STRATEGY RESEARCH PROJECT

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NATIONAL MISSILE DEFENSE STRATEGY FOR THE UNITED STATES POST 11 SEPTEMBER, 2001 – A SEARCH FOR SECURITY IN A NEW WORLD ORDER

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ABSTRACT

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This paper examines the history of the ABM Treaty as it relates to missile defense and postulates strategic options as they relate to the U.S. strategic linkage to the treaty itself. This review includes 2nd and 3rd order effects for the U.S., as well as an assessment of strategic risk. Key nations included in this analysis include the U.S., Russia and China. In light of the current geo-political situation, the paper concludes with a recommended course of action and challenges for the future.

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NATIONAL MISSILE DEFENSE STRATEGY FOR THE UNITED STATES POST 11 SEPTEMBER, 2001—A SEARCH FOR SECURITY IN A NEW WORLD

INTRODUCTION

The President of the United States (U.S.) watched with horror as the missile approached its target. The command screen clearly showed the predicted impact on a small island in the Aleutians, Alaska, and all he could do was watch as a spectator. Some 30 years prior in 2007, the United States had terminated missile defense as an option to protect themselves from rogue nuclear attacks. The termination decision was about to come back to haunt them. The missile was launched from a remote site in North Korea, within days of the U.S. sending a communiqué to the United Nations (U.N.) voicing support for continued economic sanctions against the tyrannical regime of North Korean President Kim Il Lu. The President viewed the impact of the missile into the island on the command screen, sickened when he thought of the casualties to follow. Simultaneously, the North Koreans blamed the U.S. and the U.N. for pushing them too far, and threatened another launch unless the sanctions were immediately lifted. North Korea could launch the missiles anywhere, given their current capabilities obtained from maligned Russian scientists. The President turned to his national security advisor and said, "Reactivate the missile defense capability and get it going quick. We can no longer allow simple nuclear deterrence and threat of force to provide the American people the security they demand and deserve."[1]

The world changed forever on 11 September, 2001 with multiple hijackings of commercial aircraft facilitating the attack on the World Trade Center towers and Pentagon. On the level of Pearl Harbor in terms of impact, this attack on U.S. soil highlighted the vulnerability of our nation. The U.S. was unprepared for the threat, carnage, and horror associated with these rogue attacks. If terrorists can do this with an airplane, what further devastation can be caused using nuclear weapons from a rogue state or individual?[2] For almost forty years, the U.S. has debated national missile defense issues (NMD[3]) as part of our national security strategy dealing with defensive aspects of the use of nuclear weapons.

After the Cold War, renewed tensions developed between the U.S. and Russia over missile defense issues, particularly as they related to the Anti-Ballistic Missile Treaty (ABMT[4]) of 1972. This tension centered on differences in perception of emerging threats, rogue states with nuclear capability, and U.S. perceptions that it could not effectively deal with that emerging threat defensively because of limitations on national missile defenses outlined in the ABMT. Adding to this tension were possible plans by the U.S. to test and field systems that would possibly violate the spirit of the agreement. Tensions have increased world-wide since the announcement on 13 December, 01 by the President that the U.S. intends to withdraw from the ABMT, and focus on a limited missile defense system.[5]

This paper examines the efficacy of the current U.S. policy to withdraw from the ABMT and develop a national missile defense capability.[6] This review includes historical perspectives behind missile defense and current threats that shape the decision to deploy missile defenses.

Threats issues include a brief discussion of interests of key nations, including Russia, China, North Korea, Iraq, Iran and Libya, placing the threat in a geo-political context. As nuclear powers or nuclear power "wanna-be's," each nation's internal interests may run counter to U.S. interests, creating tension between nations at best, and war between nations at the worst. Next, the paper examines current U.S. interests and current policy for a future missile defense system, and policy options for NMD in the context of the current ABMT. The paper concludes with a recommendation for NMD and future implications.

At no time in the history of our nation is it more critical to reevaluate U.S. policy vis-à-vis the ABMT than after the events of 11 September, 2001. We owe it to future generations to get it right the first time, so no attacks like the one in the fictional scenario at the beginning of this paper occur in our lifetimes.

HISTORICAL BACKGROUND

Throughout the Cold War, the U.S. and the USSR faced off in the arms race of the century. Dwight Eisenhower, the first president to confront the complex issues of missile strategy, numbers, and kinds, led the development of the nuclear triad: nuclear submarines, land-based missiles, and bombers.[7] Throughout the 1950s, planned use of nuclear weapons took on varying forms and as the decade closed, Eisenhower's administration began to negotiate limiting nuclear tests.[8] At this time, there was no U.S. approved concept for missile defense. Near simultaneously, and very unexpectedly, the Soviets launched the satellite Sputnik on 4 October, 1957.[9] A reaction that there might be a national crisis in terms of a missile gap arose.[10] The U.S. perceived a missile gap, driving U.S. strategy (and subsequently the USSR) to match or exceed missile production of its' Cold War adversary. Thus began the missile race of legendary fame and fiction.[11] A statement by Admiral Arleigh Burke, Eisenhower's chief of naval operations in early 1959, that the USSR could be destroyed by a U.S. retaliatory strike, marked one of the earliest public discussions on what we know today as nuclear deterrence, a concept in use today.[12] These early threats led to the early attempts to develop and field early missile defense systems. These systems included Nike Zeus, Nike-X, and other first generation systems.[13]

Negotiations for test bans continued unsuccessfully until 1960, when the USSR shot down a U.S. U-2 spy plane. In reaction to the U-2 incident, USSR Party Chairman and leader Nikita Krushchev scuttled negotiations on test bans in Paris, and suspended talks until a new U.S. president came into power.[14] How to control and limit such weapons challenged the leaders of

the Cold War nations, and the concept of deterrence continued to evolve. The real concern, as always and for both leaders, was their respective nation's security.

The reality for Eisenhower, and later for all those who followed, was a general perception that the Soviets might create a missile gap so great that the USSR might be able to win a war in a nuclear environment. One of the biggest fears of U.S policy makers was a strike against the U.S. by USSR ICBM missiles. There was no missile gap as confirmed by satellite photographs in the summer of 1961[15], and the only time it really became an issue was during the 1960 presidential election campaign. In his memoirs, President Eisenhower stated that U-2 flights confirmed that there was no missile gap, and that they were the "creation of irresponsibility."[16] At the time, with a real theological struggle between communism and democracy, the concept of a missile gap and deterrence became strategic issues. Since no one could accurately predict the strength of the Soviet nuclear capability, some estimates by senior military leaders that U.S. nuclear strike capability could be wiped out in a span of thirty minutes.[17] These concerns resulted in the building of early missile defense capabilities such as Nike, Nike-X and Thor. They were the technical grandparents of today's emerging systems. Fear of catastrophic defeat rang through the halls of Congress and the White House for almost 30 years hence.[18] This missile threat, perception more than reality, and deterrence capabilities continue to challenge presidential decision making in present day, particularly as election issues.[19] These issues continue to be debated hotly today.

In the late 1960s, after a decade of miscues, the Cuban Missile Crisis, and heightened tensions, the Soviet Union and the U.S. entered negotiations to limit development of defenses against ballistic missiles. The logic behind this McNamara effort to limit defenses at the Glassboro Summit in 1967 postulated that missile defenses would be bad for both sides, because they would intensify deployment of offensive missile systems. The Soviets were not interested and in fact increased their ICBM capability, between 1966-69, by 750 missiles.[20] The total increased from 250 to over 1000.[21] U.S. scientists were skeptical about the feasibility of any missile defense, and systems developed in the U.S., including the system called Sentinel, came under attack as technologically infeasible.[22] This skepticism was due in large part to the complex nature of such an effort in space.[23] These discussions and issues became the background for the eventual ABMT. In 1968, the U.S. Congress recognized the requirement for a defensive system by appropriating funds for the deployment of a land-based defensive system called Safeguard.[24] Many conjecture it was appropriation of funds for a defensive system that be the bargaining chip to drive the USSR back to the negotiating table to forge the ABMT.[25]

The ABMT, signed on 26 May, 1972,[26] banned each party from defense against strategic missiles save two sites in each nation. This exception was further limited to a single site in a 1974 amendment, ratified by the U.S. Senate in 1976.[27] The treaty prohibits the deployment of nation-wide missile defense or systems that would serve as components of a national missile defense.[28] Many argue the ABMT has been the stalwart for world security for the past 30 years, particularly among European countries. Others would argue that 30 years ago no one anticipated missile threats to the United States would evolve to include those of nations other than Russia and China. The Safeguard system was terminated in the mid-1970s, due to a lack of funding from Congress and ongoing Strategic Arms Limitation Talks (SALT).[29]

The ABMT placed specific limits on ABM systems. Those systems included interceptors, launchers and radars. These systems included those operational, under construction, undergoing testing, undergoing overhaul/repair/conversion, and those mothballed. The key concepts in the agreement included several key tenets. First, it limited each nation to building no more than two ABM protection areas, one around the capital, one in North Dakota for the U.S., and two for the USSR. Second, no mobile, sea, air or space based systems would be developed, tested or deployed. Third, no more than 100 interceptors and launchers would be at launch sites. Fourth, missile silos should be no less than 1300 KM from the center of the national capital being protected.[30] Fifth, no transfer of systems or technology to other states would be authorized. Sixth, both nations were restricted from using concealment techniques that would preclude verification by national technical means. Seventh, both nations would establish a standing consultative commission to meet and consider questions and issues on treaty as needed. Lastly and most importantly, each state had the right to withdraw from the treaty if supreme interests of the said state are in jeopardy as a result of extraordinary events.

