No. 51 **February 11, 1999**

BALLISTIC MISSILE PROLIFERATION
Does the Clinton Administration Understand the Threat?

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Executive Summary

Although the end of the Cold War reduced the likelihood of a nuclear exchange between the superpowers, several smaller rogue states, through their dedicated efforts to acquire weapons of mass destruction and ballistic missiles, have emerged as potential threats to U.S. national security. National Intelligence Estimate 95-19 stated that no new missile threats to the United States would develop before 2010. However, given the curious circumstances of the estimate's release and the many analytical faults contained in the document, its results have been questioned.

In the summer of 1998, the congressionally appointed Rumsfeld commission reported that the ballistic missile threat to the United States was greater than the intelligence community had postulated. The commission noted that any one of several rogue states could decide to acquire a capability to inflict major destruction on the United States and then do so within five years. Only recently has the Clinton administration begun to grudgingly acknowledge that the threat may be more severe than it had anticipated. To reduce the risk posed by unforeseen threats, the United States should reallocate money in the intelligence budget from technical means of collection to human collection--which might be more effective in discovering proliferation--and should develop a limited national missile defense.

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Introduction

Despite the end of the Cold War, America has not fully escaped the threat of attack by ballistic missiles. On January 23, 1996, a triumphant President Clinton proclaimed, "For the first time since the dawn of the nuclear age, there are no Russian missiles pointed at America's children."[1] Although the fall of the Soviet Union may have reduced the risk of a ballistic missile exchange between the superpowers, it did not eliminate the threat from smaller, rogue states. Several governments, in an attempt to expand their military capabilities and international influence, have embarked on programs to strengthen their arsenals. Increasingly, those attempts include research and development of weapons of mass destruction (nuclear, chemical, and biological weapons) and ballistic missiles.

According to the secretary of defense, more than 20 nations have missiles of one form or another and more than 20 nations possess or are developing weapons of mass destruction (WMD).[2] The proliferation of such technologies outside the club of major powers is already well under way. Any nation possessing the fiscal resources and ambition to develop WMD and ballistic missiles may succeed in doing so.

Currently, only four nations possess intercontinental ballistic missiles (ICBMs) that can reach the continental United States: Russia, China, France, and the United Kingdom.[3] Fortunately, the United States is on close or at least decent terms with each of those nations. More disturbing than the nations that currently possess ICBMs are those that may be attempting to obtain such weapons: Iran, Iraq, Libya, Syria, and North Korea.[4] Known as the five rogue states, those regimes--all noted sponsors of international terrorism--pose the greatest threat to the United States.

The induction of those nations into the vaunted "ballistic missile club" could weaken America's faith in its long-held policy of deterrence. Deterrence--the theory that nations will be prevented from taking certain actions when faced with the threat of retaliation--assumes the adversary is rational. However, that assumption is not a guarantee, especially given the past actions of several leaders of rogue regimes.

Libya's Moammar Qaddafi, a long-time antagonist of the United States, has repeatedly acted hastily and unpredictably. After witnessing the destructive power and clear military superiority of the United States during the 1986

bombing of Tripoli and engagements in the Gulf of Sidra, Qaddafi nevertheless fired two ballistic missiles at an American Coast Guard facility on the Italian island of Lampedusa.[5] He has since made several statements indicating his intent to launch a nuclear-tipped missile at the United States if he acquires the capability.

North Korea's leader, Kim Jong-Il, also seems unpredictable. Commenting on North Korea's sudden withdrawal from the Nuclear Non-Proliferation Treaty in 1993, former national security adviser Brent Scowcroft noted that U.S. officials might conclude from Kim's psychological profile that he is "more susceptible to rash acts, making the current nuclear crisis 'a particularly dangerous time.'"[6] Given the reckless tendencies of the leaders of rogue states, American policymakers can no longer be completely assured that the threat of retaliation will preclude attack. In the face of those unpredictable threats, America must strengthen its intelligence capabilities and deploy a limited national missile defense system to provide the homeland with added protection against ballistic missile attacks.

Overview of Current Threats

Syria, Iraq, Libya, Iran, and North Korea pose the most likely threats to the American homeland and American forces in foreign theaters. As the following overviews illustrate, each of those nations has made a diligent attempt to acquire ballistic missiles and some sort of WMD capability either through an indigenous development program or by purchasing the technologies on the open market.

Syria

Syria has been very successful in acquiring an extensive ballistic missile force. Alarmed by the conventional buildup of its regional adversary, Israel, Syria has sought to balance that threat by acquiring a credible missile force. Syria first obtained a ballistic missile capability through a direct transfer of Scud Bs from the Soviet Union during the early 1970s.[7] That transfer was complemented by a later delivery of Soviet-built shorter range SS-21s.[8] More recently, Syria received a newer version of the Scud produced by North Korea--the extended-range Scud C. The Scud C has an estimated range of 550 to 600 kilometers, far greater than the Scud B's 310 km. With the Scud C, Syria is capable of hitting targets located in the strategic northern half of Israel.[9] Syria's possession of the Scud C

also poses a credible threat to American forces stationed at the air base in Incirlik, Turkey. Syria's ballistic missiles pose no threat to the United States.

Syria has received valuable assistance from other rogue states in the procurement of a sizable ballistic missile force. The Israeli Defense Force estimates that Syria will have at least 80 surface-to-surface missile launchers and more than 1,000 missiles by the year 2000. That equipment was both produced domestically and acquired from foreign suppliers.[10] In addition to acquiring weapon systems from the Soviet Union, Syria has received assistance in constructing two missile production facilities from Chinese, Iranian, and North Korean technicians.[11] Located in underground bunkers in Aleppo and Hama, the facilities give Syria the capability to produce Scud Bs. In addition, in July 1996 there were reports of a Chinese delivery of M-11 missile parts that were presumably to be assembled at the Syrian facilities.[12] The M-11 missile has a range of about 300 km.

