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Open Literature Review of Threats Including Sabotage and Theft of Fissile Material Transport in Japan

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Japan Open Literature Review

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Abstract

This report is a review of open literature concerning threats including sabotage and theft related to fissile material transport in Japan. It is intended to aid Japanese officials in the development of a design basis threat. This threat includes the external threats of the terrorist, criminal, and extremist, and the insider threats of the disgruntled employee, the employee forced into cooperation via coercion, the psychotic employee, and the criminal employee.

Examination of the external terrorist threat considers Japanese demographics, known terrorist groups in Japan, and the international relations of Japan. Demographically, Japan has a relatively homogenous population, both ethnically and religiously. Japan is a relatively peaceful nation, but its history illustrates that it is not immune to terrorism. It has a history of domestic terrorism and the open literature points to the Red Army, Aum Shinrikyo, Chukaku-Ha, and Seikijuku. Japan supports the United States in its war on terrorism and in Iraq, which may make Japan a target for both international and domestic terrorists.

Crime appears to remain low in Japan; however sources note that the foreign crime rate is increasing as the number of foreign nationals in the country increases. Antinuclear groups' recent foci have been nuclear reprocessing technology, transportation of MOX fuel, and possible related nuclear proliferation issues.

The insider threat is first defined by the threat of the disgruntled employee. This threat can be determined by studying the history of Japan's employment system, where Keiretsu have provided company stability and lifetime employment. Recent economic difficulties and an increase of corporate crime, due to sole reliability on the honor code, have begun to erode employee loyalty.

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Executive Summary

This report is a review of the open literature concerning threats including sabotage and theft related to fissile material transport in Japan. It is intended to aid in the development of a design basis threat. Restrictions on this report specify that only sources found in the open literature and sources written in English be reviewed.

A design basis threat can be defined by the external threats of the terrorist, criminal, and extremist, and the insider threats of the disgruntled employee, the employee forced into cooperation via blackmail, the psychotic employee, and the criminal employee.

Examination of the external terrorist threat considers Japanese demographics, known terrorist groups in Japan, and the international relations of Japan. Demographically, Japan has a relatively homogenous population, both ethnically and religiously. Ninety-nine percent of the estimated population of approximately one hundred and twenty seven million is ethnic Japanese, while the remaining one percent includes Koreans, Chinese, Brazilians, Filipinos, and people of other origins. The religious breakdown shows that 84 percent practice both Shinto and Buddhism, 0.7 percent practice Christianity, and the balance practice various other religions. All of the ethnic and religious groups are inherently peaceful in nature, but any one of them may be capable of terrorism if extremists are able to influence a small number of people.

Known terrorist groups in Japan comprise the Red Army, Aum Shinrikyo, Chukaku-Ha, and Seikijuku. The Red Army's goals were to overthrow the Japanese government and ignite global revolution through violent, guerrilla means. The Red Army split into three factions: the Yodo Group, the Japanese Red Army, and the United Red Army operating in North Korea, Lebanon, and Japan, respectively. Each faction eventually adopted a local doctrine and set of goals, as their plot of global revolution never came to fruition. The Yodo Group adopted the philosophy of the North Korean leader in 1969, Kim Jong II; the Japanese Red Army sought the overthrow of Japan's monarchy. They incited global fear and intimidation though their terrorist activities but were not successful on a large scale.

In the late 1980s, Aum Shinrikyo, now called Aleph, sought religious and spiritual enlightenment in a materialistically focused Japanese society. The cult used brainwashing techniques to gain and retain a large member base. The organization had immense resources of money, people, and arms. Aum Shinrikyo tried unsuccessfully to conduct biowarfare, but was eventually able to prove its terrorist abilities with chemical weapons. The cult used sarin in the 1994 Matsumoto incident and 1995 Tokyo subway attack. Aum Shinrikyo no longer has religious organizational privileges, and remains under the surveillance of the Japanese government. Like the Red Army, Aum Shinrikyo's most successful endeavor was the spread of terror and fear as a result of people realizing the possibility of massive terror attacks, even in relatively peaceful countries as Japan.

Chukaku-Ha, the Middle Core Faction or Nucleus, sought to demonstrate frustration with Japan's imperialism, the imperialism of the West, and the Gulf War through violent protests with rudimentary rockets and incendiary devices. Seikijuku, or Sane Thinkers School, a right-wing group, seeks to protect and reinstate the role of the Emperor in Japan.

Lastly, examination of the external terrorist threat must take into consideration the international relations and policies of Japan. These also affect Japan's security and indicate who may be willing to target Japan. Currently, Japan supports the United States in its war on terrorism and war in Iraq. Such alliances may make Japan a target for both international and domestic terrorists. The recent 2004 Madrid train bombings exemplify the actions of terrorists against countries that support U.S. policy. As might be expected, Al Qaeda sympathizers have recently been discovered working in Japan.

The *Council on Foreign Relations* contends that Japan is vulnerable to an attack from North Korea, due to its close proximity and good relations with the United States. The possibility was made very clear when North Korea launched a long-range Taepodong Missile over the Japanese islands in August 1998 as well as the testing and deployment of medium-range Nodong missiles capable of reaching Japan. Japan holds several grievances against North Korea as well, notably its weapons-of-mass-destruction proliferation, including the kidnappings of 11 Japanese in the early 1980s, which continue to hamper progress towards improving relations.

Regarding the abduction issue, the chairman of the Democratic People's Republic of Korea, Kim Jong-Il admitted abduction of the 11 Japanese at the September 17, 2002 Japan-North Korea summit meeting. Throughout a series of Japan-North Korea Normalization and Six-Party Talks, Japan has continued to reiterate the importance of the unconditional release of the eight family members of those abducted and an inquiry into the indefinite whereabouts of the other ten abducted Japanese. Japan has stated that the resolution of this issue is essential for all other issues to be determined.

In 2001 and 2002, Japanese officials became increasingly alarmed by the encroachment of espionage and drug-running ships believed to be of North Korean origin into Japanese waters. The ships were estimated to have made the crossing from their base in North Korea up to twelve times a year, often releasing smaller boats that in turn launched rubber rafts to ferry agents to and from the Japanese coast. It is believed that the missions of these agents included gathering information about the outside world, smuggling money, drugs and goods, buying technology useful for its weapons programs, swaying influential Japanese officials in Japan regarding North Korea, recruiting ethnic Korean residents in Japan to gather information about South Korea, and conducting surveillance on U.S. and Japanese military installations. The agents were believed to have relied primarily upon the approximately 200,000 Korean residents of Japan who identify themselves as North Korean citizens, and using threats against family members in North Korea as a means of coercion. North Korea is believed to be a major supplier of methamphetamines to Japanese organized crime syndicates. In December 2001, Japanese coast guard patrol boats chased and exchanged fire with one suspected North Korean spy ship disguised as a Chinese fishing boat. The confrontation ended when the mystery boat sank inside China's exclusive economic zone. North Korean cigarettes and a badge of the deceased leader Kim Il-Sung were found as some of the evidence of the ship's origin. Dozens of automatic weapons, a surface to air missile launcher and an underwater scooter capable of carrying three people were found in the sunken ship, along with ten bodies.

Even so, Japan continues to provide food aid to North Korea. Through the World Food Program, Japan has sent 118,000,000 tons of food to North Korea, and through the United Nations it provided the equivalent of US\$100,000 in response to the accidental explosion of a train on April 22, 2001.

The second component of the design basis threat is the criminal threat. Japan's crime rate appears to remain low; however sources note that the foreign crime rate is increasing as the number of foreign nationals in the country increases.

The third component of the design basis threat is antinuclear extremist individuals and groups. Japan has been the area of operations of a number of antinuclear groups including Greenpeace, Citizens' Nuclear Information Center, No Nukes Asia Forum, Green Action, Plutonium Action Hiroshima, BUND, Plaintiffs Against Nuclear Fuel Cycle Facilities, People of Fukui Opposing Nuclear Power, and Stop the Monju. Several large, international antinuclear organizations such as Greenpeace, Citizens' Nuclear Information Center, and BUND have been especially active and persuasive due to their monetary and membership resources. The recent foci of their protests have been nuclear reprocessing technology, transportation of MOX fuel, and possible nuclear proliferation issues that could result thereof. Examples of such demonstrations include Greenpeace boarding the British-flagged ship *Pacific Swan* in order to hang a "stop plutonium" sign on it as it passed through the Panama Canal. Local organizations tend to collaborate and work on specific campaigns relative to their respective locations.