The ABMT had other provisions, including the requirement to notify the other party of a decision to withdraw from the treaty, and that such notification must occur six months prior to the intended date of withdrawal. The treaty was modified in 1974, limiting the ABM sites to one for each nation. In the U.S., the site was Grand Forks, ND, with an option to move once to Washington. D.C. The treaty also limited the Soviets to one site, Moscow. However, the Soviets had an option to move the missile launch field once to a place outside Moscow, but within the limits of the treaty.

With only minor modifications over the next two plus decades, the ABMT has remained in place, and many would argue, stead-fast as an effective deterrent tool. At the end of the Cold War, key states emerging from the former Soviet Union (Russia, Ukraine, and others) agreed to the same ABMT. The treaty has become the cornerstone to nuclear security for many nations,

particularly those in Europe, who for so many years faced off directly against the Soviets during the Cold War. Modifying or negating such a long-term success such as the ABMT would have many obstacles to over come, as we shall see.

It is important to note the objectives of the U.S. and the Soviets when this treaty was first signed. The U.S. desired end state was to summarize and document mutual assured destruction as a concept, and to trade off limits via the ABMT in exchange for future cuts in offensive capabilities on both sides---end state being parity on both.[31] The Soviets equally wanted to preserve military parity,[32] and maintain the ABMT to limit the U.S. ABM capability while maintaining its ability to protect its own nuclear arsenal with ABM systems.

On 17January 1983, President Reagan redefined U.S. national security strategy by issuing the then-classified National Security Decision Directive (NSDD) 75.[33] This was a series of policies aimed at the destruction of the "EVIL EMPIRE" without a war. In March of 1983, President Reagan announced the establishment of a program to counter the Soviet nuclear threat, the Strategic Defense Initiative (SDI).[34] Critics of the system dubbed it "Star Wars", after the then-famous movie of the same name. The intent of the program was defensive in nature at genesis, with the end state capability of rendering the Soviet nuclear weapons impotent and obsolete.

President Reagan's focus on SDI terrified the Soviets, who saw decades of resources, intrigue, and other forms of persuasion at grave risk. Yuri Andropov, then the Premier of the Soviet Union, stated that SDI was not only irresponsible, it was insane.[35] Soviet reaction continued to be negative as the program evolved over the years. Congress eventually passed the Missile Defense Act in Nov 91, which called for modification of the ABMT to allow for the fielding of a treaty-compliant defensive missile system (through negotiations with Russia). This would include fielding at the earliest possible date, with appropriate technology facilitating a functional system by Fiscal Year (FY) 96.[36] The hunt for a missile defense system continued.

The effort to continue missile defense has been an on-again, off-again affair, with both presidents and Congress vacillating back and forth on support for research, development, and fielding. As a result of the Gulf War in 1991 and lessons learned in that war, the focus on missile defense shifted to theater missile defenses. This was in response to the SCUD attacks that almost unraveled the alliance during the war itself.[37] During the initial Clinton administration, missile defense emphasis supported funding for theater missile defenses, while relegating national missile defense to mostly research and development.[38]

One of the biggest controversies dealing with national missile systems that helped to sway Clinton and his advisors in their policy conclusions, still present today is the technical feasibility

of such a national system. As noted earlier in this paper, this has been an issue since the fielding of the Sentinel system. Over 100 billion dollars has been spent in the last 50 years towards fielding a functioning missile defense, and approximately 2 billion dollars is expected each year in the future.[39] Despite that large investment, there remained much doubt in the scientific community about the viability of a missile defense system under any condition. One could find credible evidence that trying to hit a bullet with a bullet simply would not work on such a grand scale.

In 1995, the National Intelligence Estimate (NIE) asserted there was no credible ballistic missile threat to U.S. territory over the next 15 years (other than from Russia and China, already known threats), and that foreign assistance to Third World nations by Russia and China was unlikely.[40] Republicans charged the administration was minimizing the threat, and Congress subsequently commissioned two reviews to determine the facts. The first study was headed by Robert Gates. The Gates Commission concluded that the NIE findings were generally accurate, although Gates faulted the NIE effort as "rushed and incomplete."[41] The second study, released in July, 1998, was headed by Donald Rumsfeld, ably assisted by Paul Wolfowitz and others, and commonly referred to as the Rumsfeld Report.[42] Formally known as the Commission to Assess the Ballistic Missile Threat to the United States,[43] the members were both Democrat and Republican, minimizing partisan debate upon the panel releasing its conclusions.[44]

The report's conclusions included an assessment that Iraq and Korea could develop weapons capable of hitting the U.S. within five years of a decision to do so (with no or little warning on U.S. side). U.S. intelligence capabilities to see these and other threats were fast eroding, the NIE assessment was essentially incorrect, and that we might not discover this capability at all if it developed further.[45] Further, the panel declared that Russia was helping Iran with missile design, a sea-born missile threat existed, and the U.S. should not have a policy that assumed advanced warning of any future attacks.[46]

Shortly after the release of the Rumsfeld Report, the North Koreans launched a missile over Japan on 31 August, 1998, demonstrating they were close to having an ICBM capability.[47] The implications of this launch were profound. U.S. intelligence failed to predict the launch, reinforcing some of the panel's conclusions. The launch demonstrated the Russians could be involved in proliferation efforts with North Korea,[48] also portending proliferation to others that include Iraq, Libya, etc.[49] The threat to the U.S. had taken on an entirely new and nearer term

perspective, and was seen by many as reinforcing the urgent need for a missile defense capability to protect from an attack by a rogue state like North Korea.

The Clinton administration reaction to the Rumsfeld Report and the missile launch by North Korea included revising plans to prepare to field a national missile defense, with an initial operational capability as early as 2005. Fielding decisions had to be made by June of 2000, predicated on radar site construction that takes five years (at a remote site in Alaska), and construction of this system would violate the ABMT. As a result, and because of ongoing testing, President Clinton delayed his decision to field until the last minute.[50] With successive failures in two tests, pressing NATO opposition to the system, Russian efforts to either sponsor a EURO/RUSSO system or some other facsimile, and technical doubts as to feasibility of any missile defense system, it was decision time. President Clinton, in September of 2000, decided to completely defer the decision on fielding to the incoming Bush administration.[51] His decision not to decide (as opposed to indecision) passed the NMD baton onto yet another presidential administration.[52]

President George W. Bush is a long-time advocate of proceeding with the development of NMD, and immediately went on the offensive with missile defense. President Bush has made at least three major policy speeches, all focused on the need to seek a new strategic concept that superceded the Cold War era AMBT. He had talked about these new strategic concepts when he was building his team as far back as the 2000 election campaign.[53]

In a speech at the National Defense University in May 2001, President Bush called for a new paradigm shift, away from the Cold War model of deterrence and ABMT, to move beyond the air of mistrust and concept of mutual vulnerability towards a new offense/defense set.[54] With his announcement in December 2001 of U.S. intent to withdraw from the ABMT within the six months, and in accordance with Article XV of the ABMT,[55] President Bush signaled the U.S. azimuth for the future. It remains to be seen if the President, within the next six months, can silence dissenters, appease allies, and gain critical support in Congress, where the money lies.

