

Terrorist Organizations and Nuclear Weapons

By

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MEMORANDUM FOR SGM Parham, R 11, USASMA, Fort Bliss, TX 79906

SUBJECT: Haines Paper, Main and Supporting Theses and Counter Argument

Main Thesis: The increased availability of nuclear technology makes it more probable that terrorist organizations will obtain nuclear weapons.

1. Supporting Thesis 1 – SGM Bradburn. Political change in government can weaken central control over nuclear technology and lead to proliferation.
2. Supporting Thesis 2 – SGM Jerabek. World Terrorist Groups are increasing their efforts to get nuclear weapons for their use.
3. Supporting Thesis 3 – MSG Bailey. The number of Countries willing to sell Nuclear Technology will increase.
4. Counter Argument – MSG Wright. America is better prepared to prevent, disrupt, and respond to terrorist attacks than ever before.

//Original Signed//
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MEMORANDUM FOR SGM Parham, R 11, USASMA, Fort Bliss, TX 79906

SUBJECT: Terrorist Organizations and Nuclear Weapons – Abstract

1. Thesis Statement: The increased availability of nuclear technology makes it more probable that terrorist organizations will obtain nuclear weapons.

2. Discussion.

A. Political change in a society that possesses nuclear capability can result in a weakening or loss of government central control over nuclear technology and lead to proliferation.

B. World Terrorist Groups are increasing their efforts to get nuclear weapons for their use.

C. The number of Countries willing to sell Nuclear Technology will increase.

3. Counter argument. America is better prepared to prevent, disrupt, and respond to terrorist attacks than ever before.

4. Research Methodology. This document consists of five parts. Parts 1-3 outline a three-component logical model based on the standard business model of supply, demand, and distribution. Part 4 is the counter argument. Successfully countering any one of the three components defeats the thesis. Part 5 details the committee's conclusions.

5. Conclusion. While the United States is capable of mitigating each of the three components of the model, it is unable to eliminate any one component. Therefore, we conclude that the increased availability of nuclear technology makes it more probable that terrorist will obtain nuclear weapons.

6. Haines Award. We (do/do not) request that the Haines Award Selection Board consider this paper for the General Haines Award for Excellence in Research. Writing Research Papers – A Complete Guide, 10th Edition by James Lester is the guide used in the preparation of this paper

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Thesis Statement. The increased availability of nuclear technology makes it more probable that terrorist organizations will obtain nuclear weapons.

Part 1, The Supply Component.

Political change in a society that possesses nuclear capability can result in a weakening or loss of government central control over nuclear technology and lead to proliferation. Loss of the control over nuclear technology or material presents a danger to the world. The fall of Communism and resulting break up of the Soviet Union is the primary example of this instability as it applies to the supply of nuclear material.

Communist defense doctrine called for protection of the motherland by controlling surrounding satellite countries as a buffer between itself and threat countries. As a result, some of the satellite communist states had nuclear weapons and capabilities forward deployed into them. The break up of the Soviet Union at the end of the Cold War into what is now Russia resulted in numerous successor states. These now sovereign nations have territorial possession of a variety of nuclear technologies. In addition, the Soviet weapons production techniques and efforts to generate cheap nuclear power produced vast stockpiles of nuclear waste. This waste is stored throughout Russia and the former republics and is practically unsecured in some areas.

The fall of the Soviet Union created an economic crisis. The central government was incapable of continuing the levels of technical spending they were accustomed to under Communism. Russia has had great difficulty controlling its economy and cannot afford the huge expenditures on its nuclear weapons programs. Those programs most closely tied to weapons technologies lost most of their funding.

Add to the availability of nuclear material a social factor – large numbers of scientist previously employed in nuclear related fields are unemployed. As the demand for nuclear expertise has decreased in Russia, these scientists earn less. They worry about how they will provide for their families. Some are capable of building a nuclear device alone. Others are experienced in production handling, inventory, and safeguarding nuclear material.

This large pool of nuclear technicians is disillusioned and potentially available to any who possess the financial resources to pay them. The glut of brainpower provides the perfect opportunity for anyone with sufficient resources in search of nuclear technology. This same logic applies to the availability of technicians needed to manufacture and handle chemical or biological weapons though the technical requirements are not as great.

