

Is There a Need for a CONUS Based National Missile Defense System to Protect the United States Against Intercontinental Ballistic Missiles in the 21<sup>st</sup> Century?

MCWAR 1994

Subject Area National Military Strategy

MARINE CORPS WAR COLLEGE  
MILITARY ISSUES PAPER

IS THERE A NEED FOR A CONUS BASED NATIONAL MISSILE DEFENSE SYSTEM  
TO PROTECT THE UNITED STATES AGAINST INTERCONTINENTAL BALLISTIC  
MISSILES IN THE 21ST CENTURY?

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20 MAY 1994

SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE

MARINE CORPS WAR COLLEGE  
MARINE CORPS UNIVERSITY  
MARINE CORPS COMBAT DEVELOPMENT COMMAND  
QUANTICO, VIRGINIA 22134

# Report Documentation Page

*Form Approved  
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>1994</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-1994 to 00-00-1994</b>	
4. TITLE AND SUBTITLE <b>Is There a Need for a CONUS Based National Missile Defense System to Protect the United States Against Intercontinental Ballistic Missiles in the 21st Century</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>United States Marine Corps, Command and Staff College, Marine Corps University, 2076 South Street, Marine Corps Combat Development Command, Quantico, VA, 22134-5068</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>34</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## Executive Summary

This is an unclassified review of the debate on the necessity to develop and field a ballistic missile defense system for the continental United States. Initially, the paper recounts the rationale for the doctrine of Mutually Assured Destruction (MAD) which was the U.S. approach to defense against the massive nuclear arsenal of the Soviet Union. The paper next reviews the threat environment in 1994 and the ongoing world-wide proliferation of weapons of mass destruction (nuclear, biological, chemical). A description of the proposed "Limited Defense System" for continental protection of the U.S. is followed by a review of present U.S. ballistic missile defense policy and budget. The paper concludes by evaluating the current situation and recommending a prudent course of action for U.S. policy makers, i.e., the projected threat environment warrants deployment of a limited defense system as soon as technology permits.

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## INTRODUCTION

A discussion on the need, and the means, to protect the continental United States from ballistic missile attack, can stir a fierce debate. At one end of the spectrum is the rationale for the use of pre-emptive strikes in lieu of a national defense system. At the other extreme is the rationale for "no defensive measures" because there is no perceived threat. The situation that we face today in the very late 20th century has not been faced by previous national policy makers. The world environment today is one of global reach, rapid technological development and regional unrest. Global reach refers to the expanding global economy, the sudden global mobility of people and equipment, the rapidly expanding global information networks, and the evolving ability of nation states (regardless of economic or geographic size) to threaten any Nation on the globe. These factors underscore the gravity of decisions made today by U.S. policy makers to protect the American homeland and society in the future. The causes of regional instability are well known by U.S. policy makers today: weapons of mass destruction (nuclear, biological, chemical), conventional terrorism, civil war, famine, disease, and ethnic violence. Complicating this situation is the knowledge that as a nation we can only affect our strategic defensive and offensive capabilities in the long run, i.e., 10-15 years. In the short run only marginal changes are possible. Because we already have a design architecture today, the deployment of a capable strategic defensive system could be completed in about 10 years, given required commitment of national resources. What follows is a limited review of the debate on this issue based on available unclassified sources.

## Part I

### **Was there ever a ballistic missile threat to the USA? If yes, how did we counter it?**

At the height of the "Cold War" the Union of Soviet Socialist Republics (USSR) possessed enough nuclear tipped intercontinental and submarine launched ballistic missiles to destroy the U.S. several times over. The Soviets, we now know, clearly had over 13,000 nuclear warheads that could be delivered onto the continental USA using both ICBM's and SLBM's.<sup>1</sup>

If the Soviets had launched such an attack, what were our options? First, there was no protection against those incoming ICBMs or SLBMs. That is, there was no way to stop them. The only ABM system that the US ever deployed, SafeGuard, fell victim to a US/USSR ABM Treaty Protocol in 1974. Initially, the SafeGuard plan called for up to twelve sites, deployed in two phases. The first phase, for which congressional authorization was originally granted, provided defense for US Minuteman ICBMs at Grand Forks Air Force Base, ND, and at Malstrom AFB, MT., with a Ballistic Missile Defense Center at Cheyenne Mountain, CO. However, as a result of the successful negotiation of the Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty) with the Soviet Union in May 1972, only the first phase was to be built. Following the signing of a protocol to the ABM Treaty in 1974 that limited both the USSR and the US to a single ABM site each, the Grand Forks site was completed but the Malstrom site was dismantled. The Grand Forks site achieved full operating

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<sup>1</sup> Lora Lumpe, Lisbeth Gronlund, and David C. Wright. 'Third World Missiles Fall Short.' The Bulletin of the Atomic Scientist, 48 (Mar. 1992): 30-32.