THE THREATS

Challenges to U.S. security in relation to the ABMT and a decision to deploy NMD and abrogate the ABMT are numerous. They include states who either own or desire to own a nuclear and/or ICBM capability. Additionally, those nations include those who may have demonstrated some hostile intent or divergence of interests with the U.S. Today this so-called rogue threat revolves primarily around six nations, two nuclear-capable now, and four who seek such capability or may have it. The nuclear -capable nations include Russia and China. The

non-nuclear nations, often referred as states of concern by the U.S. State Department, include North Korea, Iraq, Iran, and Libya. A brief examination of each, with focus on interests and current/projected capabilities and trends, is necessary to understand the geo-strategic environment, and how that relates to U.S. strategic policy options for national missile defense.

Russia, invaded twice in the 20th Century, looks west with historical concerns for security. Russian's Cold War nemesis, the U.S., continues today as a partner in some regards, but nevertheless as a former adversary. Only the U.S. possesses the capability to destroy Russian society with the push of a button. Struggling to find her way towards democracy, yet still a nuclear superpower, Russia is struggling to determine her place in history, method of government, and most importantly a way to economic stability and security. Most likely, Russia will continue to remain weak internally and linked to the international community through ties to the U.N. The ability of the Russian government to overcome debt, organized crime, and other challenges to legitimate governance remain critical to long–term Russian security. The relevancy to NMD here lies in Russia's inherent desire to retain power and influence as well as a need to generate cash flow. In the authors view, technology transfer of nuclear and ICBM capabilities to other nations provides both influence in other regions and much needed cash for their regime. As evidenced earlier in the NIE, some of this may be occurring now.

Another area of concern with Russia is control of their nuclear arsenal. One can surmise that with a weak government, organized crime in partial control in some major cities, poverty, and a vast array of tactical and strategic nuclear capability laying around in semi-secure facilities, there is risk of proliferation for profit. In fact, the economic crisis in Russia could significantly degrade complete fail-safe control over its nuclear weapons, fissionable material, or nuclear scientists.[56] Current assessments are that Russia cannot guarantee full control over these items now.[57] The U.S. has worked to ameliorate the problem, but with current economic conditions in Russia it may get worse before it gets better.[58] Similarly, with scientists out of work and others driving taxis to make ends meet, the risk of both proliferation and sale of nuclear knowledge from these individuals runs even higher.[59] Russian scientists have been reported in North Korea, working on missile issues,[60] and there are accounts of loss of control of Russian HIP helicopters to sell for food.[61] If one can sell helicopters to North Korea for food (and without Moscow approval), what else is being sold to those who have the money? In any case, this lack of control, and lack of effective governance may lead to destabilization, either in Russia or other areas where such weapons migrate.

Potential oil reserves in the Caspian Sea may be a flash point in future years, and control of those resources in Russia is not predetermined.[62] With the Russian military needing at least

three decades to recover, a regional military power exists, and a planned 2005 withdrawal of Russian border forces across the nation in 2005 or so make the overall prospects and challenges even greater.[63] Near term, Russia will seek to make marked reductions in nuclear forces, primarily to save money for more pressing economic needs.[64] Control of these oil resources, influence in the Caspian Sea area, and the need to remain influential with Iraq and Iran may push Russia to provide these nations with ICBM and nuclear capabilities in exchange for long term regional cooperation.

Russia clearly saw SDI, and now sees NMD, as a threat, and has strongly opposed U.S. testing and fielding of NMD. Russia firmly believes that we should maintain the status quo, that the deterrence of the ABMT status quo has worked for almost 30 years, and that the treaty is still viable as a source of strategic stability.[65] While the U.S. announcement to withdraw from the ABMT met with only mild comments from President Putin, Russians feel like they have been slapped in the face and the long term implications of the decision to withdraw remain very uncertain.[66] In the near term Russia seeks to maintain nuclear parity with the U.S., and in the long term seeks economic reform to become an economic and military power in the region. More importantly, Russia wants to be seen as a world power, whose participation is required for international decisions.[67] While there is some convergence of interests, near and long term interests of Russia may diverge from U.S interests, particularly if Russia and China (and others) enter into a strategic alliance to forestall US influence in the region or globally. Politically, Russia stands to lose face if the U.S. unilaterally withdraws from the treaty. In the authors view, Russia may feel shunned and this could further drive China and Russia to a mutual defense pact of one degree or another.

China is equally opposed to NMD, although it is not a party to the AMBT. Despite its geographic isolation on the Southeast Asian land mass, China can threaten our economic well-being as a regional hegemon, and through weapons proliferation can further destabilize the region and world. China seeks to reform its economy, restructure state-owned enterprises, and transform and update its banking system.[68] China's recent introduction into the World Trade Organization bodes well for stability in the region, but those broader economic demands and challenges will put greater stress on their entire social and political system. The population of China, and its continued growth (and therefore its drain on all forms of resources), will put even more stress on the social and political fabric of the nation.

The economic progress and WTO status may provide China with a platform (resources) from which to limit U.S. power and influence in the region.[69] Generally we can expect China to continue with peaceful coexistence, but the threat of either collapse or abuse of power is very

possible.[70] One can expect that China could react adversely to U.S. actions in the region if they are seen as aggressive or anti-Chinese, especially with regard to Taiwan and Taiwanese independence issues. We must remember that China is the last communist stronghold and unlikely to purposely garner favor with the west. In the author's assessment, one of the greatest risks the U.S. may find is possible support for proliferation of weapons of mass destruction by China, both with North Korea, Iraq, Iran, and other places where China may want to either influence or create instability. The desire to influence others is the cornerstone to such proliferation. The economic issues as related above, as well as China's desire to maintain regional influence facilitate proliferation of ICBM and nuclear capability for profit and for influence to other nations of concern.

China's proliferation with North Korea, Iraq, Iran, and other states known to support terrorism make this challenge to U.S. interests even more likely. China believes the U.S. and its military are on the decline, and that the U.S. could not win a war with North Korea today.[71] One can logically conclude that North Korea, with Chinese support as strong as it is for North Korea, feels the same way. With the current trend towards use of terror, and simultaneously the spread of nuclear weapons to these rogue states, this is of great concern to U.S. security interests. This is particularly true on the Korean Peninsula. The years of shame, where China was cast about by nations during several wars, in the eyes of the Chinese, are definitely over. Since 1979, China has tripled its GNP, and believes that it is taking its rightful place as a giant both in the region and the world.[72]

The Chinese military has had double digit increases in budgets over the past several years. China has purchased from Russia some 50 SU-27s, with a right to co-produce another 200 of these same aircraft. The Chinese Navy purchased Kilo-class submarines, and Sovremenny-class guided missile cruisers.[73] China has a moderate number of nuclear weapons, but small in comparison to the U.S. or Russia. China will likely have second generation ICBMs and SLBMs by early 2002, and they have also purchased a good number of cruise missiles, including GPS and terminal guidance packages.[74] With the world's largest military, China can be expected to continue to develop as a regional power.[75] China has the desire to become the regional master of nations that may include Pakistan, China and the Koreas, Taiwan, Vietnam, Cambodia, and other nations in that area.[76] China has some economic interests that converge with those of the U.S., particularly as they relate to the World Trade Organization. However, militarily and politically, there is clearly a divergence of interests that could create intense conflict in the near and longer term. The status of Taiwan is at the top of this list of conflicts. Chinese reaction to our NMD deployment may include their use or

proliferation of sophisticated decoys to our defensive systems in the world, as well as an increase in ICBMs to offset U.S. defensive capabilities.[77] Some also see this as a possible renewed arms race source.

North Korea continues to be a difficult regime for the U.S. to deal with. They recently announced plans to continue to develop new and better missiles.[78] The U.S. does not have diplomatic ties with North Korea, so most communications is done through third parties. This is especially true as it relates to missile defense and proliferation of ICBM capability. The unexpected and unannounced launch of a missile by North Korea in 1998 highlights this point. Isolated on the Korean Peninsula since the truce of 1953, North and South Korea are now studies in ultimate contrast. North Korea's economy is abysmal, there is reported wide-spread malnutrition if not starvation, and the totalitarian regime of North Korea continues to foster this dangerous communist-led, militarily controlled rogue regime. North Korea, historically a nation on the verge of war, has used massive artillery as one of its pillars of strength. With the launch of the Taepodong I missile in 1998, missile launch proliferation may be occuring.[79]

Through this launch North Korea demonstrated not only the resolve to obtain missile technology, but the capability to launch a three stage rocket from launching platforms in North Korea. The missile soared over Japan and landed in the west Pacific. The launch sent shock waves throughout the world and demonstrated a capability to launch a missile from North Korea to at least ICBM range.[80] With one or two nuclear or chemical weapons, the threat to Japan and South Korea became exponentially greater. A new and even more dangerous day had dawned in our dealings with this dangerous rogue nation. Weapons of mass destruction, if proper missile ranges could be attained, may be used by North Korea against the U.S. It is impossible to measure the intent of this 1998 launch. However, the U.S. must have a capabilities-based reaction to such threats. NMD offers the solution. Diplomatic isolation, recent thaws with South Korea and talks of reunification have not eased tensions on the Korean Peninsula. The U.S. and North Korea are at odds over key strategic interests, particularly as they deal with South Korea, and the interests of the two nations diverge in literally every area.

