sensors would also distinguish between the target warhead and other objects, such as decoys and discarded ICBM components. Thrusters would then maneuver the kill vehicle toward the warhead, which it would destroy by smashing into it (the so-called "kinetic" kill).

The system described above would be intended to defend the U.S. against an attack of around 25 to 30 warheads. The Pentagon also foresees a second deployment phase of an additional 100 or so interceptors based at a site somewhere in the U.S. This upgraded system would be intended to protect against an attack consisting of up to several dozen warheads.

III. How Leak-Proof Would the System Be?

How effective would the national missile defense system proposed by the Pentagon be in protecting the U.S. population against an attack by rogue-state ICBMs? The Defense Department's contract with Raytheon requires each EKV to have a success probability of about 90 percent.[9] This would imply that, against a barrage of 25 warheads, 100 interceptors would have a 99.99 percent probability of destroying the entire threat.[10]

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[9] Washington Post, January 17, 2000, *op cit.*

[10] Because, with 100 interceptors, four could be dedicated to each of the incoming warheads. If each interceptor has only a ten percent probability of failing to kill its assigned warhead, then the probability that all four will fail to kill it is only 1/100 of one percent, giving a probability of kill of 99.99 percent.

We can, however, safely dismiss this impressive estimate as unrealistic. Experience tells us that precision-guided munitions, no matter how sophisticated, simply do not reach these levels of effectiveness.[11] Let's instead use as a starting point a more realistic, although still quite high, guess of 90-95 percent kill probability under ideal circumstances, when the system works as it is supposed to.

For simplicity's sake, let's consider only the first-phase, 100-interceptor system (the same considerations would apply for the larger system). At a level of effectiveness of 90-95 percent against the presumed threat of 25-30 warheads, we would expect from one to three warheads to penetrate NMD and strike the United States. If we assume that the warheads are relatively crude – say, 10-20 kiloton nuclear weapons or their chemical or biological weapon equivalents – the result would be from one to three U.S. cities destroyed in Hiroshima-like blasts.

Real vs. Ideal Technology: But this presumes that the system works ideally, which will be hard to achieve. After all, nothing mechanical or electronic works just the way it's supposed to, and NMD must work the first time after – presumably – having been deployed for many years and never having been tested in combat. Of course, the same is true for some other weapons, such as ICBMs. But an ICBM's task – striking a stationary, precisely-surveyed target within a few meters – is far easier than that of the NMD interceptor, which must maneuver and strike precisely a small, very fast-moving target whose trajectory must be calculated in real time.

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[11] For a brief moment just after the Gulf War, some thought that almost 100 percent of Iraqi SCUD missiles targeted by Patriot air-defense missiles had been either destroyed or substantially diverted from their trajectories. It has since been realized that the actual success rate was far lower, probably no greater than 50 percent.

Overwhelming NMD, …. In addition, NMD interceptors can be countered in a number of ways that could severely degrade their performance. First, a foe could overwhelm them with additional warheads. We must assume that any adversary who had invested the time and resources necessary to develop an ICBM capable of striking the U.S. would not sit idly by and watch it be rendered useless as America poured concrete for NMD launchers and radar sites. That adversary would be determined to maintain the effectiveness of the ICBM force he had worked so hard to build. And the easiest way to do so may simply be to build more ICBMs, or to fit each ICBM with multiple warheads.[12] This would be a particularly attractive option if it turns out that deploying additional ICBMs or warheads is more affordable for the adversary than expanding NMD to handle the larger threat is for the U.S.

…. fooling it, …. But there probably is a still cheaper and simpler way to degrade NMD's performance. For NMD interceptors would be susceptible to relatively primitive countermeasures. NMD is designed to intercept warheads outside the atmosphere, where all objects, regardless of their mass, fall at the same rate – that is, the trajectory of a 1,000 kg warhead would be indistinguishable from that of a feather. This makes it possible, in principle, for an adversary to deploy a number of light, inflatable decoys along with a warhead in order to confuse NMD sensors. Mylar balloons, perhaps fitted with heaters to give them infrared radiation characteristics similar to those of warheads, are one candidate for the job.[13]

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[12] This latter is a technically difficult, but not impossible task. And multiple-warhead missiles need not be as sophisticated as those deployed by the U.S. and Russia. For the sort of crude and inaccurate deterrent that a North Korea might possess, it may be enough to fit several warheads onto a single ICBM without making them independently targetable.

[13] Lewis, Postol and Pike, *op cit.*

Another possibility would be so-called "reverse decoys." Real warheads could be shrouded in Mylar balloons to make them look like decoys, or the balloons could be cooled to make them blend with the cold background of space. An adversary could also outfit his ICBMs with a large number of biological weapons sub-munitions rather than with a single warhead. This would present NMD with a vast cloud of "mini-warheads," far too many to be engaged by the limited number of interceptors available.

The Pentagon and contractors developing NMD express confidence that their system will be able to distinguish between decoys and genuine warheads. This claim is impossible for outsiders to evaluate but, as the National Intelligence Council points out, "historically, the development and deployment of missile defense systems have been accompanied by the development of countermeasures and penetrations aids by potential adversaries, either in reaction to the threat or in anticipation of it." The NIC predicts that, in the 2000-2015 period during which it expects ICBM threats to the U.S. to emerge from certain rogue-states, "countries other than Russian and China will develop countermeasures to theater and national missile defenses."[14] The NIC also describes several additional possible counter-measures that would be realistic for rogue-states to develop.[15] How effective are these countermeasures likely to be? It is impossible to be certain, but it is prudent to assume that, over time, the U.S. and rogue-states will engage in the normal duel of development of offensive and defensive weapons and that, at any given time, countermeasures will degrade NMD performance to at least some significant degree.

[14] National Intelligence Council, September 1999, *op cit*, p. 6
[15] *ibid*, p. 13.