Al-Qaida has attempted to recruit nuclear expertise to help them build a bomb. Military operations in Afghanistan first revealed this threat during the early stages of Operation ENDURING FREEDOM. Documents seized from their safe

houses by United States forces outlined a significant effort to pursue nuclear weapons.¹

Russian security of nuclear material is a serious concern. The Russians did not design their nuclear material accounting systems to detect the theft of raw material. This lack of accountability systems in conjunction with current fiscal shortages magnifies the issues. Their nuclear storage sites have security problems that range from guards turning off detectors when bothered by false alarms to leaving gates propped open for their convenience. For example, in one of their largest nuclear-material processing facilities at Seversk, a security manager admitted that the guards routinely patrol with unloaded weapons in order to prevent negligent discharges.

Threats to these facilities are growing. Russian official sources report four incidences of terrorist reconnaissance on Russian nuclear warheads from 2001 to 2002, including nuclear storage sites and transport trains. These locations are supposed to be state secrets in Russia. The Russian state newspaper reported that the 41 heavily armed terrorists who seized hundreds of hostages at a Moscow theater in October 2002 first considered seizing a Moscow site storing highly enriched uranium (HEU) used to manufacture nuclear weapons. A 2003 criminal case revealed a foreign client offered a Russian executive \$750,000 to

¹ Matthew Bunn and Anthony Wier, Securing the Bomb: An Agenda for Action, (Washington, D.C: Nuclear Threat Initiative and the Project on Managing the Atom, Harvard University, May 2004). Accessed 5 Oct 04 and 20 Nov 04, <http://www.nti.org/cnwm>.

arrange the sale of stolen weapons-grade plutonium. He succeeded in making contact with residents of the closed nuclear weapon city of Sarov, in attempts to arrange the purchase.²

The potential for terrorist groups or common thieves to gain access to nuclear material exist at scores of sites throughout the former Soviet Union that contain sufficient nuclear material for a bomb. Many of these sites are not secure against demonstrated criminal and terrorist capabilities. There is enough unsecured nuclear material globally to make thousands of nuclear weapons depending on the size of the weapon desired. Terrorist groups are actively seeking nuclear materials. One example is the case of Sultan Bashiruddin Mahmood. This senior Pakistani nuclear weapon scientist and Islamic extremist along with a colleague, met with Osama bin Laden and discussed nuclear weapons at length.³

Programs to reduce the threat to the worldwide inventory of nuclear material are in place and making limited progress. During fiscal year 2003, various government and non-governmental agencies completed comprehensive security and accounting upgrades on over 35 tons of nuclear material, enough for over two thousand nuclear weapons. They destroyed over 30 tons of highly enriched uranium. Half of the nuclear generated electricity in the United States

² Ibid.

³ Ibid., ix.

now comes from blended-down HEU from dismantled Russian nuclear weapons. In the past year, the rate at which vulnerable Soviet-supplied sites have been “cleaned out” of nuclear material has increased from one site every four years to three sites in seven months.⁴ The United States subsidizes programs that provide eighty percent of the key nuclear weapons scientists in Russia with short-term grants and approximately twenty-five percent of excess nuclear technicians with sustainable civilian work.

In spite of this progress, the problem remains significant. The 35 tons of nuclear material destroyed in FY 03 represents only 6% of the estimated 600 tons of potentially vulnerable material in Russia. At the current rate of upgrading the security program, it will take 13 years to secure the material in the former Soviet Union alone. Equipment provided by the U.S. to Russia four years ago, for a “quick fix” of security at nuclear warhead sites, is still sitting in the warehouse.

President Bush summed up the potential represented by this topic during his non-proliferation address given on 11 February 2004 when he stated, “The biggest threat to America is nuclear proliferation, a Weapon of Mass Destruction (WMD) in terrorist’s hands.” Even a crude nuclear bomb produced by a terrorist group could potentially have the explosive power of 10,000 metric tons of TNT – equivalent to over 20 million pounds of high explosive or enough to fill a cargo

⁴ Ibid., x & 3.

train a hundred cars long. Physically this bomb could be smaller than the Hiroshima bomb. If a device of this nature were set off in Manhattan on a typical day, an estimated half million people would die. The direct economic damage would exceed 1 trillion dollars. The detonation of a nuclear device in New York or Washington DC would result in the devastation of economies around the world.