The threat posed by those missiles is compounded by the presence in the Syrian arsenal of chemical weapons, which were first acquired from Egypt in 1973.[13] Syria began domestic production of nerve gas in 1984 and, to date, has stockpiled between 500 and 1,000 metric tons of various chemical agents.[14] As early as the 1970s, Syria also received the technology to turn the agents into weapons. Along with the design specifications for the warheads for the Scud B, the Soviet Union provided Syria with several warheads containing the powerful nerve agent VX.[15] Syria has since conducted tests of its own advanced warhead designs for the Scud B. Recent reports by the U.S. Ballistic Missile Defense Organization indicate the imminent production of chemical bomblets for the Scud C.[16]

Of equal concern are Syrian advances in biological weapons. An August 1996 report of the Arms Control and Disarmament Agency declared that "it is highly probable that Syria is developing an offensive biological capability."[17] Currently, the Damascus Biological Research Facility is engaged in research involving the agents that cause anthrax, cholera, and botulism. Israel claims that the facility also made Ricin into a weapon in the early 1990s.[18]

Iraq

Despite the dismantling of substantial portions of Iraq's nuclear, biological, and chemical (NBC) programs and missile capabilities since the Gulf War, Baghdad still has the potential to quickly resurrect its research and production programs. Under United Nations Security Council Resolution 687 (UNSCR 687), passed in 1991, Iraq is prohibited from continuing research on NBC weapons and delivery systems and must open its facilities to UN weapons inspection teams.[19] The United Nations estimates that it can account for 817 of the 819 long-range missiles imported by Iraq through 1988, but the possibility remains that several missiles (both imported and indigenously produced) are hidden.[20] According to retired Air Force Lt. Gen. Buster Glosson, Iraq has been able to hide six to eight Scuds that are capable of delivering biological and chemical weapons. He also estimates that UN inspectors are currently aware of only two-thirds of Iraq's NBC facilities.[21] Even with the most intrusive inspections in history, the United Nations will probably not be able to find all of Iraq's NBC weapons and missiles, the materials used to make them, and the facilities in which they are made.[22]

Although Iraq's NBC and missile capabilities may be hampered as long as UN intervention continues, Iraq has already put considerable effort into reconstructing those forces. UN officials contend that Iraq has developed a clandestine network of front companies to acquire from Russia and Europe the technology and components necessary to rebuild its ballistic missile program.[23] Under UNSCR 687, Iraq is prohibited from developing a missile system with a range in excess of 150 km. After the inevitable end of UN inspections, however, Iraq may be capable of converting a system that currently complies with the directive, the Ababil-100, into an extended-range weapon.

Iraq could easily revive its biological and chemical weapons program with readily available commercial materials and technology. It might be able to revive its nuclear program with nuclear material or technology purchased or stolen from Russia. If Iraq combined its missile system with a revived NBC program, it could present a credible threat to its neighbors--specifically Israel and oil-rich Saudi Arabia--and to American forces deployed in the Persian Gulf.

Libya

For most of the past decade, since its infamous confrontations with the United States in the mid-1980s, Libya has been absent from world headlines. Its reclusiveness, however, should not be seen as passivity. In 1976 Libya originally acquired at least 240 Scud B missiles and 80 launchers from the Soviet Union.[24] Although Libya has since sold some of the weapons to Iran, it still retains a significant number of missiles capable of hitting targets nearly 300 km away. Such missiles allow Libya to threaten much of the Mediterranean.

Libya has also embarked on an indigenous missile development program called the al-Fatah. The program's goal is to deliver a 500-kilogram warhead up to 1,000 km away.[25] To date, the program has met only limited success, but the Libyan government is actively seeking outside assistance to speed development. Libya has approached experts in both Germany and the former Soviet Union for help.

Like several of the other rogue nations, Libya seems intent on deploying a ballistic missile with an NBC warhead. So far, Libyan attempts to acquire a nuclear capability have failed. To the embarrassment of both Russia and Libya, a much-publicized Libyan attempt to bribe a senior Russian navy official to sell a nuclear device failed. Since then Russia--Libya's most likely source for such weapons--has refused to share any nuclear technology with the Qaddafi regime.[26]

Libya has had much greater success in developing chemical weapons. In the 1980s Libya succeeded in producing 100 tons of blister and nerve agents, albeit with substantial foreign assistance.[27]

In recent years Libya has attempted to construct a large-scale underground chemical weapons facility at Tarhunah. That development has alarmed Western observers. In 1996 then-secretary of defense William Perry remarked, "We believe that if Libya were to begin production at this plant, it would represent a threat to all nations in the region--indeed, possibly the world. Therefore, we are prepared to take preventive measures to keep Libya from posing such a threat to peace and stability."[28] Perry later ominously warned that those "measures" could include exercising the nuclear option.[29] Although UN sanctions imposed on Libya in 1988 have hindered its development of

ballistic missiles and chemical weapons, clearly they have not eliminated the danger posed by its current arsenal.[30]

Iran

Iran has extensive experience with ballistic missiles. During the Iran-Iraq War, Iran fired nearly 120 Scuds at Iraq, including 77 missiles during a 52-day period known as the "War of the Cities."[31] The backbone of the Iranian ballistic missile force is the Scud B, which Iran obtained from Libya and North Korea. Analysts estimate that Iran bought between 200 and 300 missiles from North Korea between 1987 and 1992. In 1997 Iran possessed 250-300 Scud Bs and 8-15 launchers, according to Israeli sources.[32] With the Scud B, Iran could strike targets in the other gulf states, in eastern Turkey, and in several states of the former Soviet Union. More recently, Iran has purchased from North Korea the Scud C, which has much greater range than the Scud B. Iran reportedly had acquired 60 to 100 of the Scud C missiles by mid-1998.[33]

Iran has collaborated with North Korea on much of its ballistic missile program. In late 1992 Iran signed an agreement with North Korea worth $500 million to jointly develop nuclear weapons and advanced missile systems to deliver NBC warheads.[34] Iran is attempting to acquire newer, more advanced North Korean missiles, such as the No Dong and the Taepo Dong 1 and 2, which are the newest missile prototypes under development in North Korea. (The No Dong has a range of 1,000 to 1,300 km, the Taepo Dong 1 a range of over 1,500 km, and the Taepo Dong 2 a range of 4,000 km.)