The insider threat includes the threats of disgruntled, coerced, psychotic, and criminal employees. The Japanese have historically viewed their employment by a specific company as a relationship where loyalty and trust are essential and training, teamwork, and hard work are methodologies for success. The employee is rewarded through the very viability of the company. This ensured business stability and therefore, lifetime employment. Life-long employment and keiretsu are both expressions of the same thing—the view of Japanese society as the extension of the family. However, sources note that recent economic fluctuations have hit business hard, and layoffs, though historically nonexistent in Japan, have begun to occur.

Threats of the employee being forced into cooperating via blackmail and the psychotic employee must also be considered in determining the insider threat, along with the threat of the criminal employee. One in 10 Japanese corporations reported corporate crime from 2001 to 2003, and much more crime is believed to occur undetected. Asset misappropriation is reported to be the highest fraud practiced, while cybercrime and product piracy and counterfeiting comprise the concerns for the near future. Training to combat fraud is virtually nonexistent in Japanese industry, which depends solely on the honor code.

Japan is now a relatively peaceful nation, but its history illustrates that it is not immune to terrorism, crime, or other threats. Information on these threats found through this open literature survey may be used by Japanese officials in defining a design basis threat.

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1. Introduction and Scope

Sandia National Laboratories (SNL) and Japan Nuclear Cycle Development Institute (JNC) have undertaken a cooperative study and training program focused on Japan's system of physical protection for nuclear material transport. The Action Sheet defining this cooperative work was signed by the U.S. Department of Energy (DOE)/National Nuclear Security Administration (NNSA) on December 15, 2003 and by JNC on January 19, 2004. The project is funded by JNC.

The work is divided into four tasks. Under Task 1, SNL, working in consultation with JNC, will collect and analyze baseline data on Japan's fissile material transportation system. The baseline will include: (a) an open literature review for threats including sabotage and theft related to fissile material transport, (b) a review and summary of transportation plans for fissile materials in Japan, (c) a regulations and requirements review concerning sabotage and theft of fissile material transport, and (d) a summary report.

This report fulfills the first task as a comprehensive review of open literature sources in English of journals, books, news publications, and the Internet. This report defines threats according to the schema in *The Design and Evaluation of Physical Protection Systems* by Mary Lynn Garcia (Garcia 2001). According to Garcia, adversaries can be characterized in three broad groups: outsiders, insiders, and outsiders working in collusion with insiders. In order to analyze the potential adversaries, information is required regarding their motivation, potential goals based on targets, numbers, capabilities, and tactics.

Outsiders might include terrorists, criminals, extremists, or hackers (Freedman and Mann 1997). Ideological, economic or personal reasons are motivations that might prompt adversaries to undertake criminal actions against an institution or facility. Ideological motivations, linked to a political or philosophical system, include political terrorists, antinuclear extremists and certain groups of philosophical or religious fanatics. Economic motivations involve a desire for financial gain, where criminals might view nuclear materials or information as attractive targets for theft, ransom, sale, or extortion. Personal reasons for committing a crime include a grievance against an employer, psychosis, or a form of recreation, such as computer hacking.

An insider is defined as anyone that possesses knowledge of operations or security systems and has unescorted access to facilities or security interests. A passive insider would only provide information. An active, nonviolent insider might facilitate entrance and exit or disable alarms and communications. An active, violent insider would participate in a violent attack and is a very difficult adversary to protect against. It should be recognized that insiders can have the same motivation as outsiders. It should not be assumed that an employee would be invulnerable to greed, dissatisfaction, or cooperating with adversaries as a result of coercion, such as a threat against his or her family.

The local environment, including conditions outside and inside the facility, should be considered in any characterization of the threat. The general attitude of the community or the presence of organized extremist groups can provide information on threats. Other factors inside the facility such as labor issues, industrial relations policies, public relations policies, security awareness, and human reliability programs may also affect the potential threat. A review of the demographics of the local and national population can be useful in determining a potential threat to a specific facility. Any discontented faction of the population should be reviewed, including technically skilled people, people skilled in combat and political extremists. Considering the potential adversarial threats, the next section of this report will describe the demographics of Japan to identify known terrorist organizations and potential domestic or international adversaries.

This report is not an exhaustive study, but it highlights findings that may help to define a threat and provide research leads for continued development of a threat definition for sabotage and theft of fissile materials during transportation in Japan.

2. Findings

2.1 External Threat

2.1.1 Terrorist Threat

2.1.1.1 Japanese Demographics

The terrorist threat can be defined as the sum of threats due to demographics, specifically ethnicity, and tendencies and conflicts resulting from them; known terrorist organizations in Japan; and Japan's international relations.

Japan is a relatively homogeneous country inhabited by a relatively homogeneous population of ethnic Japanese people. The *2004 CIA World Fact Book* states that 99 percent of the population of an estimated 127,333,002 people is ethnic Japanese. It assigns an immigration rate of zero migrants per 1,000 people for Japan.

One percent is of non-Japanese origin, including:

- 511,262 Koreans,
- 244,241 Chinese,
- 182,232 Brazilians,
- 89,851 Filipinos, and
- 237,914 people of other origins.

The religious makeup of the Japanese population is as follows (CIA 2004):

- 84 percent practice both Shinto and Buddhism
- 0.7 percent practice Christianity
- 15.3 percent practice various other religions.

The majority of Japanese practice a combination of both Shinto and Buddhism, although many do not classify everyday superstitions and practices as religious; Shinto and Buddhism are ingrained in much of Japanese culture. (Wikipedia 2004a) Furthermore, Japanese do not necessarily strictly adhere to one specific religion; a person's wedding may take place at a Shinto shrine and his funeral in a Christian church, for example. Japanese streets and buildings are decorated for Christian holidays such as Christmas and Easter, while many Japanese homes have a prayer shrine at which Shinto gods may be offered prayers. In fact, many Japanese are wary of organized religion, remembering the World War II Japanese theocracy of exaggerated nationalistic Shinto and the cult-like tendencies of Japanese New Religions such as Aum Shinrikyo, a formerly religious group now called Aleph. History has shown the Japanese how religious organizations can offer opportunities for power and exploitation.

Although not an original religion in Japan, Islam is growing in practice. As Islam becomes more prominent in Japanese society, so does the discrimination felt by Muslims. Tomoko Yamagishi, in a paper presented in the War in Times of Peace conference in 2002 (Yamagishi 2002), describes how some Muslims immigrated to Japan towards the end of the 1980s to a prolific Japanese economy that offered better salaries than those they could find at home. However, the Japanese government, including the Japanese police force, was not equipped to control such laborers, because they were solely prepared to understand and account for Japanese. Muslim laborers, therefore, had free reign within the country; they were not citizens unless they married Japanese, and otherwise were simply not accounted for at all. Although they were not officially acknowledged as being in Japan, the media made Japanese aware of the Muslims' presence by portraying them negatively, since Japanese see themselves as a homogeneously populated country. In light of the September 11, 2001, terrorist attacks on the United States, the Asian People Friendship Society, a non-governmental Japanese organization, along with a Bangladeshi-dominant Muslim group, a Pakistani-dominant Muslim group, and a Japanese Muslim Association held a symposium entitled Islamic Society and History. Recent aggressiveness towards Muslims in Japan was highlighted, specifically citing an incident where Japanese police had begun close monitoring of a certain mosque and had begun arresting Muslims whose visas had expired. This is believed to have occurred as a result of United States intelligence and pressure.