In spite of the efforts of western powers, in cooperation with the Russian government, to limit its availability on the world market nuclear material is not well controlled. The example of the availability and lack of safeguards on nuclear material in the former Soviet Union demonstrates that the potential for loss of control over considerable amounts of nuclear material exist. The situation in Russia and the former Soviet States would apply to any nuclear society where the governmental order is interrupted.

Part 2, The Demand Component.

World Terrorist Groups are increasing their efforts to secure nuclear weapons or weapons material. We will survey various groups who for, political or ideological reasons would consider a course of action involving obtaining nuclear weapons and employing them as a terror weapon.

We all remember September 11, 2001 as a day when the world changed. The era of the limited terrorist attack like those that occurred during the 1972 Olympic Games in Munich are over. Terrorist organizations around the World are better trained and skilled. They are more professional, better financed, more brutal, and possess a more resolute determination than ever before in history. Most importantly, the scale of acceptable terrorist acts changed. When considering scale, remember the terrorist actions worldwide such as the devastating attacks in Madrid on 11 March 2004 that saw 10 bombs explode on four trains in three stations in the busy morning rush hour.⁵ From using passenger airplanes as deathly bombs against civilians, it is only a small conceptual step to the use of nuclear weapons against a population center.

During the 2004 presidential election campaign, in the first Bush – Kerry debate, both candidates agreed on their worst nightmare: “Nukes” in the hands of terrorists. It is not common that both presidential candidates have the same opinion on one issue. However, it happens sometimes, and by bringing this topic up as their number one priority, both candidates acknowledge the significance of the issue.

Who has enough hate to employ weapons of mass destruction, what is the origin of the hatred, and against whom is this hate targeted are the questions

⁵ BBC News: Madrid Train Attacks – Ongoing Coverage of the March 11, 2004 Bombings” BBC News UK Edition, last accessed on March 23, 2005
http://news.bbc.co.uk/1/shared/spl/hi/europe/05/madrid_bombings/html/1.stm

considered when studying the demand component. The following paragraphs give a brief sampling of six groups including their strengths and motivations. While these groups are mostly Middle East based, they vary in their focus and possess worldwide operational histories.

1. Abu Nidal Organization - Iraq/Lebanon. This group has carried out terrorist attacks in 20 countries, killing or injuring almost 900 persons. Targets include the United States, the United Kingdom, France, Israel, moderate Palestinians, the PLO, and various Arab countries.

They have several hundred plus militia in Lebanon and a limited overseas support structure. The organization has received considerable support, including safe haven, training, logistic assistance, and financial aid from Iraq, Libya, and Syria (until 1987), in addition to close support for selected operations. It is a very brutal and strong terrorist organization, with a deep fundamental hatred against the USA and Israel. This organization is willing to use nuclear weapons to achieve their goals.⁶

2. Aum Supreme Truth – Japan is a cult established in 1987 by Shoko Asahara. The Aum aimed to take over Japan, then the world. Over time, the cult

⁶ Audrey Kurth Cronin, Huda Aden, Adam Frost, and Benjamin Jones, " CRS Report to Congress – Foreign Terrorist Organizations," The Congressional Research Service – the Library of Congress, February 6, 2004, 1.

began to emphasize the imminence of the end of the world and stated that the United States would initiate Armageddon by starting World War III with Japan.

In 2000, Fumihiko Joyu took control of the Aum following his three-year jail sentence for perjury. Joyu was previously the Russia Branch leader. On 20 March 1995, Aum members simultaneously released the chemical nerve agent sarin on several Tokyo subway trains, killing 12 persons and injuring up to 6,000. Recent studies put the number of persons who suffered actual physical injuries closer to 1,300, with the rest suffering from some form of psychological trauma. The group was responsible for other mysterious chemical accidents in Japan in 1994. Its efforts to conduct attacks using biological agents have been unsuccessful. Japanese police arrested Asahara in May on 17 counts of murder.

Since 1997, the cult has continued to recruit new members, engage in commercial enterprise, and acquire property, although the cult scaled back these activities significantly in 2000 in response to public outcry. The cult maintains an Internet homepage. The Aum has an estimated membership of 1,500 to 2,000 persons. At the time of the Tokyo subway attack, the group claimed to have 9,000 members in Japan and up to 40,000 worldwide.