Also, using North Korean technology as a foundation, Iran has initiated its own missile design and development program. On July 23, 1998, Iran tested the Shahab-3, a medium-range missile with an estimated range of at least 1,300 km.[35] According to U.S. assistant secretary of defense Kenneth Bacon, "We believe it was based on a North Korean No-dong missile."[36] This latest test--marking further progress toward Iran's apparent goal of possessing an ICBM--increased the Clinton administration's already deep concern about Iran's delivery capabilities.[37]

The alarm can also be attributed to revelations about Iran's NBC capabilities. In 1996 the Central Intelligence Agency reported to Congress that "Iran continues to be one of the most active countries seeking to acquire all types of WMD technology and advanced conventional weapons."[38] The

original impetus for Iran's NBC acquisition program was the Iran-Iraq war, which pitted Iran against an adversary that possessed chemical weapons. Finding itself at a tremendous disadvantage, Iran embarked on a crash course to acquire NBC weapons--first by buying them from other nations and later by developing an indigenous production capability. By the end of the war, Iran was able to produce several blood and blister agents, including mustard and cyanide gas. This production capacity now approaches nearly 1,000 tons annually. During the early 1990s Iran expanded its research to include nerve gases--including the v-agents--and is now widely believed to have made them into weapons. Furthermore, Iran is known to have conducted research on several biological agents such as anthrax, biotoxins, and the organism that causes foot-and-mouth disease. The 1996 Arms Control and Disarmament Agency annual report warns, "The United States reiterates its previous finding that Iran has produced BW agents and apparently weaponized a small quantity of those agents."[39]

North Korea

Of the rogue states with potential capabilities for WMD and ballistic missiles, North Korea poses the gravest threat to the security of the American homeland. North Korea is the most technologically advanced of the rogue states and the most notorious proliferator of missile-related technology. After acquiring Scud Bs from the Soviet Union, North Korea began reverse engineering them in the 1980s.[40] It soon developed a sizable production capability, which South Korean intelligence sources estimate at 100 Scud missiles annually. An October 1995 assessment by the South Korean Defense Ministry claimed that North Korea had approximately 500 Scuds in its inventory.[41] All of those missiles are capable of hitting targets throughout the Korean peninsula--from the South's capital city of Seoul to military staging areas that would be used if hostilities broke out. Scud missiles pose no threat to the American homeland.

Western observers are also sounding alarms over North Korea's potential NBC capabilities. Analysts believe that North Korea may have produced enough plutonium to produce one or two nuclear devices before agreeing to cease efforts to build a nuclear bomb under the 1994 Agreed Framework.[42] Recent reports that North Korea may be working on an underground nuclear facility underscore the ease with which the regime could revive its latent nuclear program.

North Korea also has made advances in other areas of NBC research. According to a 1995 Defense Intelligence Agency assessment, North Korea has possessed a chemical warfare program since the 1960s.[43] The U.S. Department of Defense claims that North Korea has a sizable stockpile of nerve, blister, choking, and blood agents--all of which could be delivered by ballistic missile.[44] Also, North Korea has been conducting intensive research on biological weapons for at least the last 30 years. The regime has stockpiled infectious agents, toxins, and possibly crude biological weapons, which could be delivered by missiles.

Recently, there have been more troubling developments. On August 31, 1998, North Korea conducted its first missile test since 1993 by launching a multistage Taepo Dong 1 missile over Japan and into the Pacific Ocean. The missile launch, which the State Department later confirmed to be a failed attempt to orbit a satellite, represented a tremendous technological advance.[45] Henry Sokolski, a former proliferation official with the Pentagon during the Bush administration, observed, "This is a totally new threat. It looks like [the North Koreans] leapfrogged from a two-stage missile to a three-stage missile. What is alarming is that they are working on a three-stage missile at all."[46]

More worrisome for American security interests was the range of the missile. Intelligence agencies tracked debris from the launch nearly 4,000 miles into the Pacific Ocean. Rep. Curt Weldon (R-Pa.), chairman of Subcommittee on Military Research and Development of the House Committee on National Security, interpreted the test as an indication that North Korea may have the capability to hit the United States, specifically Alaska and Hawaii.[47] The increased range of the Taepo Dong 1 certainly makes American troops stationed in Japan vulnerable to attack.[48]

Threat Evaluation

Although all five rogue states maintain potentially devastating weapons in their arsenals, not all pose a direct threat to the American homeland. Of the rogue states, North Korea is the greatest immediate threat to national security. As the 1998 test flight demonstrated, North Korea may already have the capability to hit the periphery of American territory, which is defenseless against a missile attack. Fortunately, the lower 48 states are not currently under the threat of attack by ballistic missiles possessed by any of the rogue states. Iran, the

next most technically advanced state, probably will not have an ICBM capable of hitting the United States in the near future. However, Iran is seeking to develop a missile in the 3,500-mile range and could present a threat to Europe in the next several years. All of the other rogue states could pose a danger to American forces stationed in their respective regions. That vulnerability is one reason the overseas deployment of U.S. forces increases rather than decreases America's risk exposure.