Iraq continues to test the west, defy U.N. resolutions, and generally serve as the chief antagonist in the Middle East. Economically a disaster area, Iraq remains a threat to others in the region. Saddam Hussein and his legions continue to defy the world, and demonstrate that they are a rogue nation. According to Saudi military leaders, Hussein continues to harbor designs on control of oil in Kuwait and Saudi Arabia.[81] Ten years ago that was manifested in a flagrant violation and subsequent occupation of Kuwait during the Iraqi invasion of that country.

Iraq will continue to produce or purchase WMD, and attempt to become a nuclear power in the Middle East. Possible launches of ICBM that could range the continental U.S. may be possible as soon as 2015, based upon technology received by illegal means.[82] While Iraq does not likely possess nuclear capability today, it is entirely possible to purchase this capability. Nuclear weapons are becoming the weapon of choice because they are inexpensive overall, and because of and their availability, clandestinely and openly.[83] Additionally, Iraq may have such a capability and the international community is unaware of this fact. This is entirely plausible, as much of the sanction efforts have been ineffective in stopping the flow of illegal goods into the country. An inability of weapons inspectors to assess this capability in accordance with U.N. sanctions ensures that this remains an unknown. Possession by Iraq of this capability would shift the balance of power in the region, and further destabilize the region. Iraq and the U.S. have a clear divergence of interests, particularly in light of the tyrannical wielding of power by the Hussein regime. This is not expected to change in the near term.

Iran continues to be lesser player in the region, with a small but growing economy, and limited markets due. Iran is still economically weak, but recent changes in government reflect a growing commitment to national sovereignty, regional assertiveness (particularly as they see Israel as their regional competitor), and varying degrees of friction with the U.S.[84] At the same time, rapprochement with the U.S. and other western countries, coupled with a lifting of some U.S. sanctions on exports, may cause the economy in Iran to rebound. Iran's military is small but capable, and it keeps its short range missiles for deterrence value. Iran can test an IRBM or land attack cruise missile by 2004, and perhaps launch an ICBM as soon as this year.[85] Iran's Shahab-3 long range missile, suspected to have been obtained from China or Russia, has been test launched since 1998.[86] Iran's ties to Hezbollah, and Hezbollah's use of terror against Israel, continue to create a greater rift with the west. Iran, most likely an exporter of terrorism, may also be on the U.S. short list for the next target on the war on terrorism.

Like Iraq, nuclear technology, fissile material, weapons of mass destruction infrastructure and delivery systems are available for Iran to purchase openly or clandestinely.[87] Iran's oil production and other sources of income may provide the funds necessary to purchase these weapons. The U.S. and Iran's interests diverge in most areas, and Iran is still diplomatically isolated from the U.S. and several other western nations. This nation's fundamentalist Islamic focus, much like Afghanistan's, is an impediment to democratic process and dialogue with most western powers.

Libya, located on the strategic coast of northern Africa, is adjacent to sea lanes of communication and is a large source of oil for the U.S. and others. General Qhadafi has ruled

Libya since 1969, and he appears to be moderating his political stances in general, due in part to his advancing age.[88] Libya has been on the State Department's list of those who sponsor terrorism since 1988, when Libyan intelligence agents were found guilty of the 1988 bombing of Pan Am 103 over Lockable, Scotland.[89]

The Bush administration supports the recent trend towards moderation Libya has demonstrated of late, particularly since Libya condemned the attacks in the U.S. in September, 2001.[90] The economic gains for Libya, if sanctions are completely lifted and they are taken off the terror list of the U.S. State Department, are not insignificant. Particularly with the oil capacity that is yet to be fully developed because of these sanctions, in this authors view, this effort could lead towards moderation with the U.S., with economic recovery for a Muslim-dominated country. This could send moderating signals throughout the Middle East, terminate the Libyan support to terror and weapons of mass destruction, and mark a turning point in U.S.-Libyan relations.

U.S. INTERESTS AND CURRENT POLICY

Current U.S. vital interests include defense of the homeland, ensuring U.S. security and freedom of action, honoring international commitments, promoting democracy, and contributing to the economic well being of both the U.S. and its allies.[91] Current security trends, particularly with the fight against terrorism currently underway, will continue on this azimuth for some time to come. The U.S. will fight for its survival, and the threat of use of nuclear weapons as an asymmetric attack against our homeland by terrorists continues to be of great concern to the national command authority.[92] This threat is of particular concern as it relates to delivery by ICBM by nations of concern. It is clearly in the interest of the U.S. then, to ensure that these attacks do not occur.

The current policy of the U.S. is to withdraw from the ABMT on 13 June, 2002, and as soon as practical, begin deployment of an effective missile defense system.[93] This includes defense against a limited threat to the U.S. from ICBMs launched by nations of concern identified earlier in this paper. The question that this paper answers next is: whether or not the United States should maintain its current policy to withdraw from the ABMT, and develop a national missile defense capability? The strategic appraisal of this issue which follows includes a review and analysis of two possible strategic options and provides the answer that question.

STRATEGIC APPRAISAL AND OPTIONS FOR STRATEGY

For the U.S., the NMD effort is clearly in our interest. The aim of the Bush administration remains squarely on developing long term peace and stability.[94] It is important again to

reexamine policy to ensure that the United States matches policy to reality. However, we must examine the perspective of both Russia and China, and other key nations/allies, to correctly ascertain convergence or divergence of interests. This convergence or divergence will define and identify risks with regard to staying the course or changing policy direction. Both Russia and China oppose NMD, and therefore their national interests diverge significantly from the U.S. in this regard. China has been very vociferous, even shrill with its opposition to NMD.[95]

The U.S. has two strategic options. The first option includes continuation of the current policy that includes NMD testing and eventual fielding, and withdrawal from the ABMT by 13 June 02.[96] The second option includes cessation of NMD testing and development until the ABMT can be renegotiated with Russia and other nations. Each option is analyzed below using the following criteria: ability to safeguard U.S. security, ability to address the evolving threat, cost, technical feasibility, domestic consensus, international consensus, treaty compliance, and risk.[97]

STRATEGIC OPTION ONE

Strategic option one provides for withdrawal from the ABMT within 6 months of Dec 01, 2002, more robust NMD testing and fielding of an operational capability as soon as possible. This is the current policy of the U.S. outlined by President Bush in December 2001. To many, this option threatens world order and stability. However, by invoking Article XV of the treaty, proponents of this option state that this option complies with tenets of the treaty.

This option attempts to answer the call for security for the U.S. by protecting our citizens from attacks by rogue nations using ICBM missile capability. Obviously, Congress would need to support the Presidents' decision by passing legislation to resource this effort, the staggering near and long term costs of which are discussed below.

This option provides for and addresses the evolving threat. However, there is argument over whether or not proposed systems are even capable of dealing with the evolving threat, especially discriminating between complex decoys.[98] The current system appears to be primarily focused on the threat from North Korea, particularly because the initial X-band radar site essential for the ground-based NMD system, is in Sheyma, AK.[99] Scientists, from both ends of the spectrum, continue to support their respective views. Eisenhower's skeptical comment that "it is like trying to hit a bullet with a bullet"[100] is very appropriate for NMD opponents. The truth of the matter is that it is very difficult to determine the accuracy about diverse facts on technical capabilities, and therefore, the ability to deal with multiple threats. The ability of the U.S. to meet the requirement in the NMD Act of 1999 to deploy as soon as

technologically possible, an effective missile defense is still in doubt. In the authors view, the facts remain complex. In the final analysis, the assumption should be made that "we can get there from here." The risk of doing nothing outweighs the risk of doing something.