To take stock, then, we have a system that, if it works ideally against the expected threat, is likely to allow from one to three WMD warheads to strike U.S. territory. Taking into account technology's normal deviation from ideal performance, the impossibility of testing NMD under combat conditions and its susceptibility to counter-measures, we should expect that, in a real attack, additional warheads would make it through the missile shield – shall we guess perhaps half a dozen in total?

Now, a half-dozen Hiroshima-equivalents on U.S. territory is quite a sobering prospect, but the fact that NMD cannot be leak-proof does not, in and of itself, mean that it should not be deployed. After all, even as we contemplate the destruction wrought by half a dozen warheads, shouldn't we keep in mind the 20 or 25 that didn't get through, and the many tens of thousands of lives thereby saved? Shouldn't we, therefore, deploy NMD even if it isn't perfect? The answer to that question depends on how NMD's benefits weigh against its costs of all kinds, a topic we will explore later. For the moment, however, we should ask whether NMD might do even worse than expected. Might it fail utterly to protect the U.S. from rogue-state WMD?

Of course, this might happen if NMD technology failed catastrophically, or if our adversary unexpectedly attained an extremely high level of counter-measure effectiveness. But this is not the most likely route to a total failure of NMD.

…. *or evading it.* In fact, the simplest, cheapest and most effective means of defeating NMD's missile shield might be to go around it, rather than through it. As the National Intelligence Council points out,[16] an adversary could choose to deliver a warhead by ship- or submarine-mounted cruise missile, a threat immune to NMD. Even simpler, a weapon of mass destruction could be assembled from components already in

the United States, then delivered and detonated (this is probably a more realistic scenario for chemical and biological weapons than for nuclear weapons). Alternatively, a warhead could be inserted into the United States by truck, aircraft or ship, perhaps in one of the tens of thousands of shipping containers that enter the U.S. every day by various means.

In addition to being cheaper and simpler than developing ICBMs and their warheads, delivering a WMD to the U.S. inside a shipping container would allow a larger weapon to be used than could be loaded onto an ICBM. Moreover, the NIC believes that such a means of delivery would be more effective than a ballistic missile for disseminating biological warfare agents.[17]

Dial "555-BOOM." While acknowledging the feasibility of non-ICBM means of delivery, the NIC argues that such delivery systems would lack the prestige and deterrent value of an ICBM. Actually, however, a shipping container (for example) offers additional flexibility to an adversary wishing to threaten the U.S. with WMD. He has the option of keeping it secret, to be used as a terrorist weapon, or of making it known that he has this capability, thus giving it effectiveness as a deterrent and exploiting the element of strategic surprise. Containerized weapons could be inserted into the United States through countless ports of entry, and would be extremely difficult to detect. They could be detonated at will by remote control, perhaps by means of a simple telephone pager.

Finally, our rogue could simply claim falsely that he was capable of threatening the U.S. with containerized WMD, an assertion he would find more difficult to make about ICBMs. Imagine the chaos that an enemy might cause to U.S. commercial

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[16] National Intelligence Council, September 1999, *op cit*, pp. 11-12.
[17] *Ibid*, p. 12.

shipping and transport simply by claiming – truly or falsely – to have inserted one or more WMD into the U.S. in shipping containers.

To sum up, therefore, against our postulated threat of 25-30 WMD warheads, NMD's effectiveness seems likely to range from around 75-80 percent (if the foe attempts to penetrate the shield) down to zero, if he chooses to evade NMD by using an alternative means of delivering NMD.

It may seem unfair to insist on measuring NMD's effectiveness against threats (such as shipping containers and cruise missiles) it is not designed to defeat. Yet the only important thing if we are attacked with WMD is how many of them detonate in the U.S. How they got there would seem supremely irrelevant to us in the aftermath of an attack. Besides, the two main means of delivery – ICBM and alternative to ICBM – are linked. The more effective NMD is perceived to be by a foe, the more likely he will be to go around the shield rather than to bang his head against it – especially since some of the alternatives are cheaper and easier than ICBM delivery in the first place. If NMD, in protecting us from ICBM attack, made it more likely that an enemy would deliver WMD by other means, then it would truly have become a victim of its own success.

Part Three: Benefits and Costs

To decide whether NMD is worth deploying, we must weigh its expected benefits against the prospective costs of all kinds. Published cost estimates for deploying the first, 100-interceptor system seem to range from around $12 billion to $20 billion. In addition to the absolute monetary cost, however, we must take into account the *opportunity* cost of deploying NMD – that is, we must ask what else we might be able to do with $12-20 billion dollars, either in the defense realm or elsewhere, if we did not deploy NMD.

But perhaps the most important costs to take into account are *strategic* in nature. That is, when deciding whether to deploy NMD, we must ask ourselves not simply whether NMD will increase our security against a specific threat, *but whether deploying it will increase U.S. security on the whole, or decrease it.*

In fact, there are a number of ways in which NMD deployment will run counter to our broader national security strategy.

I. Arms Control

Arms control is an important element of every U.S. administration's national security strategy. The main rub in this area is that the proposed NMD system is incompatible with the Anti-Ballistic Missile (ABM) Treaty negotiated between the United States and the Soviet Union in 1972.

The ABM Treaty was intended to ensure to both parties that, in the event of a nuclear war between them, their own nuclear deterrent forces would remain effective. A nation-wide ABM system, it was feared, would allow one side to launch an attack against the other without worrying about nuclear retaliation. Such a situation would destabilize the nuclear balance in a time of crisis[18] by making one side (that without an ABM system) fear an attack by the other. If both sides had ABM systems, then an arms race might ensue as each side deployed more warheads in an attempt to overwhelm the other's defenses. In the perverse logic of nuclear deterrence, the prevention of war required that each side's population remain vulnerable to the other's nuclear weapons.