Other Threats

To keep the danger posed by the rogue states with ballistic missiles in perspective, it is important to explore several other alternative threats. First, there remains the possibility of an accidental or unauthorized launch on the United States by existing nuclear powers--China or Russia. Serious questions exist about both countries' command-and-control mechanisms that are designed to prevent such a launch. Deteriorating economic conditions have put great strains on the Russian Strategic Missile Forces. There is no guarantee of the security of Russian nuclear weapons. In a 1991 interview, Maj. Gen. Geli Batenin of that force noted that "15 Russian officers have the ability to authorize the release of a Russian ballistic missile."[49] With access so widely dispersed, the chance that a malintentioned officer could initiate the unsanctioned use of a nuclear missile increases greatly.

Also alarming is the fact that Russia still fears a preemptive nuclear attack by the United States. That fear nearly led to catastrophe during an infamous January 1995 incident. A Norwegian sounding rocket was detected by Russian early warning systems.[50] The Russians, believing they were facing a nuclear first strike, activated their equivalent of the "nuclear football"--a briefcase that allows high Russian officials to send coded signals to authorize a nuclear launch. Fortunately, the Russian High Command did not authorize a nuclear strike, but the episode suggests that inadvertent nuclear war is not an impossibility.

Second, the proliferation of cruise missiles poses a serious and growing threat to the United States. Some 75 nations, including the most prominent rogue states, possess cruise missiles. Although unable to reach the United States with their ballistic missile forces, those nations could conceivably use a cruise missile launched from a ship off either U.S. coast to deliver an NBC weapon. Also,

several new generation land attack cruise missiles are expected to enter service in Russia and China in the next few years. It is not far-fetched to assume that several rogue states could acquire them. Those highly accurate missiles, which can be fitted with NBC weapons, may be able to defeat American air defenses easily. Thus, the cruise missiles of rogue states may pose a strategic threat to the American homeland sooner than will their ballistic missiles.

An even greater threat than the ballistic or cruise missiles of rogue states may be terrorists--whether state sponsored or acting independently--attacking with NBC weapons. Because terrorists do not usually have a permanent location that can be attacked, they may be harder to deter with threats of massive retaliation than is a rogue state. They could smuggle a nuclear bomb into a city by ship or by satchel, or they could spray biological or chemical weapons from a rooftop, a crop-dusting aircraft, or the exhaust system of a car. A terrorist attack using WMD may be the greatest single threat to U.S. security.[51]

Intelligence Failures

As noted before, several rogue states are well on the road to acquiring NBC weapons and delivery technology. There is increasing concern, however, that America's intelligence services--the nation's primary means of detecting emerging threats--may not be capable of providing early warning of new security dangers arising from such developments. More disturbing is the possibility that the products of the intelligence-gathering process, passed on to intelligence consumers and policymakers in the form of National Intelligence Estimates (NIEs), may be politicized to suit the current administration's interests. That prospect poses a threat to the security of the United States.

A Faulty NIE

NIEs were first prepared during the early years of the Cold War as a method of combating the misestimation of North Korean and Chinese behavior during the Korean conflict. NIEs are produced by the National Intelligence Council, a body composed of personnel from various agencies and organizations: half of the people are CIA intelligence officers, one-quarter are intelligence officers from other government departments and agencies (Defense, State, Trea-

sury, Energy, and the FBI), and a quarter are analysts from outside organizations (such as universities and nonprofit institutions). The National Intelligence Council reviews the reports of the intelligence community and drafts from them a formal estimate. The Foreign Intelligence Board, composed of the heads of the various intelligence agencies, meets and reviews the document before it is released to the president and other top policymakers.[52]

In theory, that process should produce unbiased and accurate intelligence reports. However, a recent troubling example shows that NIEs may be vulnerable to political influence. In early 1995 Lt. Gen. Malcolm O'Neill, then head of the Ballistic Missile Defense Organization, requested an assessment of the ballistic missile threat to the United States. The CIA responded in November with NIE 95-19, Emerging Threats to North America during the Next 15 Years, a document that claimed to give an accurate picture of the threat facing the United States. Among its key findings were the following:

> No country, other than the major declared nuclear powers, will develop or otherwise acquire a ballistic missile in next 15 years that could threaten the contiguous 48 states or Canada.
>
> North Korea is unlikely to obtain the technological capability to develop a longer range operational ICBM. North Korea would have to overcome significant hurdles to complete such a program, particularly given the political and economic uncertainties and technological challenges it faces. . . .
>
> We are likely to detect an indigenous long-range ballistic missile program many years before deployment.[53]

Upon the NIE's release, however, those findings were met with charges that politics had been injected into the intelligence process. Even before the estimate is examined on its merits, the circumstances surrounding the document's release would seem to lend at least some support to the charges. The completed NIE, promised to Gen. O'Neill before the summer of 1995 began, was delayed until December of that year--nearly seven months past its original due date. Furthermore, the NIE was then released to Democratic Sens. Carl Levin of Michigan and Dale Bumpers of Arkansas--not to Gen. O'Neill, the estimate's original customer.[54]

Interestingly, the estimate was released to Congress by the CIA's Congressional Affairs Office during debate on the National Defense Authorization bill, which contained funding for ballistic missile defense research. The release of the document, clearly optimistic about the ballistic missile threat to the United States, had obvious political advantages for the administration. The estimate helped the administration stand solidly by its "3+3" deployment plan for a national missile defense system instead of supporting a more ambitious program sponsored by congressional Republicans. (The "3+3" plan would conduct research and development on a national defense against ballistic missiles until 2000, when a decision on whether to deploy a system would be made on the basis of the threat at that time. If a decision to deploy were made, production and deployment would take another three years until the system was in place in 2003. Secretary of Defense William S. Cohen recently estimated that it could take up to two years longer to deploy a national missile defense.)[55]