capability in April 1975, but was eventually inactivated in 1976. Congress ordered the site inactivated because it deemed a single site to be too costly to justify continued operations, and perhaps most importantly, because of a new Soviet ICBM missile that was now carrying multiple independently-targetable reentry vehicles.<sup>2</sup> An understanding developed in the late 1960s and early 1970s that the technology was not yet available to defend against a massive attack envisioned from this new missile threat.<sup>3</sup>

Prior to 1983, US emphasis was on a massive retaliatory capability serving as a strategic deterrent. The approach was based on retaliation, revenge, and mutual vulnerability. The concern was to counter the threat of a massive scale "all out attack" from the Soviets with an immediate US response of greater nuclear destruction. This became known as the doctrine of "Mutually Assured Destruction" or MAD. However, it did not take into account the possible cases of an unintentional nuclear strike or an accidental launch and attack; that is, an errant mechanical or electrical launch or the decision by a dissident military or political group who wished to take things into their own hands.

Deterrence was not then, and is not now, the answer to either the accidental or unintended attack. During the period of the MAD doctrine the U.S. did not possess the

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<sup>2</sup> Public Affairs Office. "US Army Strategic Defense Command History". USASSDC Publication. July 1989.

<sup>3</sup> Jeffery Simon. Security Implications of SDI - Will We be More Secure in 2010? Washington DC: National Defense University Press, 1990. 7.

capability to protect itself from these latter threats and today still does not possess such a capability. Interestingly, in 1993 more than 70 percent of the American people believed that the U.S. possessed a capability to defend itself against ballistic missile attack.<sup>4</sup>

## Part II

### The Threat

"Revenge takes forty years; if not my son, then the son of my son will kill you. Some day we will have missiles that can reach New York."<sup>5</sup>

Abul Abbas, PLF leader reacting to US initiatives in the Gulf War, Feb. 1991

What will the threat be in the 21st Century? Clearly the "New World Order" that President Bush spoke of following the fall of the Soviet Empire was not initially envisioned by many to include the global dangers and uncertainty that now present themselves. The invasion of Kuwait by Saddam Hussein in August 1990 and the resulting Persian Gulf War of 1991 quickly focused world leaders on the reality that the cold war concern about regional conflicts expanding into global conflicts did not disappear with the demise of the Soviets. New threats were emerging throughout the world that previously had been only associated with the Soviets and their proxy states: weapons of mass destruction (chemical, biological, nuclear) and the means to deliver them. By December 1993 more than 30 nations, including Third World countries, had

<sup>4</sup> Lt. Gen. Donald M. Lionetti. Speech presented to AUSA Conference. Arlington, Virginia, 1 July 1993.

<sup>5</sup> Lionetti, 1.

tactical ballistic missiles that could be used to disrupt any US buildup or to intimidate regional allies. This recognition prompted Congress and both Presidents Bush and Clinton to give theater missile defense (TMD) programs high priority in DOD planning and budgeting. However, defense of "Homeland" USA against ballistic missiles did not share the same priority as TMD because the threat was not seen to be present nor immediately on the horizon.

The chances of a massive ballistic missile attack on the United States by the Russians is certainly very low today, and the Peoples Republic of China will probably not attempt to use their limited number of ICBMs against the U.S. However, a limited strike against the US through an accidental launch or a launch by a disheartened militant group in either country cannot be ruled out. While this threat may seem a bit more plausible than the intentional launch from either nation, it is still low. But the unstable Third World has clearly demonstrated a willingness to use missiles against any and all targets, as seen during the Iran-Iraq war in the 1980s.<sup>6</sup>

The director of the Central Intelligence Agency, James Woolsey, stated during his confirmation hearings:

Over the next ten years, we're likely to see several Third World countries at least establish the infrastructure and develop the technical knowledge that's necessary to undertake ICBM (Intercontinental Ballistic Missile) and space launch vehicle development. A shortcut approach that's prohibited by the Missile Technology Control Regime and by the nonproliferation treaty would be for such Third World countries to buy ICBM's or major components covertly, either with suitable nuclear warheads or fissile materials.

Speaking on the same subject in the December 1993 issue of Army magazine, the

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<sup>6</sup> Donald M. Lionetti. "The Shields and Swords of a 21st Century Army". Army. Dec. 1993, 18.

Commanding General of the U.S. Army Space and Strategic Defense Command stated, "...The issue, then, is when technology will proliferate. And the heart of the matter is, will we have the national resolve and commitment to deploy at least a preliminary defense *before* we are threatened by a Third World ICBM? Most Americans believe that we can defend ourselves against intercontinental ballistic missiles. We cannot."<sup>7</sup>

In an address to the National Defense University on 25 March 1993, Secretary of Defense Les Aspin listed the "Principal Dangers" facing the U.S. and the world:

- \* Regional Instability
- \* Nuclear Proliferation
- \* Reversal of Democracy
- \* World Economics.

In a subsequent address on 13 May 1993 on announcing the realignment of the Strategic Defense Initiative Office (SDIO) to become the Ballistic Missile Defense Office (BMDO), Secretary Aspin listed the BMDO's "Missile Defense Priorities:

- \* Theater Missile Defense
- \* Ground-Based National Missile Defense
- \* Follow-on Technology for Both Tactical and Strategic Defenses

While clearly the National Missile Defense effort was recognized as a priority, it subsequently was reduced from Program Status to a Technology Readiness Program following the 1993 Bottom-Up Review, released in August 1993.