In accordance with this nuclear logic, the ABM Treaty banned the deployment of "ABM systems for a defense of the territory of its country" and enjoined the parties to the treaty from providing a base for such a defense."[19] This ban on defending the whole of one's country by means of ABM defenses is the core meaning of the treaty, and would be directly violated by NMD.

NMD runs up against other restrictions of the ABM Treaty, as well. For example, the treaty defines an ABM system as consisting of interceptor missiles, launchers for those missiles and ABM radars.[20] Should future technology bring forth new ABM systems "based on other physical principles," it was agreed that limiting such systems would be discussed. The SBIRS sensors are not radars and, if used as components of NMD, would presumably be subject to this provision. Moreover, the treaty states that its signatories must not "develop, test, or deploy ABM systems or components which are

[18] This particular problem is one facet of so-called "crisis instability."
[19] ABM Treaty, 1972, Article I, Paragraph 2.
[20] *Ibid*, Article II, Paragraph 1.

sea-based, air-based, space-based, or mobile land-based."[21] This provision would prohibit the use of SBIRS or any other space-based sensor as a component of NMD (as well as some proposals that would use ship-based radars or interceptors as part of NMD). Finally, the treaty prohibits[22] its parties from deploying ABM components outside their own territory, a provision that would affect NMD tracking radars in Great Britain and Greenland.

But is the ABM Treaty worth keeping, or is it simply a burdensome relic of the Cold War? In fact, although the logic of "mutual assured destruction" was born of the Cold War, it did not die with it. So long as both the U.S. and Russia (and now China) have nuclear deterrent forces that might be used against one another, it is desirable to avoid inducing either crisis instability or an arms race by introducing missile defenses that would threaten the effectiveness of those forces. In fact, as arms control agreements proceed to lower numbers (as in the proposed START 3 Treaty), each side will presumably become even more eager to maintain the effectiveness of its smaller arsenal. Although the international context of the ABM Treaty changed radically when the Soviet Union fell, its strategic logic remains intact.

The United States intends to renegotiate the ABM Treaty with Russia in such a way as to allow NMD to be deployed while retaining the treaty "as a cornerstone of strategic stability."[23] It is not clear why Moscow would consider such a re-negotiation to be in its interest, particularly since the Russian authorities do not seem to view rogue-

[21] *Ibid*, Article V, Paragraph 1.
[22] *Ibid*, Article IX.
[23] Slocombe, *op cit.*

state ICBMs with the same alarm as does Washington.[24] Nevertheless, the administration has expressed confidence that Moscow will eventually acquiesce in the modifications the U.S. desires.[25] It is impossible to assess these claims from the outside, since we don't know what might have been said in private between American and Russian officials, or what price the Russians might eventually ask or be granted for accepting changes to the treaty. It is worth at least recalling, however, that throughout the 1980s the U.S. administration repeatedly – and incorrectly -- expressed optimism that the Soviet Union would finally allow the ABM Treaty to be renegotiated in a way that would permit President Reagan's Strategic Defense Initiative to be deployed.

What if the United States, faced with Russian intransigence, simply withdrew from the ABM Treaty, as is its right under the so-called "supreme interests" clause?[26] The administration has strongly suggested that it would do so[27] and pro-NMD members of Congress have been even more explicit in their support for such a step.

Withdrawing from the ABM Treaty would do more than simply remove a successful arms control measure that, as the administration acknowledges, continues to play an important role. It would also damage U.S. credibility in pursuing other arms

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[24] The U.S. is sometimes puzzled and frustrated by the fact that other nations, such as Russia and our European Allies, do not seem to share our view that NMD and their means of delivery in the hands of unsavory and hostile states pose an urgent threat. After all, could not our friends and partners be targeted by these NMD as easily – in some cases, even more easily – than ourselves? Of course, the U.S., with its wide-ranging foreign commitments, is a particularly attractive target for rogue-states. But I believe that several other factors also account for the lack of a common view of the perils of NMD. First, European nations, especially, do not have the same expectation of a near-invulnerability from foreign threats that we do. For them, a certain level of danger seems normal. Second, these nations tend to view threats more broadly than we do, as both military-technical *and* political (for example, we have noted earlier how both the Administration and the NIC have collapsed the rogue-nation ICBM threat into its purely technical dimension). For our partners, intentions count at least as much as capabilities. Finally, the U.S., although the mightiest nation on Earth, sometimes tends to regard itself as dealing from weakness. This causes us to discount inappropriately the enormous risks another state would be running by attacking U.S. territory.

[25] See, for example, Becker, Elizabeth and Schmitt, Eric, "Delay Sought in Decision on Missile Defense," New York Times, January 20, 2000, p. A1.

[26] ABM Treaty, Article XV, Paragraph 2.

control agreements. Only the U.S., Russia, Ukraine, Belarus and Kazakhstan are parties to the ABM Treaty. But the many other countries that either oppose or are indifferent to the U.S. desire to deploy NMD would be unlikely to agree that our "supreme interests" required us to take the extremely unusual step of withdrawing from a major treaty. Where, they would ask, is America's commitment to arms control if it cannot live with the ABM Treaty? How, they would wonder, can we take U.S. support for other arms control measures – or, for that matter, for any solemn international agreement -- seriously if Washington is apt to decide at any time to withdraw from agreements it no longer finds convenient?

II. Relations with Great Powers

Another area of national security strategy that would be harmed if we deployed NMD is our relationship with other great powers, Russia and China. Russia, of course, would be offended by our withdrawing from the ABM Treaty. China also opposes NMD. Deploying national missile defenses would at once worsen our relations with Moscow and Beijing while driving the two of them – who already share a resentment of American "hegemony" -- closer together. Since our *rapprochement* with China in the late '70s, it has been a principle of U.S. foreign policy that, as Henry Kissinger puts it, the United States should always have better relations with both Russia and China than these two have with one another.[28] NMD deployment will help put this principle in danger. It may also harm U.S. interests in another way, if Moscow and Beijing collaborate in developing

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[27] Slocombe, *op cit.*
[28] See, for example, Kissinger, Henry, Diplomacy, Simon & Schuster, New York, 1994, p. 729.

countermeasures to NMD (according to some reports, such cooperation has already begun).