In spite of this, however, Islam is on the rise in Japan, even if through conversion. The *Japan Times* notes how many Japanese women are converting to Islam in order to marry Muslim men who came to Japan for work. (Nakano 1992) Consistent with Islamic law, a potential spouse must convert, at least in name, to Islam in order to marry. According to the Islamic Center in Setagay-ku in Tokyo, Japan, 80 new Muslims were registered in 1992, of whom most were Japanese women. These women practice varying orthodoxy levels of Islam. Some Japanese women put their new religion above all else in their lives, even changing jobs in order to honor certain practices such as the salat daily ritual of prayer, while others integrate Islamic practices into their Japanese lifestyles such as by wearing their veils only at certain times.

Another report on the history of Islam in Japan (Nida'ul Islam Magazine (http://www.islam.org.au), May-June 1995), contends that there is no reliable estimate of on the Japanese Muslim population in Japan. Estimates range from a few hundred to one thousand people that are openly practicing Islam.

On the other hand, Christianity has spread on Japan over the last hundred and twenty years as part of its Westernization process and is greatly respected by the Japanese, even if they do not adhere to its creeds. Even though less than one percent of the population is Christian, many of the middle class and intellectuals are Christian, so that their influence is greater than their numerical strength might suggest. Christianity was introduced to Japan more than five hundred years ago, which also has contributed to its acceptance and propagation.

Despite its relative homogeneity, Japan is not immune to discrimination by ethnicity as well as religion. Yasunori Fukuoka notes that although only a fraction of one percent of Japanese population is Korean, Koreans are greatly discriminated against in Japanese society. (Fukuoka 1996) During Japanese colonization of Korea, many Koreans found it economically promising

to immigrate to Japan, while many were forced to do so later. Many of these latter immigrants (approximately 1,700,000 to 1,800,000) returned to Korea after Imperial Japan was defeated by the Allied Powers in 1945 and Korea received its independence. About 500,000 to 600,000 Koreans, whose families had already begun to assimilate into Japanese culture, remained in Japan. Many third-generation Koreans do not speak Korean at all, and a large proportion of Korean families use adopted Japanese family names in order to avoid discrimination. Thus, many Japanese do not even recognize their interactions with Koreans, as Japanese and Korean people do not have any distinguishing physical characteristics. However, Fukuoka asserts that Koreans are still oppressed in Japanese society today if not by law, by societal attitudes.

Japanese children are only considered naturally Japanese if they are born in Japan to married parents of whom both are citizens of Japan. Only if these conditions are met are children entered into the family's Koseki, the official family tree chronicling generations (Japan-101 2003). Japan recently ratified the Convention relating to the Status of Refugees which finally gives permanent resident Koreans either South Korean or North Korean national status depending on their geographic origin. However, Japanese ethnicity is still an unwritten requirement to serve in a governmental position, and even to be a public school teacher (Fukuoka 1996).

Japan is a country with relatively homogeneous demographics, though sources state the population is becoming more diverse ethnically as well as religiously. These trends can be taken into consideration in helping to define the external terrorist threat, along with already known terrorist groups in Japan and internationally. Although all of the ethnic and religious groups are generally peaceful in nature, any of the groups are capable of terrorism if extremists are able to influence even a small number of people.

2.1.1.2 Known Terrorist Groups in Japan

Although it is a very peaceful nation, Japan is not immune to terrorism and has a history of such activity. The recent terrorism history of Japan includes several known terrorist groups including three factions of the Red Army, Aum Shinrikyo, Chukaku-Ha, and Seikijuku. Fortunately, most of the terrorist events in Japan have resulted in small numbers of casualties. They have, however, produced mass hysteria and are therefore believed to have been ultimately purported to incite intimidation (Dolan and Worden 1994).

Box and McCormack (Box and McCormack 2004) describe the social situations and attitudes that may have aided in the formation of terrorist groups in Japan. In the aftermath of World War II, Japan adopted a democratic, parliamentary system to supplant its previous totalitarian rule. However, with the United States managing the global system, Japan's primary focus was on building and maintaining a favorable relationship with the United States. Box and McCormack argue that the formation of both the Red Army and Aum Shinrikyo occurred as a result of dissatisfaction with this constricted focus and conformity of the Japanese government to the thoughts of Japan's American advisers.

Terrorism is prevalent in all forms and structures. Box and McCormack contend that such groups as the Red Army and Aum Shinrikyo undeniably fit the definition of terrorist groups. However, it may be the repression that ensues from the narrowing of the government's and society's focus to obliterate such groups that spurs the very existence of these organizations and

ones like them in the first place. Frustration due to being ignored in light of seemingly more urgent activities, such as fighting the current war on terrorism, may actually ignite terrorist activities. Thus, right- as well as left-wing groups practice terrorism to accomplish their goals. The Red Army wanted to initiate global revolution to give rise to a better world, and Aum Shinrikyo began as a retreat to enlightenment amidst a world of chaos and overwhelming materialistic pressures. Through their frustrations at failure and unwillingness to admit to the imperfection of their ideals, these factions lost their grip on reality and resorted to terrorism, justifying their actions by the current state and agendas of society (Box and McCormack 2004).

2.1.1.2.1 Red Army

Box and McCormack discuss how honoring the Japanese constitution came only after honoring the requests of and earning the trust of the United States, and therefore many civil rights movements were ignored. Repression ensued and frustration simmered within groups of idealistic students. These feelings were intensified in 1950 when students struggled to resist the Japan-South Korea Normalization Treaty which seemed to compromise Japan to the Cold War containment strategy. The students also were suspicious that construction of a new airport represented military proliferation, and "bureaucratic infiltration" of academic institutions was occurring. Students felt that non-imaginative teaching, outdated and unkempt facilities, and overloaded and therefore impersonal classes were not being taken seriously by the Japanese government. Student demonstrators violently protested at symbolic locations by fighting with gebabo (violence staves), helmets, and Molotov cocktails, which were used to bomb police stations. Their activities eventually reached sufficient magnitude that universities were forced to suspend proceedings for the entire academic year of 1968 to 1969. Between 1968 and 1988, eighty-five people were killed and five thousand more suffered injuries due to these protests. However, even after classes were resumed, not all students gave up their fight (Box and McCormack, 2004).

The Red Army formed in Tokyo in 1969 after the riots of the earlier 1950s and 1960s. The Red Army consisted of students who were not willing to accept that their revolution had failed and refused to concede and return to universities. Their doctrine became a global declaration of war on the middle and upper classes. They wanted to overthrow the Japanese government and ignite global revolution, because they believed current governments were not satisfying the needs of their peoples. The Red Army quickly divided into three factions, the Yodo Group, the Japanese Red Army, and the United Red Army with common goals being to initiate a global revolution.

The Yodo Group consisted of just a few dozen Japanese, but they managed to hijack a local airplane and force its landing in Pyongyang, Democratic People's Republic of Korea (DPRK), where they were welcomed by Kim II Sung, the North Korean president at that time. They emerged two years later to announce to the Japanese media that they had been reformed; their global outlook had evolved to solely reflect the thoughts of the DPRK. The Yodo Group is believed to be the culprit behind the abductions of Japanese citizens in the late 1970s for recruitment purposes. The Yodo Group members lived out their lives in North Korea, raising families and living extravagant lifestyles of travel and privilege with resources gathered through money laundering and powerful friends.

Another faction of the Red Army, the Japanese Red Army, saw the Palestinian struggle as a worthy cause in their global view, and set up a new base in Lebanon in February 1971. The Japanese Red Army was primarily organized and led by Fusako Shigenobu, a woman who was on the international wanted list due to the Japanese Red Army's hostage incident at The Hague. She was arrested in November 2000. The Japanese Red Army joined forces with the Popular Front for the Liberation of Palestine and participated in an attack on the Lod International Airport in Tel Aviv in 1972. Their violent actions resulted in the death of twenty-six people; the wounding of twenty-six others, mostly Puerto Rican tourists; and the death by suicide of two of the three Japanese Red Army members. Other groups allied themselves with the Japanese Red Army to execute attacks masterminded by the Japanese Red Army on the oil refineries in Dubai and Singapore and the embassy in The Hague in 1974 and the United States and Swedish embassies in Kuala Lumpur in 1975. In addition, the Japanese Red Army and its affiliations continued to rob banks and kidnap in order to fund activities. Similar to the Yodo group, the Japanese Red Army also struggled with the shift of their global view of revolution to their local, primary task at hand: Palestine.