The costs of the system under this option are staggering, and will no doubt rise over time. Historically, costs tend to rise on any technical system and for government programs in general. This is one of the most complex capabilities every designed, and the costs if we go into the weaponization of space could drive the costs exponentially higher. The costs run even higher if we design this system to protect NATO and other allies. If the current concept where to provide the capability to provide limited protection from threats against the U.S. and Canada only, the cost in 2001 went from 5.3 to 8 billion dollars.[101] Sea-based systems, at least for the time being, have been cancelled due to cost over runs. The services will no doubt be affected by this turn of funding events. To what extent right now is unknown, especially with the war on terrorism ongoing. In the short term, the services may expect funding shortfalls.[102] In the long term, force structure cuts to pay for this new style of security may be required. Unfortunately, there is only so much money in the budget to divide up throughout the defense budget.

The "hit to kill" technology system appears to operate against simple targets, as recent test successes demonstrated. The tests conducted so far indeed were miraculous, in that a bullet did in fact hit a bullet. However, current technological limitations prevent us from defeating complex decoy systems. There were no complex decoys during these tests, nor were there target missiles fired from an unexpected quadrant. Additionally, the target missiles were fired at routine locations in California instead of from unexpected or threat quadrants.[103] Under limited conditions, the missile system functioned properly. In the near term, the system can be deployed. In the long term, with technological advances in decoys ongoing, the challenge to the system by decoys may be much more difficult to resolve.

Domestic support to field a missile defense runs high, particularly in light of events of September 2001. The public wants something done about any threats to our security, and for most Americans sooner is better. The attack of last September changed the very nature of our concept of security. Most Americans are demanding that we improve security in the U.S. to protect us on our own soil. While most Americans do not understand the complexities of missile defense, nuclear proliferation, ICMBs, and other technical jargon, they do understand what it feels like to be vulnerable now. Americans want "something" done, and do not want to have "no option" if a rogue nation fires a missile towards the U.S. When the dust clears, and votes are taken, Congress may choose to support the President's decision to withdraw from the treaty. First, Congress will not want to have any perceived vulnerability to attack. Second, they will

support their constituents who feel the same way. There are those in Congress who loathe to unilaterally withdraw from a treaty that Congress ratified, and they could be an impediment to progress towards fielding a NMD.

Our allies in Europe, where the focus of nuclear deterrence has centered for the past 50 years, are reticent to support our efforts in this regard. Current efforts of the European Community center on development of the European Security Force of some 60,000 men, and the obvious strategic, logistical, and political challenges are included in that effort.[104] Many Europeans do not believe the U.S. threat assessments, particularly in regards to NMD. More importantly, funding of this program remains a key concern, and the Europeans are rightly concerned about cost of any effort at burden sharing as it relates to NMD. Many in Europe remain unconvinced that there is any real technically feasible NMD concept, and they are very concerned about a new arms race if the ABMT is abandoned unilaterally by the United States. Most nations in Europe cannot afford participation in this missile defense effort, as they can barely afford what little defense they now have conventionally.[105] Combined with a fear of moving away from a security agreement (ABMT) that has helped maintain the strategic balance of power since the 1950s, we see the Europeans generally opposed to US efforts in this area.[106] As an aside but certainly connected, the Russians may continue to engender support for either a EURO-RUSSO missile defense, or continuation of the status quo. In either case, they can be expected to use this friction point to drive a wedge between Europe and the United States if possible.

Our NATO allies are most concerned about what they perceive as a potential de-coupling of security interests. Said another way, there is a fear that if we develop this NMD, our focus on security concerns will turn away from Europe, focusing inward in an isolationist perspective, referred to as decoupling.[107] Left to their own devices in this concept, the Europeans would have to deal simultaneously with what they see as a likely arms race, increased instability, and now a EURO incapable of dealing with their own missile defense shortcomings. While administration officials have long argued that this is not the case, this decoupling issue remains a paramount concern of our allies in NATO.[108] France may decry the decision in any case, particularly in light of its own nuclear capability perhaps made obsolete by our missile defense plan. They already have voiced vociferously in NAC meetings their concerns and opposition to our plan.[109]

Related to the allied issues, both Britain and Denmark in this option have not only some concerns but some say in the matter as well. In the mid-course option, land-based interceptors for missile defense and radar expansion and upgrades occur at sites currently in their two

countries.[110] Theoretically, both countries could stand to gain zero protection themselves by approving these upgrades. Of vital interest to all concerned is that while the radars themselves provide early warning, the current proposed interceptor coverage does not include Denmark or the UK. To do so would drive the cost of the overall program up exponentially. In the end, the U.S. must deal with these two countries to develop a mutually beneficial agreement in the event that basic defense is upgraded. The cost for the upgrade to the C3 system is going to exponentially drive up the cost of the overall system. To cover the rest of Europe yet again another leap forward in cost and time.[111]

In this option, the ABMT is obviously terminated, through legal options as outlined in Article XV of the treaty itself. The second and third order effects of this option are discussed in every other measurable criterion. While the treaty itself is not violated, Europeans themselves feel that the ABMT has been the cornerstone of stability for almost 30 years now.

Risks in this option are not insignificant. Our end state remains security of the U.S. and our way of life. The reaction to a withdrawal from the treaty, at worst, could drive the Russians, the Chinese, and others into an arms race of sorts and of undetermined scope. In each state, the level of production of nuclear weapons to off-set our defensive capability would be driven by national technical capability to see what we are doing, perceived threat, and capability to purchase and maintain such systems. China, in particular, may feel compelled to deploy enough nuclear systems, with decoys, to off-set the NMD of the United States, or to increase their strategic nuclear forces.[112] The Chinese might develop a detente with the Russians, even to the extent of a new geo-strategic cooperation or defense pact. Worse yet, the Chinese could embark on an anti-US coalition that has some members already ready to sign up for it.[113] This could include the "Axis of Evil" that the President so recently referred to during his State of the Union Address in February, 2002.[114] While in the short term option one provides for the U.S. a capability to deal with the threats of rogue nations, in the long run the second and third order effects are uncertain.

Further, the perceived threat to these nuclear-capable nations could drive them to proliferate both nuclear and other capabilities to rogue nations under their influence. This effort could counter U.S. and allied efforts at counter-proliferation world wide, and may increase the influence of these rogue nations in those instances. If that were to happen, the security of the U.S. could certainly be at increased risk.

STRATEGIC OPTION TWO

Strategic Option Two remains within the ABMT, working within the current geo-strategic environment to facilitate our own security against the threat perceived against us. This includes negotiation with the Russians and other nuclear powers on revised amendments to the current ABMT. This option would seek continued compliance with the treaty of 1972, and maintain the status quo. Further, it satisfies the concerns of the Russians and the Chinese, in that they believe that the treaty (even though China was not one of the signatories to the treaty) maintains the status quo, deterrence, and therefore provides for a more stable, safe world. Our allies in Europe, particularly with their current economic and political challenges, would prefer that we stay with the treaty as written, and modified via diplomatic efforts as necessary and prudent.

Because the number one concern of the President and Congress will remain the security of the U.S, not actively seek systems capable of dealing with the threat from North Korea would be problematic in this option. This option would rely on international efforts to limit proliferation through inspections and other means, particularly in North Korea, to ensure that capabilities to attack us from there are either non-existent or of the scope that they would not, or could not, affect us or our interests in the region. This is not likely to happen in the near term under current political circumstances, but political pressure and international efforts/sanctions could cause this to change. The use of diplomatic and economic elements of national and international power, as a consequence, would have to be forceful enough against North Korea and other states to have the desired effect. They have not worked to date.

In this option, the costs of research and development continue. An advantage here is that long term procurement planning could continue without bankrupting the DOD. However, there would still be significant costs borne in this option, less than option one in the near term, but focused on research and development. Fielding costs would be delayed for an unspecified duration under this option. Consequently, long term expenditures would be less unless there is a future fielding decision made.

Technology limitations prevent us from defeating complex decoy systems at this time. The key advantage to this option is that we can continue with research and development, without the cost of fielding, to identify and fix the shortfalls that currently exist in the technical dimensions of NMD. As stated earlier, there are diametrically opposed scientific groups who come to different conclusions as to the technical capabilities and limitations on the current system. This option would also provide more time for the facts to perhaps become clearer on this murky issue.

Domestic consensus runs very high, after the events of September, 2001, to do something about a now perceived vulnerability. However, there are enough members of Congress who doubt the technical capabilities of the system and who also believe in ABMT as a deterrent, that there could be support developed domestically for this option over time. Careful deliberation, particularly as to how to ply our elements of national power to influence changes to the treaty, are required to be successful in that regard. Additionally, Congress might more likely support this effort domestically, as the cost could likely be lower in years prior to a decision to deploy missile defenses. These savings could be provided for domestic consumption on domestic issues, while minimizing diplomatic challenges from Russia, China, and our allies. Finally, Congress would likely support this option as it does not negate their ratification of the ABMT some twenty-eight years ago.