NMD deployment could also give new energy to an arms race between the U.S. on one hand, and Russia and China on the other. China, especially, might see the need to expand its nuclear arsenal as a response to NMD. Chinese officials have already stated that they "would go all out to build a force that was strong enough to get through."[29]

But do the Chinese and the Russians really have anything to fear from NMD? Aren't they over-reacting? In fact, NMD would seem to be tailor-made to negate China's ICBM force, which now consists of around 20 single-warhead missiles.

On the other hand, Russia's ICBM arsenal – consisting of approximately 1,000 strategic ballistic missiles with 4,500 warheads – is well beyond the reach of even the most elaborate NMD now contemplated. Because of this, proponents of NMD in the U.S. administration and elsewhere argue that it poses no threat whatsoever to Moscow, which should, therefore, allow it to be deployed.

This argument, however, ignores the issue of "breakout" from the ABM Treaty – that is, the possibility that NMD's "thin" missile defense might provide the basis upon which a much more capable system, one that *would* threaten the Russian strategic deterrent force, might quickly be built. "Breakout" was an important concern of the drafters of the ABM Treaty and accounted for several of its important features. These include the prohibition of "providing a base" for a national missile defense[30] and for the treaty's various elaborate restrictions on sensors (because sensors, once in place, can serve a "thick" ABM system just as well as a "thin" one).

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[29] Fitchett, Joseph, "Chinese Nuclear Buildup Predicted," International Herald Tribune, November 6-7, 1999, p. 1.

Of course, one could argue that we may safely ignore Moscow's fears. Russia is too poor to respond to an American NMD by increasing the size of its nuclear arsenal or by modernizing it to the extent required to penetrate the denser missile defenses it fears we may one day build. But Russia could again grow wealthier and, if it does not but still fears NMD, may seek asymmetric means of defeating it – and Moscow, with its extensive military-technological experience, is in a good position to do so. At least one high-ranking Russian officer has stated that Moscow would take precisely such an "asymmetric" approach to the deployment of American NMD.[31]

In evaluating Russia's concern about ABM breakout, it is useful to recall that, in the 1980s, the United States repeatedly accused the Soviet Union of laying the basis for breaking out of the ABM Treaty. According to U.S. claims at the time, Moscow could use a combination of the (treaty-compliant) Moscow ABM site and a series of large, phased-array early-warning radars (LPARs).[32] If the United States feared breakout based on the hypothesis of such a far-fetched, tinkered-together system, how much more realistic must be Russian worries about break-out when they are faced with the prospect of a real national missile defense system? Moscow may find its fears about breakout confirmed by the statements made by some prominent American senators, who wish to keep open the option of deploying a much larger NMD system than now foreseen, one incorporating space-based laser weapons and ship-based defenses.[33]

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[30] ABM Treaty, Article I, Paragraph 2.
[31] Tyler, Patrick E., "Russians Approve Test Ban Treaty Rejected by U.S," New York Times, April 22, 2000, p. A1.
[32] Among the reasons that such a scheme was unlikely were the unsuitable locations of the LPARs for ABM battle management, their vulnerability to physical attack and their operating frequency, which both rendered them vulnerable to blinding by nuclear weapons' bursts and limited their resolving power.

III. Relations with Allies

Our NATO Allies have many of the same concerns about NMD already described – that it will induce an arms race, that it will call into question the U.S. commitment to arms control and its credibility in pursuing it, and that it will damage great power relationships. In addition, some Allies worry that NMD will "de-couple" the defense of the U.S. from that of Europe.[34] It is a basic principle of NATO, as embodied in Article 5 of the North Atlantic Treaty, that the security of the Alliance is indivisible. NMD, however, is intended to protect only the territory of the United States, leaving that of Europe vulnerable to attack.

This fear is made more acute by the fact that NMD will rely on radars stationed on the territory of European allies, in Greenland (owned by Denmark) and Great Britain. This opens the prospect of a rogue attacking these unprotected European sites in an attempt to defeat NMD.[35]

IV. Reading the Scales

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[33] Becker, Elizabeth and Schmitt, Eric, "G.O.P. Senators Tell Clinton They Oppose Him on ABM Treaty and Defense System," New York Times, April 22, 2000, p. A5.

[34] Drozdiak, William, "Possible U.S. Missile Shield Alarms Europe," Washington Post, November 6, 1999, p. A-1.

[35] An opposite point of view holds that NMD will actually tighten the "coupling" between the United States and its European Allies. According to this argument, a U.S. President might, under some circumstances, be deterred from coming to the aid of Allies because of the fear of rogue-nation ICBMs being launched at the U.S. if he does so. NMD, proponents of this argument claim, would diminish this fear and thus restore the President's freedom of action. The Allies themselves do not appear to accept this argument, perhaps with good reason. As we will see, below, if the President should, indeed, be deterred from acting because of the threat of rogue-nation ICBMs, NMD would be unlikely to restore his peace of mind.

On balance, then, the situation is as follows: in exchange for a highly uncertain – and perhaps non-existent – degree of protection from rogue-state missile attack afforded us by NMD, the U.S. will suffer real damage to its efforts to establish and maintain arms control regimes, to its relationships with other great powers and to the cohesiveness of the Atlantic Alliance. Nor are these peripheral or minor interests – they are, in fact, the blood and bone of America's national security strategy. The bottom line? National Missile Defense is significantly more likely to decrease America's overall security than to enhance it.