Jack Anderson and Michael Binstein underscored the remarks of Director Woolsey in their 20 February 1994 article on nuclear proliferation, "Nuclear Proliferation: There for the Taking". Anderson states that scientists at the Los Alamos, NM, nuclear lab

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<sup>7</sup> Lionetti

believe that nuclear weapons being developed around the world should be stamped "Made in the USA". "By using unclassified U.S. nuclear technology dating back as far as World War II, foreign scientists - - many of whom apprenticed in the United States - - are coming closer each day to developing weapons that one day may be aimed at the West".<sup>8</sup> An American scientist and former inspector of the Iraqi nuclear facilities outside Bagdad, John Phillips, referred to in Anderson article, notes that Third World scientists often use published information about nuclear weapon components to draw up their own blueprints. He states, "Many of the libraries where nuclear weapons information is stored are now accessible by on-line computers. One of the things that concerns us is that a lot of this stuff has been collected (at the International Atomic Energy Agency) in Vienna."<sup>9</sup>

There are no arguments today that nuclear proliferation is not a problem. It is a serious problem that even the U.S. is having a difficult time combating at home. Many of the items that end up being used for nuclear developments come from U.S. companies that sell dual-use equipment such as lasers, machine tools, quartz crystals, and computers - - all essentials for a nuclear weapons program. There is growing concern that in North Korea items that qualify as dual-use can be found stamped "Made in the USA". On a recent U.N. inspection of Iraqi nuclear operations, Arnold Hakkila, American scientist from Los Alamos, ran into four of his former students from a course that he taught at Los Alamos on civilian nuclear reactor operations, accounting

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<sup>8</sup> Jack Anderson, and Michael Binstein. "Nuclear Know-How: There for the Taking." The Washington Post, 24 Dec. 1994. 07.

<sup>9</sup> Anderson

and control. All four were working at the Iraqi facility.<sup>10</sup>

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It must also be assumed that the friend to whom the U.S. provides information today or allows to develop a nuclear program unabated, may well be tomorrow's foe. On 19 February 1994, India launched a new 19-ton MRBM with a one-ton payload. This comes at a time when the U.S. is pressuring India to reduce or abort its medium-range ballistic missile (MRBM) program. The MRBM, designated the Agni, traveled a range of 1550 miles, giving it the capability of striking any city in neighboring Pakistan. India has fought three wars with Pakistan and fought China in 1962.<sup>11</sup>

In 1990 the U.S. passed the Pressler Amendment that cut off conventional military aid to Pakistan in an attempt to pressure it to reduce its nuclear program. Some argue that the amendment may have had the opposite effect, making Pakistan feel more dependent on its nuclear capability as it saw its conventional capability wane because of the US sanction. The Clinton Administration is now struggling with the issue of selling F-16's to Pakistan that were paid for before the Pressler Amendment was passed. As things stand now, Pakistan is clearly posturing its nuclear capability to deter Indian aggression. This of course heightens the fear that any of the two countries' various flashpoints could escalate into a nuclear showdown.<sup>12</sup>

On 22 December 1993, Representative Ronald V. Dellums (D-CA.), chairman of the House Armed Services Committee, released an unclassified report of a CIA analysis that he had requested on the potential ICBM threat to the U.S. The report summary concluded that Iraq, North Korea, Iran, and Libya all have the political support and

<sup>10</sup> Anderson.

<sup>11</sup> "India Tests Ballistic Missile". The Washington Post, 20 Feb. 1994, A44.

<sup>12</sup> "Nuclear Wake-Up Call." The Washington Times, 20 Mar. 1994, A14.

motivation to develop ICBMs that could strike the U.S., and that all but Libya would have the technical know-how within the next 15 years. However, the report noted that there was no evidence that any of them were working on an ICBM program at the present time. The agency cautioned that each of these countries was more likely to purchase everything, from complete systems to essential technologies, from nations with existing ICBMs, i.e., states of the former Soviet Union. None of these countries needed to develop ICBMs for their own protection but may do so for international prestige and to enhance their future bargaining positions. Within 10 years several Third World countries would establish the infrastructure and have the knowledge to build ICBMs. Competing demands for dwindling resources in Third World countries would most likely constrain their efforts to obtain ICBMs in less than 15 years.<sup>13</sup>

A 16 May 1994 article in the Washington Times supports the contention that Third World countries may indeed be able to purchase the nuclear components and technology that they seek from the former Soviet Union. Organized crime in Russia, systematically seeking control of 15,000 tactical nuclear warheads as a way to "hijack the state", is increasingly becoming an area of national and international security concern. In addition "132 pounds of highly enriched uranium, enough to make three weapons of Hiroshima size, had been seized (from organized crime) last April (1993) by the Russian security ministry in Izhevsk, 600 miles east of Moscow".<sup>14</sup>

Preceding the earlier mentioned CIA report by two years, a 1991 U.S. News & World

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<sup>13</sup> Thomas W. Lippman. "ICBM Threat to US is Called Slight". The Washington Post. 24 Dec. 1994. A9.