The third faction of the Red Army remained in Japan, though they too joined forces with other groups. Their union with the Tokyo-Yokohama Security Treaty Joint Struggle Committee resulted in the United Red Army and an abundance of pooled resources. They saw themselves as the "guerrillas of the Japanese revolution" where they would incite revolution to overthrow the Japanese government while the other factions of the Red Army worked to do the same in their respective locations. Their conjoining committee's focused primarily on the revolution in Japan. Nonetheless, these ambitions soon proved to be ephemeral. During a meeting, the United Red Army performed a ritual of self and group criticism, and challenged their members to cleanse and unify their revolutionary thoughts. The resulting practice spiraled out of control as a gory purge, culminating in the death of twelve members, two police officers, and the arrest of the remaining five members.

In the end, the Red Army never achieved its global goal of revolution; however, each faction did have an impact in its immediate location, as well as in Japan. The Red Army participated in an additional 17 lesser publicized bombings of government and corporate buildings or symbolic sites in Japan, notably the Mitsubishi Heavy Industries bombing on August 30, 1974, which killed eight people, and the bombing of Mitsui and Company and Taisei Corporation which resulted in 20 casualties. (Wikipedia 2004b).

Although very active in the 1970s and 1980s, the Red Army has been taken off Japan's State Department watch list, (Council on Foreign Relations 2004). Their attacks in Japan were not to the scale and impact that the Red Army would call successful and extremely noteworthy, but they did terrorize Japan, nonetheless (Box and McCormack, 2004).

2.1.1.2.2 Aum Shinrikyo

While Aum Shinrikyo terrorized Japan with its Tokyo subway sarin attack, the group had actually hoped to use purer, and therefore more potent, sarin which would have resulted in greater consequences. Like the Red Army, the group also had many failed attempts at terror, but the most successful repercussion of even these futile attempts was intimidation and fear. Box and McCormack illustrate the prevailing society that may have helped in the formation of the

cult Aum Shinrikyo. They assert that the 1980s came to a conclusion in what may have seemed to be a stable and prosperous political and social environment in Japan; however, Japanese youth actually felt estranged due to bombardment of Western ideals of materialism and progress. As a result, new religious groups emerged to offer spiritual fulfillment and identity for those Japanese who felt like failures in the fast-paced environment. Likewise, Aum Shinrikyo began as a religious organization designed to offer elucidation and freedom at a time of momentous rationalization and Westernization. This possible reality of an imaginative world of new theology and eccentric practices appealed to Japanese young adults, as they were accustomed to virtual ideas generated from computer games, "manga", and TV, which all visualized and animated extreme versions of the forces of good and evil that they saw clashing in their society (Box and McCormack 2004).

Aum Shinsen no Kai was formed in 1984, and subsequently became the religious organization Aum Shinrikyo in July 1987. It was headed by Chizo Matsumoto, more commonly known as Shoko Asahara, "the one who has attained supreme truth." Asahara was the self-proclaimed guru and holy man whose doomsday preaching seemed to practically equate death and liberation. Recruitment for the organization involved brainwashing practices including sleep deprivation, isolation, and ingestion of drugs followed by Asahara's prophetic teachings. Young Japanese, including academically able scientists, medical doctors, and engineers, searching for structure and such ideas as truth and political and social reform, willingly, at first at least, pledged complete obedience and devotion to the guru. They gave up their lives and assets to feed the organization's need for membership and 300 million to one billion US dollars' worth of assets. Due to its religious founding, businesses also provided tax-exempt money for Aum to work. Internationalization was also a success for Aum, resulting in the formation of sects in Russia, Germany, the United States, Sri Lanka, and Australia via the internet. In order to control membership, Asahara killed members who did not comply and outside individuals who questioned the practices of Aum. At the time of the infamous subway attack in 1995, Aum Shinrikyo's membership totaled an approximate ten thousand people (Reader 2000).

Ely Karmon describes how the religious side of the cult casually incorporated Hinduism, early Buddhism, yoga, and alleged miracles all for the purpose of achieving some heightened state of being such as that of the guru, Asahara (Karmon 1999). By proclaiming himself as Jesus, Asahara was able to incorporate the idea of the Last Judgment and final battle of Armageddon from the Judeo-Christian culture into his teachings. Thus, Asahara was able to focus much of his propaganda on the urgent subject of saving the world, though this purpose changed to saving the chosen themselves in 1988–1989, and eventually to "survival through combat" in 1994. Aum taught that through participation in spiritual cleansings and rituals, members would become resistant to atomic, biological, and chemical attacks.

Only after the defeat of twenty-five of the members running in the 1990 Japanese general election did frustration lead Aum to a new mission to challenge the state before the apocalypse that Asahara prophesied was coming in 1999, 1997, and, as eventually decided, 1995. This political loss prompted a critical change in the internal structure, purpose, and means to achieve this new purpose by initiating an urgent mission to save mankind facing the ultimate chaos of Armageddon. Asahara and inner circle disciples began to preach that Aum Shinrikyo was being attacked by biological and chemical weapons in an attempt to justify the acquisition of similar

weapons. Through his eclectic teachings, Asahara proclaimed that in order to save Japan, the current governmental system needed to be annihilated and supplanted by an "Aum dictatorship" (Box and McCormack 2004).

Aum Shinrikyo also has a thread of anti-Semitism in its history and ideologies. Unusual and foreign to Japan, many scholars believe that Japanese anti-Semitism is rooted in anti-Westernization or anti-Americanism, by identifying Jewish culture as the epitome of materialism and Westernization. In Japanese history, anti-Semitism is virtually non-existent, since Judaism was never a threat to any other religion, and Japanese never really differentiated between Jewish and other non-Japanese people. Nonetheless, one of the ten chapters comprising Aum's website is devoted entirely to anti-Semitism, especially on the Russian version of the website. Its statements are consistent with modern right-wing anti-Semitism doctrines (Karmon 1999).

Amy E. Smithson and Leslie-Anne Levy from the Henry L. Stimson Center report that while Aum Shinrikyo did manage to attack somewhat successfully with sarin two times, the cult had greater ambitions in mind that were a flop from beginning to end despite the generous monetary, facility, and technical resources at hand (Smithson and Levy 2000), They hypothesize that Aum's inability to manufacture and disseminate its biological and chemical weapons (save sarin) may actually discourage other terrorists from wasting time, money, and resources on such endeavors. Nevertheless, Aum touted a greatly exaggerated list of accomplishments, including the supposed acquisition of a seed culture of the Ebola virus after returning from a trip to Zaire where Asahara and his followers allegedly administered aid to victims of that virus. He claimed to have obtained a sample of Q fever from Australia as well as anthrax spores, poisonous snake venom, mushroom spores, and the means to make botulinum toxin. None of these biological weapons programs were successful, though Aum executed nine biowarfare pseudo-attacks of which only five were even notable enough to have been documented. The first involved venting botulinum toxin—that had not even sickened exposed lab rats—from six hidden vents in a van as it drove through Tokyo, Narita International Airport, and the United States naval bases at Yokohama and Yokosuka. According to police reports, the second and third incidents in June and July of 1993 consisted of a failed aerosolization of a veterinary inoculation anthrax strain mixture via an industrial sprayer and fan on top of an eight-story building where sect members in full protection gear worked for four days. However, Smithson and Levy state that these reports were greatly exaggerated; only steam was apparently seen rising from the building and a moldy smell reported. Moreover, the amount of mixture needed for a four-day release would have been substantial. Thus, despite the generous amount of money that Aum spent on laboratories and even helicopters for proposed dispersal units, its biowarfare program never came to fruition.