Part Four: Thinking Strategically About Rogue-Nation ICBMs

But if NMD is not the way to deal with the rogue-nation ICBM threat, what is? Do we simply have to abandon any hope of dealing with this threat in favor of the greater good of our overall security strategy? Can we not make ourselves safer against the rogue-state threat in a way that strengthens, rather than undermines, our general security? Put another way, how should we think *strategically* about the rogue-nation ICBM threat?

I. What Would Be Better Than NMD?

Let's start by establishing reasonable criteria for judging any proposed alternative strategy to NMD. First, if a proposed strategy offers a degree of security against rogue-state ICBMs comparable to that enjoyed by the U.S. against the Soviet and Chinese ICBM threats during the Cold War, then that strategy can be considered an acceptable

alternative to NMD (because if we *could* attain this degree of security, we would have no more reason to deploy NMD against rogue-states than against Russia or China). Second, if, in addition, the proposed alternative strategy avoids the strategic costs of NMD we have explored, or if it offers a degree of protection against a broader range of threats than ICBMs, it can fairly be deemed *superior* to NMD. But what sort of strategy might meet one or both of these criteria?

II. Deterrence and Rogue-States – In Theory

Our search for an alternative to NMD should begin with a consideration of deterrence. This is a crucial topic because our ostensible inability to deter rogue-states in the way we deter Russia or China is a fundamental argument used in favor of NMD. After all, if rogues can be deterred, nobody is better placed to do so than the United States, with its long experience in strategic deterrence, its ability to project power around the globe and its full range of military responses, from conventional to nuclear. But is it true that rogues cannot be deterred?

Before answering this question, let's review some of the fundamentals of deterrence theory.[36] First, deterrence exists *only in the mind of an adversary*. Whatever steps we may take to deter our foe, if he doesn't feel deterred, then he isn't. It follows from this that there is no such thing as absolute deterrence – an adversary may feel deterred at one time and not at another, or in one set of circumstances and not in another.

[36] There are many works on deterrence theory. Good summaries of the issues discussed here are contained in Rhodes, Ed, "Review of Empirical Studies of Conventional Deterrence," Center for Global Security and Democracy, Rutgers University, 1999 and in Gray, Colin S., Explorations in Strategy, Praeger Press, Westport, Connecticut, 1998, Chapter 3.

Second, there are two basic types of deterrence. "Punishment deterrence" dissuades an adversary from attacking us because he fears the damage we may do to him if he does attack. "Denial deterrence" dissuades an attack by persuading an enemy that he will not attain his war goals, at least at an acceptable cost.

Moreover, our ability to deter is strengthened by our capability to make good on deterrence's threat – i.e., our ability either to mete out punishment or to deny the enemy his goals – and is weakened by previous vacillation. Our ability to deter a specific adversary probably depends less on our overall military capabilities than on our ability to apply military power against him, specifically. Finally, nuclear deterrence, with its huge destructive power, is probably a more powerful deterrent threat – when it can be made credibly – than deterrence with conventional forces.

Analyzing deterrence is difficult and, inevitably, somewhat subjective because it is psychological – that is, because it exists only in the adversary's mind – and because we can usually only tell when it fails. After all, if deterrence succeeds, there is no war, but we may not know why. Perhaps we deterred the adversary, or perhaps he never intended to attack us in the first place, or perhaps ….? It may seem odd that the United States has entrusted so much of its security over the past decades to so ineffable a concept as deterrence, but there it is. We are willing to bet that it works. Will it work against rogues, too?

Many proponents of NMD believe that it will not. They argue that the leaders of North Korea, Iraq and, perhaps, Iran are fanatics who hate the West in general and the United States, in particular. These leaders do not care how many of their people are killed so long as they are able to harm the U.S. Moreover, they argue, these countries are

culturally very different from the U.S. and we cannot predict how they will react to various stimuli, including those actions that might deter others from war.

These arguments are plausible – for example, North Korea is now undisputedly the world's most bizarre country. But how well do these plausible arguments hold up against the known facts? First, the argument that rogues are culturally different from the U.S. is true, but it is also true for China and Russia. After all, the Soviet Union was a semi-Asiatic state with an ideological commitment to put an end to the U.S. system. Few in the West disputed Churchill's statement that Russia was a "riddle wrapped in a mystery inside an enigma." As for a willingness to see one's country destroyed, Mao notoriously professed to interviewers that he welcomed nuclear war as a solution to China's excess population. And yet, we were and are content to deter Moscow's and Beijing's strategic nuclear forces.

Actually, ICBMs of the type likely to be developed by North Korea, Iran and Iraq over the coming years have several features that should make them easier to deter than some other threats (for example, terrorist attacks or WMD delivered by ship). First, few countries are likely to develop ICBMs and WMD warheads for them, because of their cost and complication. Second, for the same reasons, non-state actors such as terrorists – a category that probably includes the types of people least capable of being deterred -- are unlikely to acquire ICBMs. Finally, it is always possible to tell where an ICBM came from. He who fired it cannot hope to conceal the fact that he did so.

Moreover, although deterrence is a complicated subject, the basic requirements for deterring somebody by the threat of really serious destruction are quite simple: he must not be suicidal and he must be able to calculate risks rationally. For all our concern

about the cultural strangeness and fanaticism of rogue-state leaders, we really have to be most concerned about whether they meet these two basic requirements. Do they?

III. Deterrence and Rogue-States – In Practice

In fact, we do have some specific indications that both Iraq and North Korea – the latter being the most serious near-term ICBM threat, according to the NIC and to many analysts – can be deterred by the U.S.