The Aum's principal membership is located only in Japan, but a residual branch comprising an unknown number of followers has surfaced in Russia. Tokyo in 1995 showed the brutality of this organization and the willingness to go the direct way to get attention. This group has enough hate to use nuclear

weapons. They have connections to Russia and are a radical group we need to watch carefully.⁷

3. Mujahedin-e Khalq Organization (MEK) – Iran. Formed in the 1960s by the college-educated children of Iranian merchants, the MEK sought to counter what it perceived as excessive Western influence in the Shah's regime. Following a philosophy that mixes Marxism and Islam, it has developed into the largest and most active armed Iranian dissident group. Its history is studded with anti-Western activity and attacks on the interests of the clerical regime in Iran and abroad.

During the 1970s, the MEK staged terrorist attacks inside Iran and killed several US military personnel and civilians working on defense projects in Tehran. They supported the takeover in 1979 of the US Embassy. In April 1992, they conducted attacks on Iranian embassies in 13 different countries, demonstrating the group's ability to mount large-scale operations overseas.

The normal pace of anti-Iranian operations increased during the "Operation Great Bahman" in February 2000, when the group claimed it launched a dozen attacks against Iran. During the remainder of the year, the MEK regularly claimed that its members were involved in mortar attacks and hit-and-run raids on Iranian military, law enforcement units, and government buildings near the Iran-Iraq border. The MEK also claimed six mortar attacks on civilian government and military buildings in Tehran. The group has several

⁷ Ibid., 17.

thousand fighters based in Iraq with an extensive overseas support structure.

Most of the fighters are part of the MEK's National Liberation Army (NLA).

In the 1980s, the Iranian security forces forced most of the MEK's leaders to flee to France. Most resettled in Iraq by 1987. In the mid-1980s, the group did not mount terrorist operations in Iran at a level similar to its activities in the 1970s. In the 1990s following the return of its leaders to Iran, the MEK became more active. Beyond support from Iraq, the MEK uses front organizations to solicit contributions from expatriate Iranian communities. The war in Iraq affected the organization's support base. Without outside financing, this group is less of an immediate threat. However, they are still an organization to watch carefully.⁸

4. The Palestine Islamic Jihad (PIJ) - Israel/Jordan/Lebanon/Syria

originated among militant Palestinians in the Gaza Strip during the 1970s. They are committed to the creation of an Islamic Palestinian state and the destruction of Israel through holy war. Because of its strong support for Israel, the PIJ identified the United States as an enemy but the group has not specifically conducted attacks against US interests in the past. In July 2000, they publicly threatened to attack US interests if the US moved its embassy from Tel Aviv to Jerusalem.

The group also opposes moderate Arab governments that it believes are tainted by Western secularism. They conducted at least three attacks against Israeli interests in late 2000, including one to commemorate the anniversary of

⁸ Ibid., 65.

former PIJ leader Fathi Shaqaqi's murder in Malta on 26 October 1995. They also conducted suicide bombings against Israeli targets in the West Bank and the Gaza Strip.

The PIJ's strength today is unknown. Their area of operations is still primarily Israel, the occupied territories and other parts of the Middle East, including Jordan and Lebanon. Headquartered in Syria, they receive financial assistance from Iran and limited logistic assistance from Syria.⁹

5. The Palestine Liberation Front (PLF) – Iraq broke away from the PFLP-GC in mid-1970s. Later split again into pro-PLO, pro-Syrian, and pro-Libyan factions. Pro-PLO faction led by Muhammad Abbas (Abu Abbas), who became member of PLO Executive Committee, in 1984 but left it in 1991. The Abu Abbas-led faction is known for hang glider attacks against Israel. Abbas's group also was responsible for the attack in 1985 on the cruise ship Achille Lauro and the murder of US citizen Leon Klinghoffer. A warrant for Abu Abbas's arrest is outstanding in Italy.

The organization's strength is unknown as is their area of operation. Their base was in Tunisia until the Achille Lauro attack. After the war in Iraq, the organization lost their last strongpoint. They are regrouping in Syria and Palestine. They historically received external aid from both Iraq and Libya.