<sup>14</sup> New York. "Organized Crime Seeks Nuclear Arms." The Washington Times. 16 May 1994. A12.

Report article identified Libya, Iran, and North Korea as nations "queuing for the nuclear club". The technology being used by these countries to separate the explosive uranium isotope from uranium ore was a 50 year old technology no longer used by the U.S. or even looked for by U.S. officials as a means of developing nuclear weapons. This technology was provided to Libya by the Chinese and was only discovered following the Persian Gulf War of 1991.<sup>15</sup>

The 1992 issue of Facts On File Yearbook (FOFY) detailed an attempt by Libya to recruit two Russian nuclear scientists to work on the Libyan nuclear power program. The scientists refused the offer even though they were offered salaries of \$2000.00 per month, a generous sum by 1992 Russian standards. Both scientists were working at the Russian Atomic Energy Institute in Moscow. The FOFY also noted the seizure by German officials, announced on 22 January 1992, of a cargo of advanced U.S. technology apparently bound for Libya's strategic arms program. The reported seizure took place on 10 December 1991 at the Frankfurt airport after the U.S. had informed Germany that the equipment was "dual use" and could be employed in nuclear weapons production. The equipment apparently contained lasers that could be used in rocket construction and were addressed to the Libyan organization known to be working on the Libyan nuclear program. The cargo, from an American company, had been shipped through Amsterdam, then through Frankfurt, enroute to Libya.<sup>16</sup>

In an 11 May 1994 Wall Street Journal report, Victor Mikhailov, head of Russia's

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<sup>15</sup> Amy Bernstein. "Queuing for the Nuclear Club." U.S. News & World Report. 11 Nov. 1991, 16.

<sup>16</sup> "Libya - Russia Atomic Scientist Lured." Facts On File Yearbook 1992. The indexed Record of World Events volume LII. pg. 138-140.

Atomic Energy Ministry, is quoted during an interview exploring the security of Russia's nuclear materials. Russia's early claims of safe and secure nuclear stocks are now being tempered with reports of material losses and unaccountability.

Mikhailov said that he knew of three bomb-grade uranium thefts in 1993. He is quoted as stating, "Two cases involved low-enriched uranium and one involved high-enriched uranium that was stolen from our fuel fabrication facilities".<sup>17</sup> The seriousness of such a theft is only appreciated in view of the following:

A bomb would need under 100 pounds of the uranium isotope U235, enriched to a 90% concentrate, or about 13 pounds of the plutonium isotope PU235. It takes a long time and a lot of money to produce that much, but the techniques of bomb assembly are known. Builders with raw materials would have less need for scientists, and a 10-year project might be cut to 10 months.<sup>18</sup>

The loss of high grade plutonium is not confined to the states of the Former Soviet Union. In early May 1994 Japan acknowledged that it was unable to account for 154 pounds of plutonium.<sup>19</sup>

In a 1993 letter to Rep. Dellums, Rep. Glen Browder (D-AL) requested Dellums' approval of a report from Browder's committee, the Committee for the Inquiry Into The Chemical and Biological Threat. The committee's primary function was to detail the chemical and biological threat in the post-Soviet world. The report concluded, ". . .that at the same time as the demise of the Soviet Union with its sizable chemical / biological arsenal, the chemical and biological threat has increased in

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<sup>17</sup> Barry Newman. "Loose Nukes. Uranium, Plutonium, Who's Got the Goods?" The Wall Street Journal.

11 May 1994. A1 and A8.

<sup>18</sup> Newman.

<sup>19</sup> Newman.

terms of the widespread proliferation, technological diversity and probability of use."<sup>20</sup>

What was also clearly understood was that the biological and chemical agents identified by the committee could be delivered by ballistic missiles, tactical and medium range in the short run, and ICBM's in the long run. At the present time, beyond nuclear retaliation, the continental U.S. is defenseless against such threats. These remarks on Third World threats are tempered by analysts at the Federation of American Scientists and the Union of Concerned Scientists in Washington, DC. Both suggest that China is the only developing country that could possibly pose a genuine nuclear ICBM threat to the United States in the foreseeable future. Accordingly, fears of Third World missiles do not justify spending billions of dollars on missile defenses to protect the United States. Scientists Lumpe, Gronlund, and Wright argued in a March 1992 essay that a close look at the list of present and potential ICBM owners reveals few countries that are hostile to the United States. Additionally, they argued that the missiles that developing countries possess, or are likely to acquire in the near future, are of very limited range and accuracy. Furthermore they argued that many of the hostile countries have limited technical infrastructures and can only obtain missiles by buying them. The process of building an ICBM cannot be kept secret because flight testing is not only essential but intrinsically observable. As a result the United States would not be caught by surprise. The Missile Technology Control Regime (MTCR), established in 1987 and adhered to by 18 countries including the Former Soviet Union, prohibits the export of missiles with ranges greater than 300 KMs with a 500

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<sup>20</sup> U.S. Congress. House. Committee on Armed Services. Special Inquiry into the Chemical and Biological Threat. Report. 102d Congress., 2d Sess., 23 Feb. 1993. Washington. GPO, 1993.

pound payload. Also, nuclear warhead development is more difficult than missile development, i.e., just because a country has a missile does not mean they have a nuclear warhead.