In the case of Iraq, we can look to the Gulf War and Sadaam Hussein's decision not to use chemical weapons against coalition troops, despite the fact that he possessed them and had used them both in the Iran-Iraq War and against his own people. It is widely believed in the U.S. that Sadaam refrained from using chemical weapons because Secretary of State Baker threatened Iraqi Foreign Minister Tariz Aziz with destroying the Iraqi regime if Sadaam used chemical weapons against U.S. troops.[37] Sadaam may also have been deterred from using such weapons against Israel during the Gulf War because of his fear of an Israeli nuclear response. One indication that Sadaam feared Israel's nuclear capability is the set of discussions, reported by Israeli sources, aimed at chemical and nuclear disarmament between the two countries. These talks apparently continued until the end of August 1990, after Iraq's invasion of Kuwait.[38]

In addition to these examples of punishment deterrence, denial deterrence may also have been at work. The elaborate countermeasures taken by U.S. troops against a

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[37] For a first-person account of this episode, see Baker, James A., The Politics of Diplomacy, G.P. Putnam's Sons, New York, 1995, pp. 357-361.

[38] For a discussion of this topic, see Aronson, Geoffrey, "Hidden Agenda: U.S.-Israeli Relations and the Nuclear Question," Middle East Journal, Vol. 46, No. 4, Autumn 1992, p. 617.

possible chemical weapons attack may have persuaded Sadaam that using such weapons would not aid him in reaching his war goals.

Turning to North Korea, we can see that, however foul and bizarre the Pyongyang regime may be, nothing in its actual behavior suggests that it is either suicidal or irrational in the sense of being unable to weigh risks and benefits. Pyongyang's behavior leading up to the negotiation of the 1994 Framework Agreement is frequently described as a successful act of blackmail – galling to us, but hardly a sign of irrationality. Given how close the United States was reported to be in 1994 to launching a pre-emptive attack against North Korean nuclear facilities, we may fairly conclude that the threat of conventional war weighed in Pyongyang's decision to agree to the Framework Agreement – another sign that the North Korean government can be deterred. Finally, the fact that North Korea has not launched another invasion of the south since the Korean War is probably due, at least in part, to Pyongyang having been deterred by the presence of U.S. and South Korean troops prepared to repel any such attack.

It appears, therefore, that the rogue-states in which we are most interested *can* be deterred, at least in principle. In fact, one of the several reasons that "rogue-state" is a misleading label is that it may delude us into believing that a state that flouts international norms of behavior must also flout the laws of self-preservation. As we have seen, this is just not true.

The fact that North Korea and Iraq can be deterred doesn't mean that there could never be an undeterrable rogue-state, only that these states that we must take into consideration when formulating our strategy do not fall into this category. Nor does it mean that even these states will always be deterred, in all circumstances. But it is not

necessary, in order to have faith in a policy of deterrence, that an adversary could not, under any circumstances, behave in an irrational or desperate manner. This certainly was neither true nor required in order for us to rely on U.S.-Soviet strategic deterrence. At most, it reminds us that deterrence is always a potentially fragile thing.

Some proponents of NMD use a different argument. This line of reasoning acknowledges that rogue-states can be deterred, but asserts that NMD will strengthen that deterrence. For example, Undersecretary of Defense Slocombe[39] maintains that

> Missile defenses, for their part, can convince an adversary that there is little or no chance of accomplishing the intended political or military objectives of an attack, or threat of an attack. Missile defenses further complement deterrence by enhancing the U.S. ability to fulfill its global security commitments to allies and friends. Defenses render less credible any possible attempts by an adversary to threaten or coerce the United States with ballistic missiles armed with weapons of mass destruction.

The first part of Slocombe's argument, that NMD can persuade a rogue-state that it cannot attain its war goals, confuses the two basic types of deterrence. Slocombe is maintaining that NMD will provide <u>denial</u> deterrence. As we have seen, however, rogue-state ICBMs are not war-fighting weapons; they are useful only as deterrents. In using ICBMs, therefore, rogue-states would have no war goals that we could seek to deny them through NMD. Even if NMD intercepted all incoming warheads, it would not have denied the rogue a war goal, for he had none he was seeking to attain with ICBMs. <u>Punishment</u> deterrence is the only kind relevant to a foe armed with deterrent ICBMs.

IV. Deterring the United States

[39] Slocombe, *op cit.*

But what about the second half of Slocombe's argument, that NMD will make it more difficult for rogue-states to coerce the United States by threatening to use WMD against American territory? Here the question is how easily the United States, not rogue-states, can be deterred.

In fact, even with an NMD system in place, the United States would be prey to coercion by a credible threat of a rogue-state ICBM attack on U.S. territory. As we have seen, no American President could be confident that NMD would prevent a certain number of warheads from detonating in the U.S. Bernard Brodie pointed out that each additional unit of damage threatened brings progressively diminishing increments of deterrence.[40] Put another way, the greatest deterrent effect in a President's mind will occur when he must make the choice between having no American cities destroyed and risking having one destroyed. Compared with this terrible decision, the difference between, say, losing 19 and 20 cities is *relatively* meaningless. So it is the prospect of the first one or several warheads penetrating that would have the greatest deterrent effect on a President. And, as we have seen, no realistic NMD system can hope to remove that deterrent effect.

Moreover, wars with rogue-states are unlikely to involve American interests as vital as those that would have been at stake in a war with the Soviet Union. This makes it even less likely that an American President would accept the prospect of even a small nuclear attack on our territory. Like its promise to protect the American population, then,

[40] Brodie, Bernard, Strategy in the Missile Age, Princeton University Press, 1959, p. 276.

NMD's claim to restore a President's freedom of action in the face of a rogue-state armed with ICBMs is a chimera.[41]

V. A Strategy Against Rogue-State ICBMs

We are now in a position to develop a strategy against rogue-state ICBMs. It will be based on deterrence but, because deterrence may not last forever, we will also need a longer-term strategy to adjust differences of interest that could lead to war. In the Cold War, this longer-term strategy was containment, which called for the USSR either to collapse or to change its nature – which it finally did. Fortunately, protecting our more limited interests vis a vis the much smaller rogue-states will not require such a radical remedy.