The GAO Report

The charges of political manipulation and erroneous conclusions prompted Rep. Floyd Spence (R-S.C.), chairman of the House Committee on National Security, to ask the General Accounting Office to conduct its own evaluation of the estimate. The GAO found several critical flaws in NIE 95-19. First, and most important, the GAO found that "the main judgment of NIE 95-19 . . . was worded with clear (100 percent) certainty. We believe this level of certainty was overstated, based on the caveats and intelligence gaps noted in NIE 95-19."[56] Second, the GAO noted that the NIE failed to quantify the certainty levels of key judgments, which was contrary to CIA guidelines and established practice. Instead, the NIE employed vague wording such as "likely" and "sometimes" as opposed to offering percentages to better measure the probability of an outcome. Third, the estimate failed to develop alternative futures that might drastically change the estimate's conclusion. Finally, the GAO concluded that the estimate failed to explicitly identify its fundamental assumptions. The GAO identified the following as the "linchpin assumptions" that solidify the NIE's argument:

- The Missile Technology Control Regime (MTCR) will continue to significantly limit international transfers of missiles, components, and related technology, but some leakage of components and critical technologies will likely continue.

· No country with ICBMs will sell them to other countries.

· Three countries--all of which were assessed as being "high" in both technical ability and economic resources--will not be interested in developing an ICBM that could reach the United States (and elsewhere).

· A flight test program lasting about 5 years is essential to the development of an ICBM.

· An attack against the United States from offshore ships using cruise missiles, while feasible, is unlikely to occur.[57]

The NIE's Questionable Analysis

Disregarding for a moment the question of the NIE's political intentions, the estimate should be criticized for its shoddy analysis. Merely reviewing those linchpin assumptions reveals several significant deficiencies that raise serious doubts about the NIE's key conclusions.

Among the NIE's most glaring shortcomings is the assumption that it will take five years after an initial flight test for a nation to develop an ICBM. Unfortunately, in making that claim, America's intelligence services proved that they remain trapped in Cold War-style linear thinking. In the past, standard Soviet missile development programs did require five years of flight testing. However, this estimate assumes that every nation wants to develop a reasonably accurate and reliable missile. Since the end of the Cold War, nations that are likely to acquire ballistic missiles probably want them for use as weapons of terror rather than as surgical weapons used to hit specific targets. Thus, the missile needs to have only enough accuracy and reliability to hit an enemy nation, not particular targets within its borders. As Gen. Howell M. Estes III, head of the North American Aerospace Defense Command, has said, "We're finding that countries who are developing these [ballistic missile] systems today are not doing it the way we [the superpowers] did. They're not going for accuracy. They're going for having the capability--which, in fact, is an indication of military might and national power."[58] Because the reliability, payload, and accuracy requirements of the nations now aspiring to nuclear capabilities are not as stringent as those of the former Soviet Union, assuming

that their flight test programs will last five years is excessively sanguine.

Second, the assumption of a five-year warning time appears to have been made in ignorance of the timetables for other early ICBM development efforts. The first Soviet ICBM--with capabilities comparable to what rogue states seek today--became operational only 27 months after its first flight test.[59] Later ICBMs generally required less than two years of flight testing before deployment. Furthermore, the technology for the early ICBMs was developed over 40 years ago. Since then, missile technologies have become increasingly available in the global marketplace. As former Reagan science adviser William R. Graham told Congress in 1997, most of the know-how needed to build a missile is taught in graduate schools.[60] With such dangerous technology so readily available, it is overly optimistic to conclude that no nation will be able to assemble a weapon that threatens the United States before 2010.

The estimate also makes the questionable assumption that no nation with ICBMs will sell them. That runs counter to empirical evidence. China sold intermediate-range ballistic missiles to Saudi Arabia in 1988 (largely without the CIA's knowledge) and to Pakistan five years later. More alarming, North Korea has been implicated in missile transfer deals with other rogue states--most notably Syria and Iran. Sales of space launch vehicles from the former Soviet Union may also contribute to the proliferation of missile technology. In September 1995 the administration revised the 1991 START treaty to allow Russia and Ukraine to sell their most advanced ICBMs as space launch vehicles. Many experts believe that those launch vehicles can be easily converted back to launch vehicles for ballistic missiles. According to the Heritage Foundation's Missile Defense Study Team, all but one--the warhead--of the eight key components of a ballistic missile are found in some form in space launch vehicles.[61]

Moreover, there is a serious lack of safeguards governing the sale of those launch vehicles. According to "The Military Intelligence Digest," a classified report by the Defense Intelligence Agency obtained by the Washington Times, "Much of the missile and other arms-related technology flows from Russia to China outside official channels."[62] If China is able to buy an advanced Russian SS-18 ICBM ostensibly as a space launch vehicle, there seem to be few protections that would prevent North Korea, Iran, or Syria from using the same means to buy stripped-down ICBMs.

The Gates Panel

While the GAO report examined the analytical flaws in NIE 95-19, it did not explore the charges that the estimate was infused with politics. Congress instructed Director of Central Intelligence John Deutch to form a panel of experts to review the political implications of the NIE. Deutch named former director of central intelligence Robert Gates to chair the panel. The panel was directed to look at three aspects of the estimate: politicization, process, and presentation.[63] According to the panel's report, it "found no evidence of politicization and is completely satisfied that the analysts' views were based on the evidence before them."[64] Instead, the panel attributed to political naiveté the estimate's release at such an inopportune time. Although the panel did point out several analytical flaws in the estimate, it all but exonerated the estimate from charges of politicization. The findings of the Gates panel were criticized by many people. For example, Rep. Curt Weldon (R-Pa.) wrote to Gates to express his concern about a process that absolved the intelligence community of any responsibility for the production of a faulty estimate. Weldon was particularly at odds with the panel's dismissal of charges of politicization. He wrote, "Not once did your panel provide an opportunity for Members who charged politicization to be heard.[65]

A New Study: The Rumsfeld Commission

In the wake of the controversy over the 1995 NIE and the subsequent GAO and Gates panel inquiries, Congress convened another independent review board to assess the ballistic missile threat facing the United States. The Rumsfeld commission--led by former secretary of defense Donald Rumsfeld--provided the most comprehensive, accurate, and apolitical review of the current threats to the nation. The commission's report also largely corrected the faults of NIE 95-19. In the unclassified version released by the commission, the panel concludes that North Korea, Iran, and Iraq

> would be able to inflict major destruction on the United States within about five years of a decision to acquire such a capability (10 years in the case of Iraq). During several of those years, the U.S. might not be aware that such a decision had been made.