Finally, they argued that motivation, cost and availability are key factors that do not support the threat of Third World ICBMs. Most developing countries that want missiles are motivated by regional tensions. For these countries, SRBMs and MRBMs are more important than ICBMs. Developing or purchasing missiles, especially ICBMs, is very expensive and few Third World countries have the resources to devote to this end.<sup>21</sup> in March 1992 Lumpe, Gronlund, and Wright examined Iraq, Iran, Cuba, North Korea, Syria, Libya and Afghanistan and found none of them close to producing or acquiring an ICBM capability. They argued that a hypothetical threat from the Third World does not justify the expenditure of billions of dollars to deploy a limited ABM system.

Notwithstanding these arguments, the fact remains that the North Koreans alone have two nuclear reactors that can produce enough plutonium to make roughly a bomb a month, and they are stalling international review of their operations. Additionally, their past record indicates that they will sell their nuclear expertise as well as nuclear weapons to anyone with cash. Sales of Scud missiles and other arms by North Korea to countries like Libya have netted them billions of dollars.

An example of what Third World countries are willing to pay for nuclear technology is evident by a reported offer to India from Libya. Libya offered India around \$15 Billion

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<sup>21</sup> Lora Lumpe Lisbeth Gronlund, and David C Wright. "Third World Missiles Fall Short." The Bulletin of the Atomic Scientists 48 (Mar. 1992): 30-40.

for access to its nuclear technology at the time of India's first nuclear weapon explosion. This was basically equivalent to India's national debt at the time.<sup>22</sup> While the Iraqi nuclear program has been derailed temporarily, other Third World countries have nuclear programs in progress and are receiving assistance from North Korea and China. China announced in October 1992 that it was going to build a 300-million-watt nuclear reactor in Iran. This reactor would produce enough plutonium to build several bombs per year.<sup>23</sup>

While nuclear weapons are of great concern, chemical and biological weapons and the technology to produce these weapons are proliferating at a greater rate. Chemical and biological weapons are not only cheaper than nuclear weapons but are also easier to produce and have devastating effects. Presently, a few hundred pounds of anthrax dispersed over a city can kill one million people at a cost of less than \$100,000.<sup>24</sup>

The availability and power of weapons of mass destruction will enhance the spread of these weapons and the technologies required to manufacture them.

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<sup>22</sup>Robert Jastrow and Max M. Kampelman. "Why We Still Need SDI". Commentary. Vol. 94 Number Six. Dec. 1992. 23-29.

<sup>23</sup>Jastrow.

<sup>24</sup>Jastrow

### Part III

#### **The "Limited Defense System" National Missile Defense**

The limited Defense System (LSD) architecture, referred to programmatically as the National Missile Defense (NMD) System for the defense of the United States, was set forth initially in the Missile Defense Act of 1991 (MDA). The national goal identified in this act for NMD was to deploy an anti-ballistic missile system, including one or an adequate additional number of anti-ballistic missile sites and space-based sensors, capable of providing a highly effective defense of the United States against limited attacks of ballistic missiles. The act required the initial fielding of a capability by 1996 or as soon as technology permitted.

The 1993 Bottom-Up Review (BUR) guidance and subsequent FY 94 defense authorization and appropriations bills reduced the effort to a Technology Readiness Program or "TRP". While the MDA called for fielding a system, the BUR and subsequent authorization and appropriations bills called for the development and maintenance of an option to field a NMD system, should the need arise. The mission statement briefed by the Ballistic Missile Defense Office (BMDO) NMD Project Officer states:

NMD Mission: Develop options for, and deploy when directed, an anti-ballistic missile defense system that is capable of providing a highly effective defense of the U.S. Homeland against limited attack of ballistic missiles.<sup>25</sup>

The key element in the TRP is the deployment decision point. Historically, the United

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<sup>25</sup> COL Ben Grimes. Interview, Ballistic Missile Defense Office. Pentagon. Washington DC: 18 Feb. 1994.

States does not present a good track record of anticipating a threat and preparing for it in a timely manner. Given the threat review in the preceding section of this paper, it is clear that a delayed decision to deploy an NMD capability could make the United States vulnerable to limited ICBM attacks from evolving countries. The limited options available to the United States in such an environment are reviewed in the assessment section of this paper.

The initial LDS, which presently must be ABM Treaty compliant, would consist of a developmental version of a ground-based radar or GBR, up to 100 ground-based interceptors (GBIs), and a collocated regional operation center (ROC) containing radar and interceptor operational control and battle management facilities.

The initial LDS site would be located at Grand Forks, ND, unless ABM treaty restraints were relaxed to permit an alternative first site. Selection of another location for the first site would likely save several billion dollars in overall system deployment costs because one fewer site would be necessary, given that the decision to build more than one site is made.