Making deterrence more credible. Since we have established that deterrence *can* work in principle, the question becomes how to strengthen it in practice. Our current declaratory policy makes it clear that, if WMD were used against American territory, the U.S. would free to use any means, up to and including nuclear weapons, to wreak any level of destruction we chose in retaliation.

Strengthening deterrence further, however, is a challenge that presents several difficulties. First, the United States has renounced the possession and use of both chemical and biological weapons. However wise the decision to do so may have been on

[41] Of course, the fact that a President will be deterred by a threat does not necessarily mean that he will decide to do nothing in the face of it. President Bush had to reckon with a possible use of chemical weapons by Sadaam Hussein in the Persian Gulf, yet he still decided to pursue the war. The threat undoubtedly had a deterrent effect on Bush, but other factors outweighed it.

other grounds, renouncing these weapons did deprive us of the ability to retaliate, kind for kind, against their use by others.

This leaves us with conventional force and nuclear weapons. Nuclear weapons are, in principle, a powerful deterrent because of their great destructive power. It may, however, be difficult to persuade an adversary that we would actually use these weapons in response to an attack with chemical or biological weapons. Conventional forces have the opposite strength and weakness as a deterrent. A threat to use them in response to a WMD attack on the United States would be highly credible, but an adversary may believe that he and his regime could survive even a powerful conventional attack (the Gulf War might serve as a case in point to an adversary).

The riddle, then, is how to seal up the gap in our "deterrence spectrum" between nuclear and conventional deterrence. There is probably little that we can do to make the threat to use nuclear weapons more credible to an adversary – once we have said we're willing to use them, he will either believe it or he won't. We should concentrate, therefore, on persuading potential adversaries that even conventional retaliation would put at risk that which they hold most dear.

It is a commonplace that the destructive power of modern conventional weaponry approaches, and can even exceed, that of small nuclear weapons. We should concentrate our efforts on developing war plans that can allow us to cause this level of destruction to our potential rogue adversary, and on providing the resources necessary to carry out these plans. Doing so might require us to develop some additional types of conventional weapons of unusual destructive power.[42] In order to maximize the deterrent effect of our

[42] Some of this work would fall within the 1993 DoD "counter-proliferation initiative" which, in addition to passive and active defense against WMD threats, emphasizes conventional counter-force options, in

plans, we should not only announce our willingness to carry them out but also make potential adversaries familiar with them to the extent necessary for them to understand their likely effects.

Another way to make an adversary fear our retaliation would be to lift the present prohibition against assassinating foreign officials, for the sole case of those foreign officials responsible for a decision to employ weapons of mass destruction against the territory of the United States.

Before leaving this topic, I should point out that, in threatening to use nuclear weapons to retaliate for a WMD attack, we run up against an ambiguity in U.S. policy that could effect our ability to deter an adversary. Although the U.S. reserves the right to use nuclear weapons in such cases, it also offers so-called "negative security assurances" – assurances to states that have no nuclear capability and that are members in good standing of the Nuclear Non-Proliferation Treaty (NPT) that the U.S. will not use nuclear weapons against them.[43] It is conceivable that a rogue possessing, say, biological weapons but no nuclear weapons might feel himself immune from a nuclear response by the U.S.

Isolating the foe. Yet another possible step would be to seek to make clear to rogue-states that they would be utterly isolated if they used WMD against the United States. For example, we would try to persuade Russia and China to inform North Korea that, if it used WMD against any other state, it could expect no diplomatic support whatsoever from them. As part of our argument to Moscow and Beijing, we could

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particular against hardened or underground targets (see "Proliferation: Threat and Responses," Office of the Secretary of Defense, November 1997, pp. 71-74).

[43] See, for example, Binnendijk and Kugler (eds.), "Strategic Assessment, 1999," National Defense University, Washington, DC, pp. 285-286.

remind them that this is a small price for our forgoing the hated NMD. We could sweeten the pot by making similar undertakings to Russia and China (this might be particularly attractive to China against the possibility of India using nuclear weapons against it).

Of course, we would also want our NATO Allies to express their support for our policy of retaliation, including possible nuclear retaliation, against countries that use WMD against American territory. Such an undertaking would be fully in keeping with Article 5 of the North Atlantic Treaty and, as with Russia and China, we could remind the Allies that their support is a prerequisite for our abandoning NMD.

Formulating war goals. Strengthening deterrence might also require us to modify our goals in any war with a rogue-state. If, for example, we intend to deter North Korea by threatening its regime with destruction if it uses WMD against us, then the reverse side of the coin must be that, if Pyongyang refrains from using WMD, then we will stop short of replacing the regime. Of course, we would not like to lose the option of putting an end to the Pyongyang government, but the need to do so would simply be an unhappy fact of life created by the existence of North Korean ICBMs. As we have already seen, nothing – including NMD – can restore to us the full freedom of action we want.

The role of an embassy. Re-establishing diplomatic relations with rogue-states can also be an important step in strengthening deterrence and avoiding war. There is nothing idealistic or sentimental in this concept. Diplomatic relations are not a seal of approval of a regime; they exist so that two countries can do business – and with an adversary armed with ICBMs, we have business of the gravest sort. It is perfectly possible to have poor diplomatic relations with a country. The fact is that, when we have

an embassy in another country, we are in a better position to manage crises, gather information, understand our adversary's programs, motivations, risk-calculus and its likely behavior in a crisis – and thereby strengthen the stability of deterrence and diminish the chance of miscalculation in a crisis by either side. From this perspective, it is ironic that we have no diplomatic relations with any of the rogue-states of greatest interest – North Korea, Iran and Iraq. Of course, a restoration of diplomatic relations is not entirely up to us and may not be practical at the moment. We should understand, however, why restoring relations with all these countries must be a high medium-term priority for the United States.