Our allies in Europe would gladly support our efforts to maintain the status quo. As stated earlier, the current efforts of the European Community center around the development of the European Security Force, and the obvious strategic, logistical, and political challenges included in that effort.[115] Europeans simply do not see the threat as we do, and their focus is on development of the EU, stability of the EURO, and maintenance of security alliances in the region. This option could negate an arms race in and around Europe, and support diplomatic solutions to modifications of the treaty as needed. This would have much more diplomatic support from the European countries than option one. Most importantly, the issue of decoupling of security interests, in the near term, disappears.

In this option, the ABMT would not need to be violated or terminated. This is clearly the option of choice for our allies. Modification of the treaty, in the context of missile defense as an option, will take time to negotiate. The Russians will be most content with this option, as it maintains the objectives that they had for the ABMT some twenty-eight years ago.

Risks in this option are not insignificant either. The most significant risk is to U.S. security. While we would maintain diplomatic and other elements of power to influence the Russians and other international players about ways to modify the treaty, the U.S. will be less secure than option one. The lack of a threat of a renewed arms race would certainly decrease the overall risk world wide, and one can argue that those funds that would have been earmarked for that arms race can be better spent in this option on domestic issues world-wide. In the end, that money spent internally, if spent properly, could improve the standard of living for individuals, easing the challenge of nations' economies world-wide. This option, although preferred by most international actors, increases the threat to security of the U.S. itself.

CONCLUSIONS AND IMPLICATIONS

The fictional scenario portrayed at the introduction to this paper is one that we do not want to see occur as a nation, anytime, anywhere. The recent events and the horrific attack on the United States on 11 September, 2001, will no doubt be our litmus test for security in the future. The call to arms has been sounded, and collectively we must deal with the evolving threats around us. The ABMT served the nation well for almost 30 years, and provided the world with a sense of security, a collective security, that kept the peace, and helped all of us maintain a semblance of peace and stability. However, the stark reality is that our nation is no longer safe from attack, proven by the attacks in New York and Washington. Further, the asymmetric attack that took place revealed fundamental flaws in our own capability to secure ourselves, and to secure our way of life from attack.

In the authors view, the President's recent decision to unilaterally withdraw from the ABMT, and begin to field a national missile defense is the correct action to take at this critical juncture in our nation's history. The ABMT, termed by the current Administration "a relic of the Cold War", was useful in its time, but the treaty is no longer adequate to address the security issues of the U.S. in the 21st Century. The current situation calls for a paradigm shift, and the only way that will occur is by withdrawing from the treaty. An evolving missile defense system, while costly and technically difficult to achieve, would send a clear signal to our enemies that we are going to be prepared for the coming days, and that as a nation we are committed to peace through readiness, security through resolve, and protection against these hostile attacks through measured responses and systems capable of defeating future rogue attacks against our way of life.

And what of the future, what are the near and long term implications of this historic decision and policy of the current administration? The economic implications are clear internally. We must fund the missile defense testing and fielding, despite the extraordinary cost. Externally, the near and long term impact on our economic relations with our allies, with those in the EU, WTO, and in other economic spheres of influence is difficult to assess. How will our decision effect these markets is unclear. The diplomatic implications of this decision are also compelling. Where will the Russians, Chinese, and others turn, how will they react to our withdrawal, and what are the implications for both arms control and non-proliferation? The second and third order effects of this decision will not really be seen for years to come. Our allies, particularly in NATO, are concerned about de-coupling of our security pacts. Are we on the road to unilaterilism and isolation? Will our allies take our recent diplomatic statements as a diplomatic affront, and will our relations particularly with our European allies suffer? How will we

provide coverage to allies, and at what cost? Where do NATO and the security framework of that alliance fit into this new strategic situation? How does France react to NMD and do they create new security agreements with others who own nuclear capabilities? What do the Chinese and Russians do, will they partner and ally with others in strategic alliances against the United States? What are the long term implications of that alliance diplomatically and economically? Will the Chinese proliferate WMD or complex decoy technology? There are many questions and future risks that have no answers yet. Yet one thing we know for sure is that we must secure our nation from attack, and today it seems that the only way to do that is by pressing aggressively forward with missile efforts that will do just that. The U.S. and its citizens expect and demand no less.

Word Count 9690

ENDNOTES

[1] This scenario is theoretically possible if the United States does nothing about its missile defense capability. The nuclear blast and effects could kill millions in a large population center such as New York or Los Angeles.

[2] For a detailed description of the major terrorist groups, see Christopher Harmon's book, "Terrorism Today," pages 281-290.

[3] Most recently, the current Secretary of Defense, Donald Rumsfeld, stated that the system should be referred to as missile defense. This author chooses to use national missile defense simply because the current costs, coverage areas, and phases planed are for protection of U.S. land masses (including Hawaii and Alaska) only. To expand the current national missile defense to include coverage of our key allies is going to be exponentially more expensive, and would turn into world wide coverage, costing probably 100s of billions of dollars or more per year to test and field a technically feasible system. That the current system has significant technical challenges and has only proven successful against one missile with simple countermeasures makes this larger effort all the more unlikely in the long run. From a European perspective then, it is still a national system, versus one that would provide a shield over many nations.

[4] This acronym includes both the 1972 agreement, and the amendment approved in 1974 limiting each nation to one defensive field per nation.

[5] Charles Krauthhammer, "Unilateral? Yes, Indeed." in The Washington Post, Washington, D.C.,14 Dec 01; [database on –line]; available from UMI ProQuest, Bell and Howell; accessed on 2 Feb 02. The President announced his intent to withdraw from the treaty, striking to many, a foreign policy of unilateralism. This announcement, and the unilateralism that it may portend, may not bode well for U.S. allies and U.S. coalition efforts in the future. According to Krauthhammer, the U.S. needs coalition partners and cannot alienate them again and again. This announcement, according to some, is not good news for US/EURO relations. The reaction of the Russians was negative but muted.

[6] "Missile Defense," National Review, New York (Dec 31, 2001)": 1. [database on –line]; available from UMI ProQuest, Bell and Howell; accessed 19 January 02. Many argue that with this decision, the political battles, both with allies in NATO and with Russia, China, and other nuclear powers, are just beginning. Additionally, Congress and its power to control money for such systems, is may not fully support unilateral withdrawal from the ABMT. For many on both ends of the spectrum, the battle for victory has just begun.

[7] McGeorge Bundy, Danger and Survival, Choices about the Bomb in the First Fifty Years, , (New York, New York: Vintage Press, 1990), 319.

[8] Bundy, 328.

[9] Ibid., 334.

[10] Shawn Zeller, "Sputnik: The Soviet's October Surprise", National Journal, Nov 3, 2001, Washington D.C., [database on-line]; available from UMI ProQuest, Bell & Howell. Accessed 2 Feb 02. According to Zeller, the Soviets' launch of the satellite Sputnik on October 4, 1957, was a defining moment in U.S. history. The realization that the Soviets were ahead of the United States in the race to space highlighted the American vulnerability. If the Soviets could send a satellite over the United States, they could also launch an intercontinental ballistic missile armed with a nuclear warhead. Zeller continues, 'Sputnik also intensified the arms and triggered a widespread belief in a missile gap, with the Soviets supposedly holding as much as a 15-1 advantage in ICBMs. Historians' subsequent research revealed that no such missile gap existed.'

[11] Bundy, 335-37. Bundy asserts here that the missile gap more fiction than reality and that the missile gap was a prediction of planners of what Soviet intent was. Intent was hard to gauge, and the missile production race had begun.

[12] Ibid., 341.

[13] K. Scott McMahon, Pursuit of the Shield, The U.S. Quest for Limited Ballistic Missile Defense, (Lanham, Maryland, University Pres of America, 1997), 18-19.

[14] Bundy, 332-333.

[15] Ibid., 350.

[16] Ibid., 338.

[17] Ibid., 343.

[18] Ibid., 343-48.

[19] Precise knowledge of exactly what the opposing side has, in terms of nuclear forces, is clearer now than ever before, but where they are, and who controls them are still issues. This is particularly the case with Russia and their tactical nuclear capability.

[20] Bundy, 549.

[21] Ibid., 549.

[22] McMahon, 35.

[23] Bundy, 550.