## Part IV

### U.S. Ballistic Missile Defense Policy and Budget

The single greatest military vulnerability that President Clinton inherited was the inability to protect the United States against attacks by intercontinental and submarine launched ballistic missiles.<sup>26</sup>

On 13 May 1993, Secretary of Defense Les Aspin announced that the "Star Wars" efforts initiated by the Reagan Administration were to be terminated. He followed this with an announcement in June that the Strategic Defense Initiative Office (SDIO) would be renamed the Ballistic Missile Defense Office (BMDO). This was a shift of focus and purpose for the U.S. ballistic missile defense effort. Reagan's effort was to shift the focus from protecting America indirectly by protecting its ICBMs, to protecting American civilians directly. The move back to a BMDO by the Clinton Administration is a return to the pre-Reagan philosophy. Unfortunately, the evolving threat is to the civilian population, not to U.S. ICBMs. Part of the evolving New World Order is the threat of a Third World leader threatening the US mainland. The BMDO is focused on theater systems with protection of the U.S. as a second priority.

The BMDO is moving to provide enhanced protection to deployed US forces, and our friends and allies through two new systems expected to be deployed by 2000. First, the U.S. Patriot Air Defense system will be upgraded to version 3, called PAC-3 (Patriot Advanced Capability 3). Second, DOD is developing a new defensive system

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<sup>26</sup> Frank J. Gaffney Jr. "Star Wars II." The New Republic, 8 Feb. 1993,10.

called THAAD (Theater High Altitude Air Defense) that will function with Patriot to provide a very high confidence of missile warhead kill. But both systems are theater defense systems that are technologically incapable of protecting the U.S. from ICBMs. Unless the U.S. moves to correct this vulnerability, it is likely that a hostile power or powers will attempt to exploit it.<sup>27</sup>

Many policy advisers in Washington believe that the danger of a ballistic missile attack on the U.S. evaporated with the demise of the Soviet Union. This feeling is reinforced by CIA reports that indicate that it will be 10 to 15 years before a hostile Third World country acquires an ICBM capability. These assessments, along with tremendous budget pressures, have reduced Congressional funding of missile defense systems for both deployed forces and protection of the Homeland.

President Clinton pledged to reduce defense spending by \$60 billion over the next six years beyond the cuts approved in the Bush budget. He pointed to the Strategic Defense Initiative Office (SDIO) as a source for gathering in \$15 billion of the \$60 billion. Unfortunately, there simply was not \$15 billion in SDI under the Bush budget.<sup>28</sup>

The Clinton defense cuts that were taken out of SDI, now named BMDO (Ballistic Missile Defense Office), halted work on the Army and Marine Corps system called Corps Sam, a follow-on system to PAC-3, and moved the National Missile Defense System from Program Status to a Technology Readiness Program,

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<sup>27</sup> Frank J. Gaffney Jr. "Star Wars II." The New Republic, 8 Feb. 1993, 10-11.

<sup>28</sup> Gaffney. 10.

essentially halting any effort to field even a limited ICBM defensive capability in the near term.

The Clinton Administration reduced by 80% the amount of money that the Bush Administration projected to spend on a nation-wide defense system. It has also proposed extending the 1972 ABM Treaty to all of the former Soviet Republics. This effectively limits the U.S. option to fielding the proposed ground-based National Missile Defense System, now in a technology readiness status, and prevents fielding any space based systems.

Actions by Third World powers in the last five years lend little credibility to the notion that diplomacy alone can affect the course of nations pursuing weapons of mass destruction and the means to deliver them. Among the developing countries, six have chemical weapons programs (Chile, Egypt, Israel, Pakistan, Burma, Vietnam), two have biological programs (Argentina, Brazil), and nine have both (Syria, Libya, Iran, Iraq, South Africa, India, Taiwan, South Korea, North Korea). Among the developing countries, four have nuclear programs (Pakistan, Israel, India, North Korea), and eleven support nuclear research and development (Argentina, Brazil, Syria, Egypt, Libya, Saudi Arabia, Iran, Iraq, Taiwan, South Korea, Japan). Among the developing countries, thirteen produce ballistic missiles (Argentina, Brazil, South Africa, Egypt, Israel, Libya, Iraq, Iran, Pakistan, India, China, Taiwan, North Korea), and five possess ballistic missiles (Syria, Afghanistan, Yemen, Saudi Arabia, Vietnam).

The Clinton Administration policy on dealing with the proliferation of weapons of mass

destruction and delivery means is aptly displayed in its dealings with North Korea's nuclear program and its efforts to acquire nuclear weapons.

The U.S. policy toward present North Korean activity is summarized by Under Secretary of State Lynn Davis:

Through diplomacy, we have made a serious effort to find out whether North Korea is willing to accept a nuclear-free Korean peninsula... Our strategy if diplomacy fails takes us back to the U. N. Security Council.<sup>29</sup>

North Korea continues to sell systems and technology to Third World countries like Iran and Libya.