> The threat to the U.S. posed by these emerging capabilities is broader, more mature, and evolving more rapidly than has been reported in the estimates and reports by the Intelligence Community.
>
> The Intelligence Community's ability to provide timely and accurate estimates of ballistic missile threat to the U.S. is eroding. . . .
>
> The warning times the U.S. can expect of new, threatening ballistic missile deployments are being reduced. Under some plausible scenarios--including re-basing or transfer of operational missiles, sea- and air-launched options, shortened developmental programs that might include testing in a third country, or some combination of these--the U.S. might well have little or no warning before operational deployment.[66]

What makes those findings dramatic is that they differ sharply from the conclusions of the administration's NIE. Despite the inclusion of committee members such as Richard Garwin, Barry Blechman, and Gen. Lee Butler--all appointees expected to oppose an incisive critique of the administration's earlier findings--the panel perceived a more severe near-term threat to the United States, including Alaska and Hawaii. The committee also raised the possibility of missile attacks from alternative platforms, such as tramp steamers or other offshore vessels.

Reaction to the Rumsfeld Report

The new warnings posed by the Rumsfeld commission have failed to alter the views of several key officials in the current administration. Soon after the report's release, Sen. James Inhofe (R-Okla.) wrote to Gen. Henry H. Shelton, chairman of the Joint Chiefs of Staff, inquiring whether the commission's findings had changed the Joint Chiefs' position on the emerging missile threat to the United States. (The Joint Chiefs had supported the administration's plan to be able to deploy a system within three years of determining that a threat existed.) The Senator asked, "Does this not contradict, if not undermine, your previously stated 'confidence' that we will have at least three years' warning of any emerging long-range ballistic missile threat?"[67] In response to the senator's letter, Gen. Shelton stated that "we [the Joint Chiefs of Staff] remain confident that the Intelligence Community can provide the necessary warning of

the indigenous development and deployment by a rogue state of an ICBM missile threat to the United States." According to Shelton, some analysts argue that "rogue nations could acquire an ICBM capability, and that the Intelligence Community may not detect it. We view this as an unlikely development."[68]

However, Shelton's faith in our nation's intelligence apparatus seems to be overstated and is shared by few outside the administration. Senator Inhofe, commenting on the reply from General Shelton, said,

> I am not particularly reassured that the Joint Chiefs think that the emergence of an unexpected long range missile threat is "unlikely." The recent nuclear tests in India and Pakistan were also "unlikely." The recent bombings of our embassies in Africa were considered "unlikely." The survival of Saddam Hussein as a menace to world security once seemed "unlikely." That a threat is "unlikely" is no longer, by itself, a good enough basis on which to formulate national security policy affecting the lives of millions of Americans.[69]

Events since the release of Gen. Shelton's statement further challenge his confidence in American intelligence capabilities. A week after the general's comments, North Korea demonstrated a significant advance in its ballistic technology by testing a three-stage space launch vehicle. That development caught the American intelligence community largely off guard. According to Robert D. Walpole, the CIA's senior intelligence officer for strategic programs, "Although the launch of the Taepo-Dong as a missile was expected for some time, its use as a space launch vehicle with a third stage was not. The existence of the third stage concerns us. We had not anticipated it."[70]

If the CIA and other intelligence agencies--which repeatedly acknowledge that North Korea's ballistic missile program is the primary ballistic missile threat facing the United States--fail to track such a significant advance, how can the Joint Chiefs reasonably guarantee that other clandestine developments will be detected? As Rumsfeld observed, "I think the [North Korean Launch] reinforces the point that we cannot expect that we're going to know everything that's going on in the world."[71]

Only recently has the administration begun to grudgingly acknowledge the severity of the threat and the limited

ability of the intelligence community to detect changes in it. According to Secretary of Defense Cohen,

> we are affirming that there is a threat, and the threat is growing, and that we expect it will soon pose a danger not only to our troops overseas but also to Americans here at home.
>
> Last spring the commission that was chaired by former Secretary of Defense Donald Rumsfeld provided a sobering analysis of the nature of the threat and the limitations of our ability to predict how rapidly it will change.[72]

But Secretary Cohen stopped short of endorsing the Rumsfeld report or its major conclusions that a rogue nation could inflict major destruction on the United States within about five years of deciding to acquire the capability and that the United States might not be aware of the rogue nation's decision for several years. Secretary Cohen's statement that the threat will "soon" pose a danger to Americans at home is still vague. It is time for the administration to recant its support for NIE 95-19 and formally endorse the findings of the Rumsfeld commission.

Policy Options

Since the Cato Institute first wrote on the threat posed by ballistic missile proliferation seven years ago, little has been done to protect American citizens from attack.[73] In the meantime, far from standing still, disreputable regimes around the world have been steadily advancing their efforts to obtain the technical know-how and components to threaten their neighbors and, maybe eventually, the United States.