[24] McMahon, 46. Safeguard had three purposes according to President Nixon: 1. protect U.S. land-based retaliatory forces against an attack by the USSR; 2. Defend the U.S. population against limited missile strikes such as the type the Peoples Republic of China (PRC) might be able to mount in the next decade; 3. Protect against accidental or unauthorized launches.

[25] Jeffrey A. Larsen and James J Wirtz, Rockets' Red Glare, Missile Defenses and the Future of Politics (Cambridge, MA.: Westview Press, 2001), 25.

[26] McMahon, 47.

[27] Bundy, 550.

[28] Wirtz and Larsen, 3.

[29] Larry W. Jameson , SAFEGUARD ABM SYSTEM: AN ACCOUNT OF ITS CONTROVERSIAL BEGINNING AND BRIEF EXISTENCE, Space Studies Masters Paper (Grand Forks, North Dakota, 3 May 1989), 4.

[30] Wirtz and Larsen, 307. The US ICBM silo launch area was centered in the Grand Forks, North Dakota launcher deployment area.

[31] Wirtz and Larsen, 48.

[32] Strategic Assessment, 1999, 96.

[33] Norman A. Bailey, The Strategy that Won the Cold War, National Security Decision Directive 75, (McLean, Virginia: Second Edition, The Potomac Foundation, 1998), 8.

[34] Bundy, 570.

[35] Bailey, 20-21.

[36] Bradley Graham, Hit to Kill, The New Battle over Shielding America from Missile Attack. (New York, New York; Perseus Books Group, 2001), 21.

[37] McMahon, 79. The Gulf War clearly highlighted a shortfall in Anti-Theater Ballistic Missile Defense (ATBMD). Additionally, allies were more acutely aware than previously their vulnerability to missile attacks, tactically and strategically.

[38] Graham, 23. Of note, then Secretary of Defense Les Aspin viewed this effort as the end of the Star Wars Era. He wanted the DOD to focus on short ranges systems, placing national systems on the back "research and development" burner.

[39] Bradley, xxv.

[40] Graham, 32-33.

[41] Ibid., 34.

[42] Ibid., 35. The panel was composed of both Democrats and Republicans. The Democrats included Richard Garwin, Barry Blechmore, GEN (retired) Lee Butler. The Republicans also included Bill Schneider, William Graham, R. James Woosely ,and GEN (retired) Larry Welch.

[43] Ibid., 44.

[44] Ibid., 35. The complete panel included the following: Rumsfeld (a White House Chief of Staff and SECDEF under President Gerald Ford, Wolfowitz (the Pentagon's policy chief under Ford, and subsequently served as the dean of the Paul H. Nitze School of Advanced International Studies at Johns Hopkins University), William Schneider Jr., (an under Secretary of State under Pres Reagan and chairman of the president's advisory committee on arms control), William Graham (White House science and technology director under President Reagan), R James Woosely (lawyer who served as Linton's first director of Central Intelligence for two years), and GEN ® Larry Welch (former Air Force Chief of Staff). Democratic lawmakers sponsored the following committee members: Richard Garwin (physicist who has spoken out against missile defense, and with experience in the field), Barry Blechman,(founder of Henry Stimson Center a public policy research organization), and GEN ® Lee Butler (STRACCOM CINC in the early 90s).

[45] Ibid., 44.

[46] Ibid., 42.

[47] Ibid., 52. According to Graham, the more frightening aspects of this launch included a possible use by the North Koreans of Russian technicians, and a clear failure of US intelligence (specifically HUMINT capability) to predict this launch before its occurrence.

[48] Ibid., 64. Graham continued by stating there is some speculation as to the facts. Some analysts figure that Russia helped with the staging and booster. Other more radical theories include one that the missiles were secretly built with Russian components, with the active help of Russian scientists residing in North Korea.

[49] Ibid., 60.

[50] Ibid., 322.

[51] Ibid., 329.

[52] Ibid., 154.

[53] Ibid., 343. It is interesting to note that when Bush interviewed Condaleeza Rice for National Security Advisor, Bush told her that he was fascinated with the fact of the US vulnerability, and could not believe that our nation would choose to be vulnerable and risk a threat of being blown up rather than try to defend ourselves. This is a recurring theme of President Bush.

[54] Ibid., 358.

[55] Wirtz and Larsen, 302.

[56] Institute for National Studies, Strategic Assessment 1999, Priorities for a Turbulent World. (Washington D.C.: National Defense University, 1999), 97.

[57] Strategic Assessment 1999, 97.

[58] Strategic Assessment 1999, 99-100.

[59] Strategic Assessment 1999, 97. Control of nuclear scientists continues as a problem for Russia. With turmoil for the future expected and economic challenges remaining at best where they are today, lack of control could get far worse.

[60] Graham, 64.

[61]"Russian Army Sells Arms to Pay for Food," Strategic Forcecasting 9 Oct 98. [database on-line]; available from UMI ProQuest, Bell & Howell; accessed on 3 Feb 02.

[62] Strategic Assessment 1999, 95.

[63] Strategic Assessment 1999, 95.

[64] Strategic Assessment 1999, 100.

[65]Bill Nichols, "Russia Still Against Missile Tests as Powell's visit fails to Pursuade Putin on Compromise," USA TODAY, (Arlington Va, 11 Dec 01), [database on-line]; available from UMI ProQuest, Bell & Howell; assessed on 2 Feb 02.

[66]Thomas L. Friedman, "Russia's Last Line," (New York Times, New York, N.Y. Dec 23, 2001.) [database on-line]; available from UMI ProQuest, Bell & Howell; assessed on 2 Feb 02.

[67] Strategic Assessment 1999, 98.

[68] Global Trends 2015: A Dialogue About the Future with Nongovernment Experts, CIA Report under the direction of the Director, CIA., 1.

[69] Global Trends 2015: A Dialogue About the Future with Nongovernment Experts, CIA Report under the direction of the Director, CIA., 12.

[70] Global Trends 2015: A Dialogue About the Future with Nongovernment Experts, CIA Report under the direction of the Director, CIA., 12.

[71] Michael Pillsbury, "China Debates the Future Security Environment," National Defense University Press, (National Defense University, 2000). 60-75. According to Pillsbury, Chinese leadership believes that our arrogance after the Gulf war will prevent us from effecting revolutions in military affairs, that the U.S. cannot contain Chinese power, that our space-based satellites are vulnerable, and that we are optimized for fighting in deserts, not mountains.

[72] Strategic Assessment 1999, 206. China, like Russia, does not seek to dominate the US, but would like to see a return to the status quo, where US has decreased influence in the region as compared to other key nations in the region.

[73] Strategic Assessment 1999, 209.

[74] Strategic Assessment 1999, 209.

[75] Global Trends, 2015, 35. This includes deployment of 10s of nuclear tipped missiles pointed at US, as well as hundreds of shorter range ballistic and cruise missiles. Much of this technology has been purchased and/or stolen from the west.

[76] Zbigniew Brzezinski, "The Grand Chessboard", (Harper-Collins Publishers,New York, New York), 1997, 181-184.

[77]Wirtz and Larsen, 202.

[78] "North Korea's Old Tactics May Backfire Post-11 Sept, 7 Dec 2001," Strategic Forecasting, [database on-line]; available from UMI ProQuest, Bell & Howell; accessed 3Feb 02.

[79] Graham, 52.

[80] Ibid, 53. According to Graham, the range of the Taepdong I is approx 2,000 KM, and up to 5,500 KM with the three stage missile . The range of debris landed some 4,000 KM away for the August 98 launch. The Taepodong II, not yet seen or flight tested, could have a range of over 6,000 KM, and analysts say that its design could carry a nuclear war head to target sites.

[81] The author has served the past two years in Saudi Arabia, as a senior advisor. Several officers of senior rank repeatedly stated that Hussein would attack if he could, and if the United States was not there as a deterrent force, he would have already done so.

[82] Global Trends 2015, 37.

[83] Strategic Assessment 1999, p.114.

[84] Strategic Assessment 1999, p. 110-111.

[85] Global Trends, p 37.

[86] Global Trends, p 37.

[87] Strategic Assessment 1999, p.114.

[88] Strategic Assessment 1999, 103.

[89] "Dictating Terms: Sept 11 Aids Gadahfi in Effort to Get Libya off U.S. Terrorist list---Bush Shift on Islamic Outlaws Dovetails with Two Years of Secret Talks, Lobbying---Payoff for the Oil Companies," The Wall Street Journal, New York, N.Y., 14 Jan 02, [database on-line]; available from UMI ProQuest, Bell & Howell; Assessed on 2 Feb 02.