The Clinton Administration insists that using military force to protect the (Korean) region's security also remains an option. But, given the recent display of United States resolve in Haiti, Bosnia, and Somalia; Pyongyang may not be taking the Administration's policy very seriously. According to R. S. Greenberger:

There is a real danger that Pyongyang, which likes to negotiate by going to the brink, could conclude, based on Washington's behavior elsewhere, that the U.S. in the end won't thwart its nuclear ambitions.<sup>30</sup>

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<sup>29</sup> Richard Perle. "The Best Defense Against North Korea". The Wall Street Journal. 3 May 1994. A20.

<sup>30</sup> Robert S. Greenberger. "North Korea Nuclear Crisis Flares Anew As Nation Says It's Forgoing Inspection". The Wall Street Journal. 16 May 1994. A13.

## Part V

### Assessment

The central issue is in three parts. First, whether a limited defensive ballistic missile system is even needed, that is, does the threat exist now or will it appear? Second, given that there is an ICBM threat to the US, how should it be dealt with? And finally, what would be the cost of a limited ABM system?

Certainly the threats to the United States from smaller powers are currently as unlikely as a massive, preemptive attack by the Russians. However, based on information in the foregoing threat section of this document, within 10 to 15 years the United States may be vulnerable to ballistic missiles from other countries much as the Russians already face such threats from missiles in countries like Israel today. Additionally, the threat of an unauthorized or accidental ballistic missile launch from Russia or China today, while remote, cannot be dismissed. Unfortunately, Murphy's Law applies universally and strategic weapons are not immune. Less remote is the loss of control of the Russian nuclear arsenal amidst the decaying security environment that exists today in that troubled country. Thus, the answer to the first part of the central issue is yes. Clearly there is a remote threat now that will evolve significantly within the next 10 years, perhaps much sooner given the potential for turnkey purchases of missiles, weapons, and technologies.

Given that there is an ICBM threat to the U.S. from a Third World tyrant, the response options are limited: (1) counterthreats and the use of nuclear retaliation,

(2) pre-emptive strikes, (3) use of an operational ABM defensive system and selective military responses, and (4) negotiations and concessions.

Option one is a return to the MAD doctrine that may not apply to a Third World tyrant. He may not care if he is able to get the first strike in against the world's lone superpower. The U.S. would still endure the cost of an ICBM strike, that is, the "Regret Cost" of not having a defensive system that could intercept an ICBM before it could damage the country. The second option has merit if the national political will exists to support it. It is also an option that must be totally successful, if executed, to preclude a "last gasp" ICBM launch to damage the attacker. This option could present a real "throw of the dice" to see who blinks first. The third option puts the U.S. in a position of strength, having an intercept capability and a retaliatory capability. Potential attackers have nothing to gain in such an environment. The final option represents the U.S. slide from a world power position and away from determining its own destiny. In view of these options, the fielding of a limited defensive system appears advisable to keep the U.S. in the secure position of strength that it must possess in the 21st century to remain a superpower.

Finally, what would be the cost of a limited ABM system? From the foregoing section on the National Missile Defense System, estimates range between \$10-12 billion for the ABM Treaty compliant limited defense capability. Perhaps more importantly, what would be the cost of a nuclear ICBM striking the United States? The Three Mile Island accident cleanup cost is now well over \$1 billion. This accident involved no collateral physical damage to civilian property surrounding the nuclear facility and no known

personnel casualties. The cost of the Chernobyl cleanup may eventually be more than the entire cost of the Soviet nuclear program. Perhaps the cost of a defensive system that destroys an ICBM in the exoatmosphere would pale in comparison to the cost of an ICBM striking the continental US.<sup>31</sup> This can only be viewed in terms of the "Regret Cost" of not possessing an intercept capability. What is the "Regret Cost" of only one ICBM hitting the United States? Regardless of how the United States would respond, could the response retrieve the economic loss, the human loss, the environmental loss, and the loss in world status? Would not such an attack inflict irrevocable damage? Is the "Regret Cost" more than the cost of a limited defensive capability to intercept and destroy one or several incoming ICBM's? The physical effects of a limited nuclear ICBM strike on a populated area of the United States are well documented by the Federal Emergency Management Agency in its report, Nuclear Attack Planning Base - 1990 Final Project Report. The reported effects are sobering and, frankly, make the Three Mile Island and Chernobyl incidents seem like tupperware accidents.<sup>32</sup>

It is easy to postulate threats like suitcase bombs or massive attacks that would foil a limited defensive capability. However, the National Missile Defense System under consideration would not be designed for every eventuality or to defend against a worst case possible massive attack scenario. The proposed system is an insurance

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<sup>31</sup> Michael Krepon. "Don't Parrot Old Arguments on Missile Defense". The Bulletin of the Atomic Scientists. Jan/Feb. 1991, 12-13.

<sup>32</sup> Ronald R Treichel. Nuclear Attack Planning Base - 1990 Final Project Report. Federal Emergency Management Agency. Washington DC. 1990.

policy against limited ICBM strikes. No insurance policy can be all things to all situations, no matter how costly.