⁹ Ibid., 71.

The PLF-I has been quiet recently. Nevertheless, they are still working and training themselves. With support and help from Syria, the Palestine Liberation Front is a dangerous organization. It will take time until they regroup, but if we give them the time to do so, we may have to pay the price.¹⁰

6. Al Qaida – Afghanistan. Usama Bin Laden established Al Qaida in the late 1980s to bring together Arabs who fought in Afghanistan against the Soviet invasion. They helped finance, recruit, transport, and train Sunni Islamic extremists for the Afghan resistance. The group's goal is to establish a pan-Islamic Caliphate throughout the world by working with allied Islamic extremist groups to overthrow regimes it deems "non-Islamic" expelling Westerners and non-Muslims from Muslim countries.

In February 1998, Al Qaida issued statement under banner of " The World Islamic Front for Jihad against the Jews and Crusaders", saying it was the duty of all Muslims to kill US citizens – civilian or military – and their allies everywhere. They plotted terrorist operations against U. S. and Israeli tourists visiting Jordan for millennial celebrations. Jordanian authorities thwarted the planned attacks and put 28 suspects on trial. In August 1998, Al Qaida bombed the US Embassies in Nairobi, Kenya, and Dar es Salaam, Tanzania, that killed at least 301 persons and injured more than 5,000.

¹⁰ Ibid., 74.

The organization claims to have shot down U. S. helicopters killing soldiers in Somalia in 1993 and claims credit for three bombings targeting US troops in Aden, Yemen, in December 1992. They are linked to the following plans that were not executed: a plan to assassinate Pope John Paul II during his visit to Manila in late 1994; simultaneous bombings of the U. S. and Israeli Embassies in Manila and other Asian capitals in late 1994; the midair bombing of a dozen US trans-Pacific flights in 1995; and a plan to assassinate President Clinton during a state visit to the Philippines in early 1995.

September 11, 2001 was their last and most successful terrorist attack against the United States of America. The fight against this organization in Afghanistan and in the whole world is going on. Their leader is on the run and is perhaps the most wanted person on the globe. He continues to provide training, financing, and logistical support to the organization and is their spiritual head.

Al Qaida may have between several hundred to several thousand members. It is a focal point or umbrella organization for a worldwide network that includes many Sunni Islamic extremist groups such as Egyptian Islamic Jihad, some members of al-Gama'at al-Islamiyya, the Islamic Movement of Uzbekistan, and the Harakat ul-Mujahidin.

Al-Qaida has a worldwide reach with cells in a number of countries reinforced by its ties to Sunni extremist networks. Bin Laden and his key lieutenants maintain bases in Afghanistan though they may not reside there. The son of a billionaire Saudi family, he may have inherited approximately \$300 million that he uses to finance the group. Al-Qaida also maintains various moneymaking front organizations, solicits donations from like-minded supporters, and illicitly siphons funds from donations to Muslim charitable organizations.¹¹

The list cited above is just a sample of viable terrorist organizations representative of consumer component. Common among these groups are the two psychological factors that an organization needs to cross the threshold of employing a weapon of mass destruction. They have the willingness to act without regard for the personal safety of the individual or individuals employing the device and the willingness to act on a scale reflective of the destruction of the world trade center in New York.

These organizations also possess the three resources necessary to execute a large-scale terrorist act. They have or can raise sufficient financial resources to purchase either a completed device or the required raw materials. Their membership includes educated persons capable of understanding the principles of nuclear weapon construction and employment. Finally, they can access large tracts of land to develop store/hide a nuclear weapon.

¹¹ Ibid., 74

Terrorist organizations have always attempted to disguise their future intentions, except in general terms – speaking of “Jihad” and voicing their intent to bringing down certain governmental systems. For these organizations, demonstrating interest in purchasing nuclear weapons from the black market or other places is the first step in a criminal act. However, for us, the “Free World,” this step is a significant indicator.

The strong and powerful U. S. counterattack against the terrorist organizations and bases in Afghanistan in October 2001 brought one big disadvantage. Before, most of the bad eggs were in one basket. Now, they exist throughout the world. It is harder then ever before to get a hold on them. These organizations will regroup and start again, as long as the head of the most powerful and crucial groups of all, Usama Bin Laden is on the run, the fight will not end.