[90] Paul Richter, "U.S. Reports "Positive" Policy Talks with Libya," Chigago Tribune, Chigago, Illinois, 24 Jan, 2002, ?.

[91] Donald H. Rumsfeld, Quadrennial Defense Review Report, (Washington, D.C.: The Pentagon, Sept 30, 2001), 2.

[92]William J. Clinton, A National Security Strategy for a Global Age,(Washington, D.C.: The White House, December 2000), 22.

[93] Steven Erlanger, "Bush's Move on ABM Pact Gives Pause to Europeans," New York Times, New York, N.Y., 14 Dec 02, , [database on-line]; available from UMI ProQuest, Bell & Howell; accessed on 2 Feb 02.

[94]State Department, United States of America, Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, Washing ton DC., 26 May 1972, 1-3.

[95] Siegfried S. Hecker, "Thoughts about an Integrated Strategy for Nuclear Cooperation with Russia," The Nonproliferation Review,, Monterrey Institute of International Studies, Monterrey, Cal (Summer 2001), 3.

[96] This is, as stated earlier, the stated policy of the President of the United States, George Bush, in Dec 01.

[97] These criteria were determined based upon the most critical factors that effect nations, and those factors that relate specifically to NMD. For the most part, discussions in numbers (particularly budget numbers) are avoided because there are too many conflicting budget numbers to accurately review and assess within the scope and limitations of this paper.

[98] Graham, 378. Technical feasibility of the system and cost has always been the two driving forces behind critics of the system.

[99] Ibid., 264.

[100] Ibid., 3.

[101] Ibid., 370.

[102] This is the author's view, given that the budget is a zero sum gain effort. With the costs of the system, coupled with the cost of the war on terror, conventional and other budget cuts may occur.

[103] Part of the reason for this is that the missiles were launched from a capable missile launch site in Vandenburg AFB, CA.

[104] Sydney Orman, "The Future of European Missile Defense Systems," The Journal of Social, Political, and Economic Studies, (Summer 2000, VOL 2), 396.

[105] Brussels Burden,

[106] Graham, 154. According to Graham, the French Ambassador, Guelluy, spoke for most of the Europeans when Strobe Talbot met with the NAC in Nov 99 in Brussels. Guelluy feared that NMD by U.S. would: a. undermine deterrence; b. weaken credibility within NATO of its own non-proliferation efforts (presupposes failure of non-proliferation); c. set off a new arms race with Russia, China, India and others; d. run the risk of this shield de-coupling the U.S.-EURO

security structure, and e. felt that the NMD effort threatened to upset the universe of international security that remains currently at peace.

[107] Hit to Kill, 165.

[108] Wirtz and Larsen, p 267.

[109] Graham, 154.

[110] Wirtz and Larsen, 287-89.

[111] In a briefing received at the United States Army War College, 11 Sept 01, on Weapons of Mass Destruction, lecture given by COL Glenn Trimmer, College, Carlisle Barracks, PA, on 11 Oct 2001, on WMD (one month to the day after the deadliest one day attacks in US history), the figures on cost go up to and beyond $ 100 billion for the cost of the system, from testing to full fielding. These costs could clearly go up, as the technology for this entire system is still not even off the drawing boards yet.

[112] Wirtz and Larsen, 200.

[113] Wirtz and Larsen, 201.

[114] This Axis of Evil includes Iraq and Iran, co-sponsors of terrorism and suspected owners of weapons of mass destruction.

[115] Orman, 396.

BIBLIOGRAPHY

Bailey, Norman A., The Strategy that Won the Cold War, National Security Directive 75. McLean, Va: The Potomac Foundation, 1998.

Brzezinksi, Zbigniew, The Grand Chess board, American Primacy and Its Geostrategic Imperattives, HarperCollins Publishers, New York, New York. 1997

Bundy, McGeorge, Danger and Survival, Choices about the Bomb and the First Fifty Years. New York, New York: Vintage House, 1990.

Bunn, M. Elaine, "Strategic Nuclear Forces and National Missile Defense: Towards an Integrated Framework." In QDR 2001, Strategy-Driven Choices for America's Securityl, ed Michele A. Flournoy, 319-349. Washington D.C.: National Defense Unversity Press, 2001.

Bush, George W., and Scowcroft, Brent. "A World Transformed." New York: Alfred A. Knoph, 1998.

Clinton, William J. A National Security Strategy for a Global Age, Washington D.C.: The White House, Dec 2000.

Friedman, Thomas L. "Russia's Last Line." (New York Times, New York, N.Y. Dec 23, 2001): Database on-line. Available from UMI ProQuest, Bell & Howell. Assessed on 2 Feb 02.

Graham, Bradley. Hit to Kill, The New Battle over Shielding America from Missile Attack. New York, New York. Perseus Books Group, 2001.

Harmon, Christopher C. "Terrorism Today." London England: Frank Cass Publishers, 2001.

Hecker, Siegfried S., "Thoughts about an Integrated Strategy for Nuclear Cooperation with Russia," The Nonproliferation Review, Monterrey Institute of International Studies, Monterrey, Cal(Summer 2001).

Jameson, Larry W. SAFEGUARD ABM SYSTEM: AN ACCOUNT OF ITS CONTROVERSIAL BEGINNING AND BRIEF EXISTENCE. Grand Forks, North Dakota: Space Studies Masters Paper, 3 May 1989.

Kalparia, Chittaranjan. "A Russian Perspective on the START Process and NMD." Strategic Analysis. New Delhi, India, Aug 01.

Krauthhammer,Charles "Unilateral? Yes, Indeed." in The Washington Post, Washington, D.C.,14 December 01. Database on –line. Available from UMI ProQuest, Bell and Howell. Accessed on 2 Feb 02;

Kubalkova, Vendulka. "Foreign Policy ina Constructed World." New York, New York: M.E. Sharp, INC, 2001.

Larsen, Jeffry A. and Wirtz, James J. Rockets Red Glare, Missile Defenses and the Future of World Politics. Cambridge, MASS: Westview Press, 2001.

McMahon, K.Scott, Pursuit of the Shield, The U.S. Quest for Limited Ballistic Missile Defense. Lanham, Maryland: University Pres of America, 1997.

Nichols,Bill "Russia Still Against Missile Tests as Powell's visit fails to Pursuade Putin on Compromise" USA TODAY, (Arlington Va, 11 Dec 01): Database on-line. Available from UMI ProQuest, Bell & Howell. Assessed on 2 Feb 02.

Orman, Sydney, "The Future of European Missile Defense Systems," The Journal of Social, Political, and Economic Studies, (Summer 2000, VOL 2).

Pillsbury, Michael "China Debates the Future Security Environment," National Defense University Press, (National Defense University, 2000).

"Missile Defense," National Review, New York (Dec 31, 2001)": 1. [database on –line]; available from UMI ProQuest, Bell and Howell; accessed 19 January 02.

National Missile Defensed Act of 1999, One Hundred 6th Congress, <http:www.cdi.org.hotspots/miissiledefense/act.html> Internet. Accessed 11 Oct 01.

"North Korea's Old Tactics May Backfire Post-11 Sept, 7 Dec 2001." Strategic Forecasting. Database on-line. Available from UMI ProQuest, Bell & Howell. Accessed 3 Feb 02.

Richter, Paul "U.S. Reports "Positive" Policy Talks with Libya." Chigago Tribune, Chigago, Illinois. 24 Jan, 2002.

Rumsfeld, Donald H. Quadrennial Defense Review Report, Washington D.C.: The Pentagon, Sept 2001.

Russian Army Sells Arms to Pay for Food." Strategic Forcecasting (9 Oct 98). Database on-line. Available from UMI ProQuest, Bell & Howell. Accessed on 3 Feb 02.

State Department, United States of America, Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, Washing ton DC., 26 May 1972.

Turner, Standsfield, "Dilemma of Nuclear Weapons in the Twenty First Century." Naval War College Review. Spring 2001.

United States Government Report, "Global Trends 2015: A Dialogue About the Future with Nongovernment Experts, Washington D.C., December 2000.

United States Government, "Strategic Assessment, Priorities for a Turbulent World". National Defense University, Washington DC, 1999

U.S. National Defense University. Strategic Assessment 1999, Priorities for a Turbulent World. Washington D.C.: National Defense University, 1999.

Zeller, Shawn. "Sputnik: The Soviet's October Surprise." National Journal, Nov 3, 2001. Washington D.C. Database on-line. Available from UMI ProQuest, Bell & Howell. Accessed 2 Feb 02.