Aum's chemical warfare program proved more successful in its ten attacks on Japanese people. Aum initially tried to buy chemical weapons from alleged American and Russian sources, but failed and thus changed tactics. It began to acquire large amounts of chemical compounds in order to create the desired poisonous agents itself. The Aum technical expertise was much more adept with chemical synthesis than it was with bioweapon development. They successfully concocted numerous chemical agents including nerve agent VX, tabun, soman, mustard, hydrogen cyanide, phosgene, and of course, sarin. Only VX and sarin were produced in significant quantities; the former was used for attacks on opponents of Aum Shinrikyo in 1994 and 1995, and the latter for attacks on Matsumoto Castle and the Tokyo subway system. Asahara's greed and ambition demanded the construction of several new production laboratories disguised as shrines, notably the sarin plant, Satyan 7. Aum's chief scientist advised Asahara that the plant could produce an estimated 70 tons of sarin after 40 days of operation; however that was not good enough for Asahara. In 1993 he ordered his fleet of scientists and engineers increased from 18 to more than 100 at Satyan 7. Despite such state-of-the-art facilities, that in some cases were the primary attraction for membership in the organization for students, Asahara's pressure on production lead to facility leakage problems. Residents near the Satyan 7 plant filed several complaints with local police of toxic vapors exhausting from the shrine, but Asahara denied any accusations and instead claimed that United States forces had attacked Aum with chemical agents.

Aum's sarin was soon tested on a rival religious cult in order to confirm its fatal potency and to incite a war on Japan in order to legitimize Asahara's claims of apocalypse. However, like Aum's bioweapon administration, the first two disseminations of sarin backfired–literally. A sprayer affixed to a van was again utilized, however the nozzle clogged and back sprayed in the first attempt. In the second attempt, the sect's security chief got what should have been a lethal dose of sarin, and only quick administration of anti-nerve agent supplements secured his survival. The third attack proved to be more successful, killing seven and hospitalizing 58 residents of Matsumoto (Smithson and Levy 2000). Release of 12 liters of Sarin on June 27, 1994, between 10:40 and 10:50 p.m. at the Matsumoto Castle in Matsumo City exposed 600 people, including the 95 response personnel, a duty doctor, and residents. Response crews did not initially suspect terrorism, but perhaps a severe case of food poisoning, and were therefore unequipped to handle the magnitude of the event (Nakajima et al. 1997).

Smithson and Levy assert that the motivation for the attack at Matsumoto arose from a civil law suit filed against Aum Shinrikyo questioning Aum's purchase of some land. Aum sought to ward off an anticipated unfavorable ruling by killing the three judges with sarin gas, but by the time the cult members arrived at the courthouse, the judges had already retired to their dormitories. The cult altered its plans to accommodate this change of events, and dripped liquid sarin onto a heater to vent it to the open windows of the sleeping Matsumoto Castle inhabitants. Fortunately for the judges, the breeze did not bring enough sarin their way to cause fatality, but it did for other residents who had left their windows open for the night. In the aftermath of the attack, Aum sent letters to police and media claiming that the police's suspect was incapable of creating and administering sarin, warned of a future indoor attack in a subway, and stubbornly blamed the United States for the Matsumoto gassing (Smithson and Levy 2000).

Like the Matsumoto incident, Aum Shinrikyo's most famous sarin attack was again executed to thwart a perceived threat from authorities. Through Aum's guise of being a legitimate religious organization and careful logistical planning, it was able to keep itself free from the suspicion of authorities for most of its existence until it executed the gassing of the Tokyo subway system. Police had confirmed nearby residents' suspicions that Aum was producing poisonous agents by testing soil samples, yet the legal system did not allow Japanese authorities to halt Aum with the available evidence. After the Matsumoto incident, Asahara ordered that all of the sarin be destroyed, and Satyan 7 was converted to the shrine it was claimed to be in February 1995. Media, police, and residents were invited to visit the holy temple to dispel fears of Aum's wrongdoing. However, the police eventually received the legal authorization to extensively

search the facility. While they prepared to do so, two Aum members inside the Self Defense Forces warned Asahara of the invasion approaching on March 22, 1995. On March 18, 1995, the weekend before the police investigation was to occur, Asahara and several inner circle members masterminded an attack to discourage authorities from searching their compound. They quickly engineered the plans for an attack on the subway lines that intersect in the city center, and that carry the police force shift change. Two top scientists, after unsuccessfully trying to explain to Asahara that all of the sarin was diluted and the ingredients dispersed in hidden locations, reluctantly and painstakingly prepared two gallons of very impure sarin in record time. The assassins practiced puncturing plastic bags of water with sharpened umbrella tips. While preparation for the subway operation was underway, other Aum members firebombed several buildings in Tokyo, and left fake fliers from a rival sect threatening to wage war on Aum Shinrikyo in order to try to keep Aum away from the blame and confuse police.

Aum Shrinkyo attacked Tokyo's subway system between 7:46 and 8:01 on the morning of March 20, 1995. Five attackers stabbed and successfully punctured a total of eight of eleven bags of sarin disguised in newspapers before exiting the cars and meeting their getaway drivers. Subway operators eventually were forced to shutdown all three subway lines and twenty-six stations. Throughout the course of the day, 5,510 casualties reported to medical centers of which 4,470 were psychogenic patients and 54 were critically or severely wounded. The gassing resulted in 12 fatalities, and widespread fear in Japan, as well as the rest of the world. Clean-up of the subway took place immediately, but ridership remained below average in the following days.

After Aum Shinrikyo's attack on the Tokyo subway, the government was finally able to take action and arrest over 200 elite members of Aum, strip the organization of its religious status, and put the cult under surveillance (Box and McCormack 2004). Before Asahara was found on May 16, 1995, he sent a videotape to Japanese authorities stating that he and many of his followers were infected with Q fever because of attacks from the United States, and could not come out of hiding (Smithson and Levy 2000). Asahara was sentenced in February 2004, and subsequently received the death penalty for crimes associated with the 1995 subway attack. (US DOS 2004a).

Despite law enforcement crackdowns, the cult's membership and resource gathering proliferated; Aum practically doubled its member force by attracting 2,700 new members in 1997, and totaled an estimated 20 million dollars' worth of assets by 1999. In retaliation against the crackdowns, several Aum members tried to attack the Tokyo subway system again in May and June of 1995 by engineering hydrogen cyanide bombs that were thwarted before detonation by vigilant subway employees. Aum Shinrikyo members not incarcerated also threatened the Moscow subway system with a sarin attack (Smithson and Levy 2000). According to the United States Embassy in Japan, in July 2001 several Russian Aum Shinrikyo followers were arrested under the suspicion of a plan to bomb the Imperial Palace in Tokyo in order to free Asahara and take him to Russia. In 1999, in the continuing aftermath of the subway attack, the Japanese government passed legislation allowing authorities to look more immediately and aggressively into suspicious activities of individuals and groups. The Public Security Intelligence Agency also acquired the legislation necessary to continue its surveillance of the Aum Shinrikyo cult until 2005 as allowed by the Public Security Commission. In January 2000 Fumihiro Joyu assumed leadership of Aum, changed the name to Aleph, and supposedly rejected the ideals of Asahara and his sybilic teachings. Recruitment activities were curbed beginning in 2001 because of public suspicion, and current membership stands at less than 1,000 members located primarily in Japan. A small branch with several hundred members has emerged in Russia (USDOS 2004b).

Aum Shinrikyo was a well established organization with internal structure, monetary resources, substantial amounts of weapons, a large base of membership—including international membership—and intellectual and technical capability. Although many of Aum's ambitions failed miserably, several attacks were successful enough to cause fatality and mass injury, and most of all, incite terror and fear in Japanese and the global community (Smithson and Levy 2000).

2.1.1.2.3 Chukaku-Ha

Several other terrorist organizations, including the Chukaku-Ha, had less impact but contribute to Japan's history of terrorism. In 1957 the Chukaku-Ha, meaning Middle Core Faction or Nucleus, formed from remnants of the Japanese Communist Party and a small clandestine operations group, the Kansai Revolutionary Army. Combined, Chukaku-Ha is the largest domestic militia group in Japan comprising 3,500 members. Chukaku-Ha protests what they consider Japan's imperialism, imperialism of the West, and the Gulf War—specifically it protested the development of Tokyo's Narita airport, which was interpreted as Japanese aid to the Gulf War. Chukaku-Ha mainly organizes and participates in protests and demonstrations that could include the use of rudimentary rockets and incendiary devices with the intent to arouse awareness and hurt property, but not necessarily to harm citizens. Chukaku-Ha fired no less than four rockets at the United States Army Base at Zama. They have not been active recently. Their primary sources of income are membership dues, member news publications, and various fundraising efforts (US DOS 2004a).