September 11, 2001 showed the world a worst-case scenario – a well-resourced organization willing to act on a large scale. Nuclear weapons or other weapons of mass destruction are the next logical step in a fight against the “unbeliever” and against the “Free World.” It is reasonable to expect that terrorist organizations around the world are trying to get nuclear weapons for their own use.

Part 3, The Distribution Component.

The number of countries willing to sell nuclear technology and/or material to third parties will increase. As we have established the supply and demand components of the business model, let us now look at the distribution component. As examples we will consider three countries that western analysts fear may now be or may become vendors of nuclear material or technology; France, Pakistan/India (taken collectively), and North Korea.

France. The United States has a history of military support to France going back to our involvement in World War I. Sales of military technology and weapons stem from our position as democracy's arsenal during WWII. We supplied the arms and machinery that enabled the French Resistance and Free French Army to participate in the push against the Germans following the Normandy invasion. During the cold war, the US imported technology to France to speed her post war development as a NATO partner without causing her to devote industrial resources to weapons development. As its industrial base developed, France crossed the threshold from military technology consumer to producer.

France developed and used chemical weapons in WWI and maintained stockpiles of mustard gas and phosgene at the beginning of WWII. In a 1988 speech to the United Nations, French President Mitterrand claimed that France

had no chemical weapons and would produce none in the future. Having no evidence to the contrary, we should accept that France no longer has a chemical warfare program nor does it have chemical weapons stockpiles. France ratified the Chemical Weapons Convention (CWC) on March 2, 1995.

Today France buys and sells military technology. Famous among its exports is the Mirage fighter aircraft. Experts considered this fighter one of the most advanced rivals to the United States and Russian developed aircraft. These appear in the market place as competition to US models. The countries that purchase from France are often on the American weapons technology transfer restricted list. France failed to support the United States by providing troops in Southwest Asia in the "War on Terror." Instead, she publicly criticized the United States for attacking Iraq. Many Americans analysts characterize France as a potential source of nuclear technology leakage to our enemies.

France is however a party to all non-proliferation treaties and is a member of all international export control regimes. Though France scaled down its nuclear forces after the Cold War, it retains a significant nuclear capability. It possesses a limited but varied missile program.

India and Pakistan taken together represent a well-documented historical hot spot. As a result, they have long sought nuclear supremacy over each other. They are also among the world's poorer states. India has a powerful military, is a

regional power, and has a strong technology sector. On the other hand, India possesses a huge population that is an economic drain.

Pakistan borders one of the world's most volatile states, Afghanistan. In the mid-1970s, Pakistan embarked upon the uranium enrichment route to acquiring a nuclear weapons capability. By the mid -1980s, Pakistan had a clandestine uranium enrichment facility. As early as 1989-1990, the United States concluded that Islamabad had acquired the capability to assemble a first-generation nuclear device.

Experts believe Pakistan stockpiled approximately 580-800kg of highly enriched uranium (HEU), sufficient amounts to build 30-50 fission bombs. In 1998, Pakistan commissioned the Khushab research reactor, which is capable of yielding 10-15kg of weapons-grade plutonium annually. According to the United States, China helped Pakistan by providing nuclear-related materials, scientific expertise, and technical assistance. Islamabad conducted nuclear tests in May 1998. Shortly after India conducted its own weapon tests and declared itself a nuclear weapon state. Pakistan is not a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

India regards its nuclear and long-range power projection programs as instruments for maintaining strategic stability in the Asia-Pacific region. These capabilities support New Delhi's claims to great power status and further

demonstrate that India's technical prowess is equal to that of developed countries. India rejects the existing nuclear nonproliferation regime stating that it perpetuates an unjust distinction between the small group of states with nuclear weapons, and the rest of the world's nations. India has also been highly critical of the nuclear weapon states' failure to meet their nuclear disarmament commitments.