Arguments against building a strategic ABM system cite three primary reasons.

Besides being a waste of a tremendous amount of money, building such a system could actually have far-reaching negative consequences. First, it may negate the opportunity to finally achieve significantly deep cuts in the ICBM forces of the world powers. Building even a limited continental defensive system for the U.S. could prevent such cuts and actually provide an incentive for Russia to maintain and improve her fleet of weapons. Second, a limited defensive system may not seem "limited" to the Chinese. China might feel compelled to build more ICBMs to maintain its limited deterrent posture. This could easily lead to a regional arms race with India and Pakistan. Third, focusing on a defense that protects the U.S. against future Third World threats misses the opportunity to focus on solving the regional conflicts that could lead to global involvement. By rejecting to build a defensive system and by making deep cuts in its own ICBM force, the U.S. would demonstrate that such systems are unnecessary and would go far in promoting the nonproliferation and reduction of missiles worldwide.<sup>33</sup>

Countering these arguments today are a number of universal truisms. Ballistic missiles, whether short, medium or long range, are appealing to Third World leaders for a number of reasons. Besides political power and status, ballistic missiles provide these leaders with a unique military capability that has been referred to as the "poor

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<sup>33</sup> Lumpe.

man's air force". To a degree, a country can have the capabilities of a bomber air force at a fraction of the cost. Ballistic missile ranges, flexible payloads, relatively low cost, and short flight times even for ICBMs, make them unique political and military weapons. Additionally, the small number of ballistic missile defenses currently available have only limited effectiveness against the known and evolving threats.

These factors argue for the continued proliferation of ballistic missiles in general and the eventual proliferation of ICBMs. Additionally, the advantages of weapons of mass destruction (nuclear, biological, chemical) over conventional munitions argues that these weapons will continue to proliferate regardless of attempts to the contrary. The technologies for these weapons are in demand and readily available today. It can be concluded that there will be an ICBM threat to the U.S. from evolving Third World countries in the future.

## **Part VI Conclusion**

There is a growing realization that it is much easier to build nuclear weapons than we once thought; and that missiles to hurl them through space to their targets are now readily available on the international market.

The North Korea's of the world (read Third World powers wanting First World weapons) will eventually obtain nuclear weapons, with or without the intrusion of international inspections or sanctions. When they accumulate many of these nuclear

weapons, and they will, the United states will wish that it had at least a limited anti-ballistic missile defense system in place to protect the Homeland.

The United States can no longer remain confident of its ability to deter attacks through the threat of massive nuclear retaliation. Likewise, the use of test ban treaties, regional arms controls, U.S. economic and military incentives, nonproliferation efforts, international inspections and sanctions, may have a positive slowing effect but will not prevent the acquisition of ICBMs by Third World countries. Some Third World countries that obtain an ICBM capability will prove indifferent or undissuaded by the threat of nuclear retaliation.

It would serve U.S. strategic decision makers well to recall the words of Winston Churchill when he spoke to British legislators in 1934 as they refused to see the German threat rising in Europe:

I do not believe that war is imminent or that war is inevitable. But it seems very difficult to resist the conclusion that if we do not begin forthwith to put ourselves in a position of security, it will soon be beyond our powers to do so.<sup>34</sup>

By the end of the decade Britain was at war and was unprepared for it.

If the U.S. waits to build a limited missile defense system until the threat is on its doorstep, it may be too late. Then, we will be forced into the unenviable position of choosing among bad alternatives: (1) preemptive strikes (that must be successful), (2) counterthreats and use of U.S. nuclear retaliation, and (3) bargaining to protect

the Homeland and preserve society. The United States would certainly be intimidated

<sup>34</sup> Nancy J. Perry. "The New Case For Star Wars." Fortune. 3 Dec. 1990, 132.

when considering employment of U.S. military forces regionally when a nuclear ICBM capable Third World leader had an interest in the area.

Could a Third World threat appear in two or three years? Given present proliferation concerns, the possibility exists. Is the use of counterforce, preemptive strikes, a reasonable approach to eliminate this threat? Can we, could we do it? U.S. performance in this area has not been impressive as evidenced by our failure to destroy German V-2 rockets in WWII and Iraqi Scuds in the 1991 Gulf War.

As with so many national policy questions, the correct course of action will be known for sure 15 to 25 years from now. The U.S. approach will have been "prudent" or "shameful", based on world events. But the available threat information clearly warrants the fielding of a limited ABM system now.

Now is the time to begin deployment of a defensive capability to protect the United States from a limited ICBM strike and thereby preserve the Nation's options for dealing with this forthcoming threat. Beginning now would enable the U.S. to have an operational ABM system in place early in the next decade. What must be understood is that in the end nuclear coercion, as part of a political-military game plan from a Third World tyrant, will triumph over the threat of massive retaliation. For in the end, a Third World tyrant who is able to defy the world and its lone superpower to obtain nuclear weapons is more likely to be believed than a superpower that hesitated to build a defensive system to maintain its position of strength and preserve world order.

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