2.1.1.2.4 Seikijuku

Seikijuku, or Sane Thinkers School, is a right-wing group active in Japan that in January 1991 shot the mayor of Nagasaki. Dispute and violence between left-wing and right-wing groups is not uncommon regarding issues such as the role of the Emperors of Japan (Dolan and Worden 1994).

2.1.1.3 International Relations

International relations, as part of a modern global system, help determine terror activities within Japan indirectly by creating environments that may encourage rebellion and terrorism (Box and McCormack 2004). International relations and policies also directly affect Japan and the potential for terrorist activity on its islands. Japan's support of the United States' current war on terror and in Iraq is an example of Japan's multilateralism that may impact and compromise its security. The Council of Foreign Relations reports that Japan's sympathy for the United States after the September 11, 2001 terrorist attacks and support for its war on terror is quite natural considering Japan's own experience of terrorism with the 1995 sarin attack and the death of 24 Japanese in the World Trade Center attack. It also notes that this support may provide an avenue for the weakening of Japan's own security. In the wake of the September attacks Japan was able to pass legislation enabling Japan to send troops to Afghanistan and to activate its armed Self

Defense Forces, which the Council of Foreign Relations contends is significant, since Japan has worked hard since the end of World War II to embrace and project pacifism in both principle and practice (Council on Foreign Relations 2004).

The Japanese Diet passed the Iraq Reconstruction Assistance Law in July 2003 enabling Japan to dispatch its Self-Defense Forces for humanitarian aid purposes to Iraq and subsequently passed the Anti-Terrorism Special Measures Law in October 2003 allowing for a six-month extension of the former legislation. The law provides for air transportation for US troops and supply of 40 percent of the fuel consumed by United States naval forces. Furthermore, Japan has ratified several treaties which will encourage collaboration with the United States, other Asian countries, and other additional countries in providing information and intelligence and improving border security. Japan has taken the initiative to inform and prepare other nations in the region of East Asia by holding seminars on counterterrorism measures such as immigration and export control, aviation security, law enforcement, and countermeasures to discourage terrorist financing. (US DOS 2004b).

Dispatch of the Self Defense Forces is a controversial issue in Japan, because it is the first major incident since the conclusion of World War II in which Japan has deployed troops internationally. Much of the Japanese public views this as a step beyond self-defense (Wikipedia 2004c), and it did not occur without internal opposition. In February 2003 the Japanese Prime Minister, Junichiro Koizumi struggled with decisions about whether to support the United States' war in Iraq and Koizumi's political party, or to accede to the voice of the eighty percent majority of Japanese citizens who oppose any Japanese involvement with war in Iraq (Marquand 2003). On January 18, 2003, thousands of Japanese protestors of Japanese support of the war in Iraq demonstrated near Tokyo, and on January 19, 2003, 300 protestors organized at the US naval base in Yokosuka, which accommodates the USS Kitty Hawk (Revolutionary Worker 2003). Greenpeace Japan has also helped to orchestrate demonstrations in Tokyo to protest Japanese involvement in the war on Iraq (Greenpeace Japan 2003).

The Council on Foreign Relations contends that Japan is vulnerable to an attack from North Korea, due to its close proximity and good relations with the United States. The possibility was made very clear when North Korea launched a long-range Taepodong Missile over the Japanese islands in August 1998 as well as the testing and deployment of medium-range Nodong missiles capable of reaching Japan. Japan holds several grievances against North Korea as well, notably its weapons-of-mass-destruction proliferation, including the kidnappings of 11 Japanese in the early 1980s, which continue to hamper progress towards improving relations (Council on Foreign Relations 2004). According to "Japan-North Korea Relations" released in May 2004 by the Ministry of Foreign Affairs of Japan, the government of Japan aims to "normalize the relationship with North Korea in a manner that would contribute to the peace and stability of the Northeast Asian region, in close co-ordination with the United States of America and the Republic of Korea." (Ministry of Foreign Affairs of Japan 2004). However, the release contends, such actions are taking time to materialize, because communication between the two countries is provisional. At the last Six Party Talks all parties, including Japan, the United States, South Korea, China, Russia, and North Korea, agreed to reconvene at the end of June 2004. Japan's most outstanding grievances with North Korea include the resolution of the abduction issue and security and nuclear issues.

Regarding the abduction issue, the chairman of the Democratic People's Republic of Korea, Kim Jong-Il admitted abduction of the 11 Japanese at the September 17, 2002 Japan-North Korea summit meeting. Throughout a series of Japan-North Korea Normalization and Six-Party Talks, Japan has continued to reiterate the importance of the unconditional release of the eight family members of those abducted and an inquiry into the indefinite whereabouts of the other ten abducted Japanese. Japan has stated that the resolution of this issue is essential for all other issues to be determined.

Until recently, as a result of the 1994 signing of the Agreed Framework by the United States and North Korea, the United States supplied light-water reactors and 500,000 tons of heavy oil annually to North Korea in response to North Korea freezing its graphite-moderated reactors and other nuclear activities. This agreement was officially established in 1995 as the Korean Peninsula Energy Development Organization (KEDO). However, on December 31, 2002, North Korea refused inspection by the International Atomic Energy Agency of its nuclear facilities. On January 10, 2001, North Korea announced its abandonment of the Non-Proliferation Treaty and the Security Council of the United Nations discussed the matter soon afterwards. North Korea, at the April 23-25, 2001, Three-Party Talks with the United States, China, and Republic of Korea, declared that all spent fuel rods had been reprocessed and used in the fabrication of nuclear weapons. Relations remain strained, though the most recent and third Six-Party Talks took place May 11-15, 2004, in Beijing. Denuclearization of Korea as a whole was agreed upon as the most important objective by all six parties present. They also agreed on the necessity to freeze North Korea's nuclear program as the initial step towards the completion of this denuclearization goal. The parties agreed that such Six-Party Talks were a fair and effective means in order to achieve the necessary communication and subsequent actions required for success of normalization of relations and their stated intentions (Ministry of Foreign Affairs of Japan 2004).

In 2001 and 2002, Japanese officials became increasingly alarmed by the encroachment of espionage and drug-running ships believed to be of North Korean origin into Japanese waters. The ships were estimated to have made the crossing from their base in North Korea up to twelve times a year, often releasing smaller boats that in turn launched rubber rafts to ferry agents to and from the Japanese coast. It is believed that the missions of these agents included gathering information about the outside world, smuggling money, drugs and goods, buying technology useful for its weapons programs, swaying influential Japanese officials in Japan regarding North Korea, recruiting ethnic Korean residents in Japan to gather information about South Korea, and conducting surveillance on U.S. and Japanese military installations. The agents were believed to have relied primarily upon the approximately 200,000 Korean residents of Japan who identify themselves as North Korean citizens, and using threats against family members in North Korea as a means of coercion. North Korea is believed to be a major supplier of methamphetamines to Japanese organized crime syndicates. In December 2001, Japanese coast guard patrol boats chased and exchanged fire with one suspected North Korean spy ship disguised as a Chinese fishing boat. The confrontation ended when the mystery boat sank inside China's exclusive economic zone. North Korean cigarettes and a badge of the deceased leader Kim Il-Sung were found as some of the evidence of the ship's origin. Dozens of automatic weapons, a surface to

air missile launcher and an underwater scooter capable of carrying three people were found in the sunken ship, along with ten bodies.

Even so, Japan continues to provide food aid to North Korea. Through the World Food Program, Japan has sent 118,000,000 tons of food to North Korea, and through the United Nations it provided the equivalent of US\$100,000 in response to the accidental explosion of a train on April 22, 2001.