VI. Moving Beyond Deterrence

Nothing we have proposed up to this point requires either good relations with the rogue-states in question or that they change their nature or behavior. Of course, if they stopped being rogues, that would help matters enormously. Short of that, we can set ourselves the longer-term goals of adjusting, through diplomacy, whatever differences existing between us might lead to war. Let me be clear. Accomplishing this does not depend entirely on us – both parties must be ready for serious negotiations in order for such a policy to work. Such a diplomatic policy may prove to be impossible in some cases, or not yet ripe in others. We are talking about long-term goals that we set ourselves in order to have a vision of the end-point we desire, not ones we can reach tomorrow. But it is important to remain alive to the possibility of moving beyond deterrence for the simple reason that it may not work forever.

An example of this sort of future-oriented policy is the ambitious diplomatic program toward North Korea proposed by former Secretary of Defense William Perry.[44] Perry foresees moving beyond the 1994 Agreed Framework toward a broader settlement of differences between Washington, Seoul and Pyongyang. The Perry program, which includes nuclear, economic and political elements, would proceed in a step-by-step and reciprocal manner with the aim of restoring productive relations among the U.S., North Korea and South Korea.

In the Persian Gulf, our long-term political goal should be to move toward restoring the balance of power in the Gulf between Iran and Iraq – the centuries-old basis for stability in the region. Any improvement of relations between the U.S. and Iran, for example, would be certain to be registered immediately in Baghdad, perhaps even resulting in more flexibility in Iraq's stance toward us – might this include even matters touching on WMD and their delivery systems? The U.S. would aim at returning eventually to holding the balance of power in the Gulf, a less arduous role than its current task of "containing" both Iran and Iraq.

Regarding WMD possessed by Iran and Iraq, one approach would be to press Israel harder to join the Nuclear Non-Proliferation Treaty and to give up its nuclear weapons as part of an overall peace settlement in the near east (perhaps in conjunction with U.S. conventional guarantees to Israel). This is, no doubt, a radical idea, but no more radical than NMD itself, and more in keeping with our broader strategic interests. For example, if we pressed Israel to de-nuclearize itself, we would help to de-fang the argument of the Arab world and Iran that we have a double standard when it comes to

[44] Perry, William J., "Review of United States Policy Toward North Korea: Findings and Recommendations," Washington, DC, October 12, 1999 (available from Department of State web site).

preaching nuclear non-proliferation. The pre-Gulf War Israel-Iraq disarmament discussions cited earlier suggest that this proposal may not be hopelessly quixotic.

VII. Alternative Strategies – Summing Up

The alternative strategies outlined above are not a quick fix. They will require hard diplomatic slogging and continued military vigilance. They are not a guarantee that WMD will not be successfully used against the United States by rogue-states. But, as we have seen, nothing – including NMD – can provide such a guarantee.

But these strategies can reasonably promise an acceptable level of security, based on deterrence and diplomacy, against rogue-state ICBMs while working with, rather than against, our broader strategic interests. Moreover, as broader policies than NMD, they offer some promise of protecting the U.S. against threats other than ICBMs – for example, WMD delivered by alternative means, against which NMD will be impotent.

But why, it might be asked, not do it all? Pursue these proposed strategies *and* deploy NMD. Wouldn't this provide even more security? The problem is that, as we have seen, deploying NMD undercuts rather than strengthens our national security strategy. The combination of NMD and our proposed strategy is less, not more, than the sum of its parts.

One last question is worth asking. If NMD runs counter to U.S. interests, what accounts for its enduring fascination? There are several possible answers to this question. One of them, in particular, is usually neglected. To explore it, we must leave today's

debates over issues of technology and strategy and enter the deeper currents of American tradition and temperament.

Part Five: Conclusion – National Missile Defense and American Culture

In 1796, George Washington published his farewell address to the nation. In what was to become the classic expression of the invulnerability from external threats provided America by its geography, Washington described the interests and conflicts of European states, then observed that "our detached and distant situation invites and enables us to pursue a different course." "Why," he asked, "forgo the advantages of so peculiar a situation?"

The surprise attack on Pearl Harbor, followed within several years by the development of the intercontinental bomber and the long-range ballistic missile, made Americans aware that the two oceans surrounding them no longer provided the near-absolute security upon which Washington urged them to base their foreign policy. Today, we long to restore our lost invulnerability and, true to our American tradition of distaste for the affairs of the world, we shun the ambiguities and intangibles of politics and turn instead to the seeming certainties of technology.

National Missile Defense taps another vein of American tradition, as well, that of retreating from the corruption of the outside world behind a ring of purely defensive weapons. This current can be traced back to Thomas Jefferson, who mistrusted the "offensive" army in favor of the "defensive" navy and put his faith in defensive coastal artillery. It reemerges in the isolationist idealism of the inter-war period, in the ever more

casuistic and futile efforts to distinguish “defensive” weapons from “offensive” ones and to ban the latter.

And so the paradoxical nature of National Missile Defense emerges. A technological approach that seems so modern, even futuristic, is actually backward looking and nostalgic. An ambitious weapon that appears to be the quintessence of internationalism and realism, with its search for greater freedom of action in the international arena and its finely calculated kill probabilities, turns out to have its roots in isolationism and idealism.

In fact, the invulnerability from attack Washington celebrated never really existed. As he wrote his farewell address, the United States was less than twenty years away from involvement in yet another world war, to be fought partly on American soil. The recently defeated British watched mistrustfully from across the Canadian border, while Spain controlled vast lands to the west and south, as well as the sea approaches to the southeast.

For more than a century, Washington’s successors would face these challenges with sword, treaty and the purse. These, the classic tools of statecraft, finally established American supremacy across much of our continent and it is in these that we must continue to seek our security today. In these, and not in the hope for a technological miracle designed to return us to a non-existent golden age – a goal which, like the cool waters that tormented the thirsting Tantalus in the old Greek story, must remain forever just beyond our reach.