Earlier this year the Bush administration told China, South Korea, and Japan that North Korea had sent nuclear materials to Libya. New reports suggest the processed uranium went first to Pakistan, then Libya. The dispute undermines efforts to get North Korea to the negotiating table.¹²

North Korea since its origin in 1948 has been isolated and heavily armed, with hostile relations with South Korea and the West. It developed a capability to produce short and medium-range missiles, chemical weapons, and possibly biological and nuclear weapons. North Korea faces significant economic pressures in addition to its increasing political isolation. Large-scale military spending eats up resources needed for investment and civilian consumption. In 2003, heightened political tensions with key donor countries and general donor

¹² Mike Shuster, Correspondent, NPR, "U.S. Claim on N. Korean Nuclear Shipment Questioned", National Public Radio – All Things Considered, March 25, 2005, <http://www.npr.org/templates/story/story.php?storyId=4561606>

fatigue threatened the flow of desperately needed food and fuel aid.¹³ The Command Sergeant Major of United States Forces, Korea stated, "The North Koreans will sell anything, if the price is right."

North Korea has vacillated on the subject of nuclear non-proliferation. In October 2002, North Korea confirmed U.S. intelligence reports that it had a clandestine enriched uranium program in violation of the Agreed Framework and the Nuclear Non-Proliferation Treaty. In December 2002, Spanish and American naval forces intercepted a North Korean ship loaded with Scud missiles bound for Yemen; but allowed the shipment to precede to its destination. That same month, Pyongyang lifted the freeze on its plutonium-based nuclear weapons program and expelled IAEA inspectors who had been monitoring the freeze under the Agreed Framework of October 1994. In January 2003, North Korea announced its withdrawal from the NPT. In April 2003, Pyongyang declared the bilateral "denuclearization agreement" with Seoul was no longer valid.

In early 2005, North Korea formally announced that it possessed nuclear weapons. As a result, China has attempted to mitigate North Korea's continue nuclear weapons development and perhaps market nuclear weapons technology. China told the United States it would push for another round of six-way talks on

¹³ The Central Intelligence Agency, "CIA – The World Factbook 2004, North Korea", accessed on January 21, 2005, <http://www.cia.gov/cia/publications/factbook/geos/kn.html>

the North Korean nuclear crisis as soon as possible, saying it would be in touch with Pyongyang and the other players.¹⁴

As a potential distributor of nuclear material, France gets a bad rap. While she allegedly had a role in Saddam Hussein's dream of nuclear power, the evidence is weak. She has demonstrated a willingness market conventional weapons technology remains on the United States' "sell to" list. India, Pakistan, and North Korea are a different story. Each of these countries has sufficient political and economic motivation to market nuclear weapons or weapons material. They each seek to obtain or maintain local military dominance.

Part 4, Counterpoint – Targeting the Three-Component Model.

America is better prepared to prevent, disrupt, and respond to terrorist attacks than ever before. On March 1, 2003, the president created the Department of Homeland Security (DHS) with one single overriding responsibility: to make America more secure. Approximately 180,000 personnel from 22 different organizations became part of the DHS completing the largest

¹⁴ "China will push for N.Korea 6-party talks", China Daily, updated 2005-05-13, 0909, http://www.chinadaily.com.cn/english/doc/2005-02/13/content_416276.htm

government reorganization since the beginning of the Cold War. As a result, we upgraded security at key facilities around the country.¹⁵

DHS also established a National Cyber Security Division to examine cyber-security incidents; track attacks, and coordinates response. Included in the DHS Act was a sweeping transformation within the FBI, the establishment the U.S. Northern Command, and the creation of the multi-agency Terrorist Threat Integration Center and Terrorist Screening Center.

In the area of Border and Transportation Security, DHS has unified agencies to keep out terrorists, criminals, and dangerous material. The DHS is implementing a layered security strategy – including an increased DHS presence at key foreign ports, improved visa and inspection processes, strengthened domestic seaport security, and improved security technology at airports and border crossings. DHS is implementing background checks on 100% of applications for U.S. citizenship and has registered over 1.5 million travelers into the U.S. VISIT program. The Coast Guard also has seized over 136,000 pounds of cocaine and arrested more than 280 drug smugglers in 2003 with this layer out approach. DHS is completing a massive overhaul of security at our nation's airports.

¹⁵ United States Department of Homeland Security, "DHS Organization – About the Department of Homeland Security", http://www.dhs.gov/dhspublic/theme_home1.jsp

DHS protects our communications systems, power grids, and transportation networks. During the holiday terror alert, DHS coordinated with private and civic partners to upgrade security at key facilities and coordinated response round the country. DHS also established a National Cyber Security Division to examine cyber, chemical and biological threats. DHS established the BioWatch program, which protects many large U.S. cities by monitoring the air for biological agents.