The threat of blackmail by a rogue state with ICBMs or an unauthorized or accidental launch by either Russia or China could be greatly ameliorated by the deployment of a limited missile defense system. A system capable of intercepting up to 20 warheads might be a sufficient defense against rogue regimes, which most likely would not possess large numbers of missiles. A limited system could also defend against a small accidental or unauthorized launch by a major power.

Deploying only a limited system would also have the advantage of maintaining the deterrent balance between the United States and Russia that has been in place since the

early decades of the Cold War. Although a limited system could conceivably destroy a few incoming warheads, it would not destroy enough to threaten either country's strategic deterrent--that is, the ability to annihilate the other power. Thus, a limited U.S. missile defense would probably not cause Russia to dramatically increase the number of its strategic warheads to overcome the defenses. In fact, some analysts are predicting that financial problems will force Russia to unilaterally reduce its strategic warhead total below 1,000.

Despite the need for a national missile defense system, the development and deployment of such a system should proceed at a measured pace. A "third way" of procuring a missile defense system is possible. Rather than throw money at the program--as would some conservatives to whom missile defense is a religion--or completely avoid the missile defense issue--as would some liberals enamored with arms control for its own sake--the best policy is to honestly assess the nature and extent of emerging threats and develop a national missile defense system at a pace that the technology can support and that test results will bear out. No matter what the threat is, rushing to develop a system that fails to work is not an attractive remedy.

Another prudent policy option would be to reallocate money spent on intelligence. Money should be transferred from technical intelligence collection systems to human intelligence operations. During the Cold War human intelligence capabilities eroded as the United States came to rely increasingly on technical collection to monitor military developments in the Soviet Union. Yet intelligence from human operatives is often more useful in tracking missile and NBC proliferation than is technical intelligence (although the latter is still needed.)

Yet the fiscal year 1999 supplemental appropriation bill still seemed to reflect the priorities of the Cold War. Of the $1.5 billion Congress added to the intelligence budget, nearly $1 billion went to technical collection and only $300 million (20 percent) went to underwrite intelligence from human sources.

Congress needs to become more aware of the importance of human intelligence--which probably will be of increased value in the future--and reallocate existing resources accordingly. Rogue nations are now moving their NBC and ballistic missile programs into underground laboratories and assembly plants, which severely diminishes the effectiveness of America's high-cost technical collection systems and

produces a dangerous gap in intelligence.[74] Developing more intelligence sources "on the ground" could lessen that gap and greatly improve America's warning of threats from NBC and ballistic missiles programs.

As the next century approaches, the almost certain prospect that nations such as Iraq, Iran, Syria, Libya, and North Korea will possess long-range ballistic missiles--most likely tipped with nuclear, chemical, or biological warheads--should be among America's foremost security concerns. The deployment of a limited ballistic missile defense system and an increased emphasis on human intelligence gathering are critical to maintaining the security of the homeland.

Notes

1. William Clinton, "Prepared Text of the State of the Union Address," New York Times, January 24, 1996, p. A14.

2. William Cohen, Annual Report to the President and Congress (Washington: U.S. Department of Defense, 1998), p. 63.

3. Institute for Foreign Policy Analysis, "Exploring Missile Defense Requirements in 2010: What Are the Policy and Technology Challenges?" http://www.fas.org/spp/starwars/advocate/ifpa/report696_exe.htm.

4. Ivan Eland, "Protecting the Homeland: The Best Defense Is to Give No Offense," Cato Institute Policy Analysis no. 306, May 5, 1998, p. 5; and "Circles of Fear: An Anti-Missile Shield," The Economist, January 4, 1997, p. 33.

5. Charles Peña, "Theater Missile Defense: A Limited Capability Is Needed," Cato Institute Policy Analysis no. 309, June 22, 1998, p. 6.

6. Quoted in Greg J. Gerardi and James A. Plotts, "An Annotated Chronology of DPRK Missile Trade and Developments," in The Nonproliferation Review (Fall 1994), http://cns.miis.edu/pubs/npr/gerplo21.html.

7. U.S. Department of Defense, Proliferation: Threat and Response (Washington: Government Printing Office, 1997), p. 40.

8. Ibid.

9. Harold Hough, "Viewing Syria's Strategic Missile Infrastructure from Space," Jane's Intelligence Review, April 1, 1998, p. 24.

10. Cited in Wyn Bowen, Tim McCarthy, and Holly Porteous, "Ballistic Missile Shadow Lengthens," International Defense Review--Extra, February 1, 1997, p. 1.

11. Paul Beaver, "Syria to make Chemical Bomblets for Scud Cs," Jane's Defence Weekly, September 3, 1997, p. 3.

12. Anthony Cordesman, "Weapons of Mass Destruction in the Middle East," Center for Strategic and International Studies, April 21, 1998, p. 21.

13. "Israel Claims That Syria Is Making VX Nerve Gas," Jane's Defence Weekly, May 7, 1997, p. 6.

14. Cordesman, "Weapons of Mass Destruction in the Middle East," p. 21.

15. Beaver, p. 3.

16. Ibid.

17. Arms Control and Disarmament Agency, 1996 Annual Report, August 1996, http://www.acda.gov/reports/annual/comp.htm, p. 6.

18. Anthony H. Cordesman, "Military Balance in the Middle East XIV: Weapons of Mass Destruction," Center for Strategic and International Studies, December 28, 1998, p. 25.

19. U.S. Department of Defense, Proliferation, p. 29.

20. Cordesman, "Weapons of Mass Destruction in the Middle East," p. 41.

21. Cited in David A. Fulghum and Robert M. Wall, "Hidden Weapon Sites Still Pose Problems," Aviation Week and Space Technology, February 16, 1998, p. 23.

22. Eland, p. 25.

23. R. Jeffrey Smith, "Iraq Buying Missile Parts Covertly; Officials Say Effort Violates Trade Ban," Washington Post, October 14, 1995, p. A1.