Besides domestic frustration at Japan's support of the war in Iraq, outside terrorists may bookmark Japan as a target for attacks, as Madrid was chosen in the recent bombings of the Madrid train system in 2004. In that attack, on March 11, 2004, ten of thirteen bombs were detonated via mobile phones inside train carriage cars in Madrid, Spain at unintentionally staggered times in the early morning rush hour. One hundred ninety civilians were killed and more than 1,800 were left wounded (Goodman 2004). While the investigation of the Madrid bombings was still underway, on March 30, 2004, Spanish investigation authorities announced that their examination focused on the Moroccan Islamic Combatant Group. Many of those arrested and suspected are of Moroccan origin, and several are believed to have connections to the al-Qaeda leader in Spain. A videotape of the alleged al-Qaeda military leader in Europe uncovered on March 14 warns of continued bloodshed if "collaboration with the criminals Bush and his allies" is continued. In addition, *BBC* news sources describe that the Moroccan Islamic Combatant Group organized in the early 1990s in Afghanistan, Western Europe and Morocco with two main missions: to establish an Islamic state, and to encourage and assist al-Qaeda's Jihad against the Western world and those who support it (BBC News 2004).

Japanese citizens have been specifically targeted in Iraq. Two Japanese journalists and a Japanese volunteer in Iraq were kidnapped by Iraqi rebels as a threat to the Japanese government; the Islamic Clerics Committee was fortunately able to coordinate their releases (Wikipedia 2004c). Abu Musab Al-Zarqawi, the leader of an Islamic militant group with connections to al-Qaeda, is quoted as stating, "We will hit with a fist of iron all those supporting the Americans or (interim Iraqi Prime Minister Iyad) Allawi or his cronies" as part of an explicit threat to Japan. Al-Zarqawi states that they must withdraw their troops from Iraq or Japanese troops will suffer massive explosions from car bombs (Associated Press 2004).

Not only are Japanese been singled out and threatened overseas, but seven people with suspected links to al-Qaeda were arrested in Japan at the beginning of June, 2004. One of the detainees is suspected of having links specifically to a group fighting for the liberation of Kashmir, an area to which both India and Pakistan believe they hold rightful ownership. Al Qaeda and Jihad followers have threatened Japan for sending troops to Iraq, and do not segregate the Kashmir issue from the current war being waged in Iraq (Reuters 2004). According to an article in the *Daily Herald* on May 30, 2004, a Frenchman, Lionel Dumont, was the first al Qaeda agent to penetrate Japan. Dumont traveled, lived, and worked in Japan several times for over a year beginning in 2002 with a false passport and without arousing suspicion of Japanese authorities, employers, or landlords even though he had been placed on the world's most wanted list in 1999 following his escape from Sarajevo prison. In France, Dumont had been a member of the gang Roubaix and had been sentenced to life imprisonment for a number of crimes as a result of his involvement. He was also sentenced to 20 years for the killing of a Bosnian policeman during

robberies when fighting alongside other Muslims. The Roubaix gang is suspected to be financing a radical Muslim system through its robberies. Another member of the gang, an Algerian, Ahmed Ressam, was linked to plans to plant a bomb in the Los Angeles airport in 2000, and was convicted in the United States. Dumont is a convert to Islam believed to have ties to al Qaeda and who was attempting to initiate an active operation in Japan. An additional five members, three Bangladeshis, an Indian, and a Mali national, who remained in contact with Dumont have been arrested for violation of immigration laws including use of false passports (Talmadge 2004).

In light of these events, Japan has begun to reduce the number of illegal immigrants. In 2003 50,000 foreigners were deported, and Japanese authorities aim to deport another half of its illegal immigrant population of 250,000. These deportations are a direct result of the discovery of Dumont and that he entered, lived in, and left Japan undetected. According to polls, half of Japanese feel that immigrants augment Japanese society, while the other half deem such foreigners as having a negative affect on society. The latter viewpoint is believed to be enhanced by media discrimination, while Amnesty International Japan reminds that only two percent of all crimes in Japan are committed by people not of Japanese origin. (Mc Curry 2004)

The terrorist threat in Japan includes threats created from demographic friction and tendencies, terrorist groups original to Japan, and affiliations with foreign policies. Known terrorist organizations persist in Japan today, even if they are currently under governmental surveillance. Both the Japanese Red Army and Aum Shinrikyo remain on the United States' terrorist watch list per 2003 due to their perceived potential of posing a threat. Conversely, Yasufumi Asai and Jeffery L. Arnold argue that the current probability of terrorist attacks on Japanese soil is minimal, because Japan is geographically isolated as an island, has well-protected borders, is relatively homogeneous in population, has a stable governmental system, has control over terrorist groups historically active in Japan such as the Red Army and Aum Shinrikyo, and has followed the United States' suggested actions in the war against terror, such as the freezing of terrorists' assets. However, Japan's close ties with the United States in the US-led war on terrorism could actually be one of many causes of terrorism in Japan's history and future (Asai and Arnold 2003).

2.1.2 Criminal Threat

The criminal threat can be defined by examining the history of Japan's crime rate. According to *UK Trade & Investment* (UK Trade and Investment 2003), the Japanese have long boasted about the degree of safety and security in their country. While the crime rate has risen in recent years, it is still well below the threshold of concern for western countries. The 1995 Tokyo subway sarin gas attack and an increase in car crimes have helped to undermine and erode some Japanese citizens' trust in the safety and security of their country. Japanese attitude gives the full responsibility of combating crime to their government, and therefore Japan's National Police Agency manages all police activities of its 250,000 full-time officers distributed throughout the Tokyo and Osaka metropolitan units. The Japanese police system is organized into koban and keisatsu-cho, or local police stations where liaison with local communities occurs for patrol and crime control. However, *UK Trade & Investment* reminds that the Japanese have a relatively young police industry and establishment, and therefore immature experience relative to other nations' police systems.

The number of crimes committed in 2003 by Japanese citizens amounts to 370,877 compared to a total Japanese population of 127,435,000 people (Japan Reference 2004). However, foreign crime has been increasing, jumping 16.9 percent from 2002 to 2003. The number of foreigners in the country has been increasing as well, from 1,075,317 in 1990 to 1,686,444 in 2000 and 1.9 million in 2003. This represents about a 45 percent increase in registered foreigners over ten years, as compared to Japanese citizens' annual growth rate average of about two percent. In 2003, Japan's National Police Agency (NPA) arrested 20,007 foreign nationals in connection with 40,615 crimes and offenses. Offenses include such minor violations as visa overstay, drug use, illegal weapon possession, speeding, prostitution, etc., and exclude all violent crimes or crimes causing damage to people or property. Therefore, the number of foreigners arrested for serious crimes committed in 2003 was 8,725. Total percentage of crimes and offenses committed, respectively, by nationality in 2003 were as follows:

- 83.3% and 74.5% were Asian,
- 10.9% and 17.7% South American,
- 1.3% and 2.2% North American,
- 1.5% and 2% European
- 1.2% and 1.8% Russian,
- 1.3% and 0.9% African, and
- 0.5% and 0.8% Oceanian.

Foreign nationals are commonly singled out when an arrest is to be made because they do not necessarily look like Japanese and are therefore easy to identify, and they do not necessarily speak Japanese well, requiring the involvement of authorities for even petty crimes that Japanese citizens might have simply settled themselves. *Japan Reference* points out that this assertion needs to be taken into consideration (Japan Reference 2004).

Breaking down the crime statistics even further, the Japan National Police Agency reported a total of 2,790,000 penal code crime cases known to the public in Japan in 2003. Of this number,

- 13,658 were felonious offences,
- 2,263,000 were larceny offences,
- 78,759 were violent offences,
- 74,754 were intellectual offences,
- and 13,034 were moral offences (Statistics Bureau 2004).

The crime rate in Japan is relatively low; however, foreign crime may be increasing.

2.1.3 Antinuclear Extremist Threat

In continuing to consider factors that may impact the definition of threat to Japan, the antinuclear extremist threat is one that consists of currently active extremists from several antinuclear organizations including Greenpeace, Plutonium Action Hiroshima, Citizens' Nuclear Information Center, No Nukes Asia Forum and BUND to focus our study. These groups protest all different forms of nuclear technology from peaceful uses to weapons proliferation.