The PATRIOT Act plays vital role in protecting the homeland, enabling the Federal government to better track terrorists, disrupt their cells, and seize their assets. By breaking down unnecessary barriers between intelligence and law enforcement systems, the PATRIOT Act ensures that the best available information about terrorist threats. The act also allows the United States to provide pertinent data to international agencies such as the United Nations, the International Atomic Energy Agency, INTERPOL, and foreign governments. In the past, sharing this information compromised domestic prosecutions.¹⁶

As we look at the steps taken to prevent future incidents as they relate to the three-component model earlier, our military and DHS focus on the consumer component. The efforts of Department of Homeland Security mitigate the terrorist's ability execute his mission on American soil. Our military campaign in

¹⁶ FindLaw.com, "115 STAT. 272 PUBLIC LAW 107-56—OCT. 26, 2001" (AKA The Patriot Act), <http://news.findlaw.com/cnn/docs/terrorism/hr3162.pdf>

Southwest Asia decreases the terrorists' ability to take advantage of his financial, personnel, and facilities resources.

The United States Department of State leads the attack against the distribution component of the model. The Bush administration is supporting China's effort to engage North Korea, arguably the most dangerous offender, in the six party talks. At a conference in Beijing this month, Secretary of State Condoleezza Rice asked Chinese leaders for help in getting North Korea to rejoin nuclear weapons talks.¹⁷ While the administration is not satisfied with the current state of relations between China and Taiwan, it acknowledges that China is perhaps the more stable government at least in the near term and therefore less likely to sell nuclear material or technology on the world market. The state department is of course engaging other nations beyond the scope of the examples we cited here.

The United States has increased its efforts engage the governments of Pakistan and India. We have agreed to sell some two dozen F-16 fighter planes to Pakistan. The move is a reward for Pakistan's cooperation in the war against terrorism and as an effort to encourage Pakistan to limit the exportation of nuclear material. The decision angers Pakistan's major adversary, India. U. S. officials say the sale will not alter the balance of power on the sub-continent because Pakistan is currently far behind India.

¹⁷ Rob Gifford, NPR News, Beijing, "Rice Seeks China's Help in Restarting North Korea Talks", Morning Edition – National Public Radio, March 21, 2005, <http://www.npr.org/templates/story/story.php?storyId=4544009>

India is also contemplating the purchase of warplanes, though not necessarily from the United States. The United States may allow Lockheed Martin to co-produce defense equipment with India. The government may also allow the sale of Patriot ADA systems to India. Secretary Rice has also offered to review U. S. technology transfer laws as they relate to India.¹⁸

Our efforts to limit the supply of nuclear material especially in the world's unstable societies attack the supply component of the model to engage the supply component of the model. Agencies involved in this effort include non-governmental organizations such as the Center for Nonproliferation Studies at the Monterey Institute for International Studies (attempts to document the amount and locations of nuclear material in the world) and government agencies such as the Defense Threat Reduction Agency (verifies the destruction of nuclear weapons). We continue to work diligently to document the location and inventories of nuclear materials in the former Soviet Republics. We support international monitoring agencies. However, we are overwhelmed in these efforts by the amount of material available on the market.

¹⁸ Michele Norris and Vicky O'Hara, NPR News, Washington, All Things Considered – National Public Radio, March 25 2005, <http://www.npr.org/templates/story/story.php?storyId=4561612>

Part 5, Conclusions.

America is a powerful nation. We possess the means to attack each component of the model; supply, demand, and distribution. We can mitigate each component to some extent. However, factors beyond our immediate control such as competition between nations, the speed of technology transfer, the availability of nuclear material, adversarial resources, and the degree of hatred held by our enemies reduce the effectiveness of our best efforts.

Because we are unable to eliminate any one component of the model, we must therefore conclude that the thesis of this research is true. The research does not support any certain assessments and therefore the thesis speaks in terms of likelihood. Based on our study we must conclude that increased availability of nuclear technology makes it more probable that a terrorist organization will obtain viable a nuclear weapon.