24. Cordesman, "Weapons of Mass Destruction in the Middle East," p. 14.

25. Robert Waller, "Libyan Threat to the Mediterranean," Jane's Intelligence Review, May 1, 1996, p. 228.

26. Ibid., p. 227.

27. U.S. Department of Defense, Proliferation, p. 35.

28. Quoted in Michael T. Klare, "Nuking Libya," Nation, July 8, 1996, p. 5.

29. U.S. Department of Defense, Proliferation, p. 35.

30. Bryan Bender, "Libya Hampered by Decade-old UN Ban, Says CIA," Jane's Defence Weekly, August 12, 1998, p. 7.

31. Anthony H. Cordesman, "Weapons of Mass Destruction in Iran," Center for Strategic and International Studies, April 28, 1998, http://www.csis.org/mideast/ reports/ WmDinIran4-28-98.html, p. 1.

32. Ibid., p. 2.

33. Ibid., p. 3.

34. Yossef Bodansky, "Iran's New Ballistic Missiles," Defense & Foreign Affairs' Strategic Policy, May-June 1997, p. 8.

35. "Iran Tests Shahab 3 Ballistic Missile," Jane's Missiles & Rockets, August 1, 1998, p. 1.

36. Quoted in ibid.

37. "Concern Rises As Arms Programmes Advance," Jane's Defence Weekly, October 15, 1997, p. 22.

38. Quoted in ibid.

39. Arms Control and Disarmament Agency, p. 7.

40. Bowen, McCarthy, and Porteous, p. 1.

41. Ibid.

42. Doug Bandow, Tripwire: Korea and U.S. Foreign Policy in a Changed World (Washington: Cato Institute, 1996), pp. 104-5.

43. Cited in E. J. Hogendoorn, "A Chemical Weapons Atlas," Bulletin of the Atomic Scientists, September-October 1997, p. 35.

44. U.S. Department of Defense, Proliferation, p. 6.

45. "North Korean Satellite Launch Termed Failure," Washington Post, September 15, 1998, p. A13.

46. Quoted in Bill Gertz, "North Korean Missile Seen Posing Risk to U.S.," Washington Times, September 16, 1998, p. A1.

47. Ibid.

48. Hogendoorn, p. 35.

49. Quoted in Allen Levine, "Soviet General Says Unrest May Spark Nuclear Terror," Atlanta Journal/Atlanta Constitution, October 16, 1991, p. A2.

50. See generally, Peter V. Pry, War Scare: Russia and the United States on the Nuclear Brink (Westport, Conn,: Praeger, forthcoming 1999).

51. Eland, pp. 5-8. For an alarming discussion of the threat to the homeland from terrorists and rogue states using WMD, see Richard Betts, "The New Threat of Mass Destruction," Foreign Affairs 77, no. 1 (January-February 1998): 26-41.

52. Joseph S. Nye Jr., "Peering into the Future," Foreign Affairs 73, no. 4 (July-August 1994): 82.

53. Director of Central Intelligence, Emerging Missile Threats to North America during the Next 15 Years, PS/NIE 95-19, November 1995, President's Summary, pp. 1-2.

54. Letter from the Central Intelligence Agency to Sen. Carl Levin stating the intelligence community's view on future missile threats, December 7, 1995.

55. U.S. Department of Defense, News briefing, January 20, 1999, p. 3.

56. General Accounting Office, "Foreign Missile Threats: Analytic Soundness of Certain National Missile Estimates," August 1996, p. 1.

57. Ibid., p. 7.

58. Quoted in "Verbatim," The Air Force Magazine, September 1998, p. 29.

59. William T. Lee, "In the CIA Kitchen," Weekly Standard, August 4, 1997, p. 16.

60. William R. Graham, Testimony on Missile Proliferation before the International Security, Proliferation, and Federal Services Subcommittee of the Senate Governmental Affairs Committee, September 22, 1997, from Lexis-Nexis.

61. Missile Defense Study Team, Defending America: A Near- and Long-Term Plan to Deploy Missile Defenses (Washington: Heritage Foundation, 1995), p. 10.

62. Quoted in Bill Gertz, "China's Arsenal Gets a Russian Boost," Washington Times, May 5, 1996, p. A1.

63. "NIE 95-19: Independent Panel Review of Emerging Missile Threats to North America during the Next 15 Years," http://www.fas.org/irp/threat/missile/oca961908.htm.

64. Ibid.

65. Curt Weldon, chairman of the Subcommittee on Research and Development of the House Committee on National Security, Letter to Robert Gates, January 17, 1997.

66. Commission to Assess the Ballistic Missile Threat to the United States, "Report of the Commission to Assess the Ballistic Missile Threat to the United States," July 15, 1998, Executive Summary, pp. 5-6.

67. Quoted in Rowan Scarborough, "Joint Chiefs Back Clinton on Missile," Washington Times, August 19, 1998, p. A1.

68. Gen. Henry Shelton, Letter to Sen. James Inhofe, August 24, 1998. Emphasis added.

69. Sen. James Inhofe, Response to Gen. Henry Shelton's letter, http://www.senate.gov/~inhofe/pr082698.html, August 26, 1998.

70. Quoted in Bradley Graham, "North Korean Missile Threat Is Reassessed," Washington Post, September 25, 1998, p. A31.

71. Quoted in ibid.

72. U.S. Department of Defense, News briefing, p. 2.

73. Channing R. Lukefahr, "Countdown to Disaster: The Threat of Ballistic Missile Proliferation," Cato Institute Foreign Policy Briefing no. 10, July 14, 1991, pp. 1-12.

74. Walter Pincus, "Buried Missile Labs Foil U.S. Satellites; North Korea, Iran among 'Intelligence Gaps,'" Washington Post, July 29, 1998, p. A1.

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