2.1.3.1 Greenpeace

Greenpeace is a global, comprehensive organization with many social grievances, many nuclearrelated. Greenpeace Japan, the Greenpeace organizational branch in Japan, focuses largely on the issue of halting Japan's production of mixed oxide (MOX) reactor fuel, especially opposing open sea transportation and Japan's proposed plan to use MOX in thermal reactors (Greenpeace Japan 2002). The shipment of MOX fuel is a prominent grievance of Greenpeace International, as illustrated by their numerous press releases on the topic, international lobbying efforts, and global protests. In February 1998, Greenpeace even went so far as to board the British-flagged Pacific Swan carrying a shipment of waste, according to Greenpeace's website, when it passed through the Panama Canal in order to hang a banner reading "stop plutonium" and prove that the vessel was unguarded and its contents at risk for theft and proliferation. When the Pacific Teal carrying MOX fuel reached the pacific coast of Japan near the Fukushima nuclear power plant from France, the Greenpeace ship Arctic Sunrise was among the first to greet it carrying its own cargo of protestors and banners foreshadowing demonstrations on shore (Greenpeace 1999). In Fall 2002, Greenpeace again focused on the voyage of the Pacific Teal and its security vessel, the Pacific Pintail, from Takahama, Japan, to the United Kingdom and back. However, according to their April 2002 press release, they do not simply oppose the transportation of MOX fuel, but are skeptical of the United Kingdom's reprocessing facilities, BNFL, alleging they have been under scrutiny for falsifying data and safety documents. Greenpeace also contends that the cask used for the MOX fuel shipment has not been approved by the International Atomic Energy Agency and, in fact, was rejected when its precursor was reviewed. Greenpeace encourages and supports coastal countries to create regulations and legislation to pressure Japan and the countries contracted for reprocessing Japan's fuel to comply to high standards for maritime transportation practices, if not halt operations (Greenpeace 2002). The Greenpeace Japan website offers articles and "cyberaction" outreach for the public. Their website also maintains a link on its website (http://www.greenpeace.or.jp/index en html) devoted entirely to protesting nuclear issues.

2.1.3.2 Citizens' Nuclear Information Center

The Citizens' Nuclear Information Center (CNIC) is an organization whose sole focus is opposing nuclear development and ending any dependence on and use of nuclear technologies in Japan. The CNIC was established in Tokyo in 1975, and their most prominent comprehensive work since then has been the coordination and funding of a study on the use of MOX fuel in light-water reactors from 1995 to 1997 (Tagaki, et al. 1997). This International MOX Assessment report entitled "Comprehensive Social Impact Assessment of MOX Use in Light Water Reactors" scrutinizes the transportation of MOX fuel. The report concludes that Japan is not equipped to handle fuel reprocessing safely, providing evidence of inconsistencies in regulations. It points out that Japan was the last country to develop an Environmental Impact Assessment (EIA) process, and highlights its history of accidents experienced from skewed and undisclosed regulations. This report argues that Japan's government does not offer enough regulation and authority in the transportation and the justification thereof for MOX utilization. It charges that Japanese law does not even classify the workers in their transportation cycle as transportation workers as defined by the International Atomic Energy Association (IAEA), since doing so would require that such workers and their working conditions be monitored. It argues that there would be no economic benefits for using foreign, reprocessed MOX fuel after taking

into consideration all of the indirect costs that would be incurred in physical protection security, compensation costs to countries along the transportation routes should an accident occur, and cost of required insurance coverage. The report concludes that the use of MOX fuel is unjustifiable and should not be continued.

According to CNIC's website, other activities include co-hosting several symposiums such as "International Conference on Plutonium" in 1991, "Asia-Pacific Forum on the Sea Shipments of Japanese Plutonium" in 1992, "Why Plutonium Now?" in 1993, and "Sustainable and Peaceful Energy Future" in 1997 with such groups as Greenpeace International, the United States Nuclear Control Institute, the Japan Nuclear Industrial Forum, and Friends of the Earth. The 1993 conference was the first attempt at debate between the CNIC and the Japanese nuclear industry. Recently, the CNIC, along with the Japan Congress Against A- and H- Bombs (see Section 2.1.3.4), founded a committee to assess the criticality accident at the JCO Uranium Processing Plant in 1999. In 2003 they hosted an open debate on "Thinking about the Reprocessing and Nuclear Fuel Cycle Policy". In 2000, CNIC published a report refuting the Japan Nuclear Cycle Development Institute's H12 Geological Disposal report (CNIC 2004).

2.1.3.3 No Nukes Asia Forum

The No Nukes Asia Forum (NNAF), according to its website, was born from the Anti-Nuclear Information Center in Korea in order to bring Asian countries together annually to discuss developments of nuclear programs across Asia and determine ways to stop such advances. NNAF opposes all nuclear energy in Asia and blames the Japanese government and electric companies for working together in order to promote and sell nuclear power to other Asian countries, namely Korea and Taiwan. The Forum has been hosted by a different Asian country since 1993 where it was first held in Japan. Over the past decade, *NNAF* has drawn many participants from many Asian countries including Japan, Korea, Thailand, and Indonesia (NNAF 2004).

2.1.3.4 Gensuikin

Gensuikin, or the Japan Congress Against A- and H-Bombs was initiated in 1965 in order to create relationships between Japan and other antinuclear groups worldwide, to work on campaigns to end dependence on nuclear energy and defense, and to aid radiation victims, namely, victims of the bombs dropped on Hiroshima and Nagasaki. The Japan Congress Against A- and H-Bombs has grown to encompass chapters in 47 prefectures and support from 32 labor unions and youth groups in Japan. Their primary activities include two annual events: March 1^{s.} Bikini Day, to commemorate the exposure of the fishing boat Daigo Fukuryu-Maru to radiation from the 1954 U.S. testing at Bikini Atoll., and the August hosting of the World Congress Against A- and H-Bombs conference in Hiroshima and Nagasaki. In the words of their former chairman, Moritaki Ichirou, they contend that humans and nuclear technology, including nuclear energy, "cannot coexist" (Gensuikin 2003).

2.1.3.5 Green Action

Green Action, according to its website, is a relatively young citizen organization in Kyoto, Japan established in 1991. It is active in collaboration with other similar groups in order to halt Japan's plutonium and MOX fuel use programs. Green Action's specific foci are opposing the Rokkasho-mura reprocessing plant located in the Aomori Prefecture of northern Japan, and the

Monju fast breeder reactor. It states that MOX production at the Belgonucleaire facility in Belgium is substandard as well, and proposes that there is a manipulation of data as the facility refuses to release the quality control data. Green Action also petitions for and offers to intermediate negotiations between governments and utility companies and is available to pursue legal action. In addition, Green Action works to provide information for policymakers, media, and the general public (Green Action 2004).

2.1.3.6 BUND

The website of BUND, the German branch of Friends of the Earth, describes civilian demonstration activities in Japan specifically related to the construction of the Hamaoka plant in the Tokai prefecture, a site where four nuclear reactors already operate. Residents and sympathetic anti-nuclear opinion are worried that the Hamaoka facilities and physical surrounding area are not suitable for withstanding an earthquake, citing the fact that the plant plans propose construction over a major fault line. BUND also seeks to raise awareness of the many cover-ups that have occurred due to self-inspection of the power plants without governmental regulation. The BUND news release cites several demonstrations of Japanese antinuclear groups, including the Stop the Monju organization, involving speakers and masses of people carrying signs and shouting chants have taken place at critical times and locations, such as on November 19, 2002 at the Ministry of Economy, Trade and Industry during the Diet's deliberation of two nuclear-related bills (BUND 2002).

2.1.3.7 Local Antinuclear Organizations

A number of other local and smaller organizations are engaged in the Japanese antinuclear campaign, including Plaintiffs Against Nuclear Fuel Cycle Facilities, People of Fukui Opposing Nuclear Power, and Stop the Monju. According to the Plutonium Investigation plutonium online news based in Paris, France, the first, Plaintiffs Against Nuclear Fuel Cycle Facilities, primarily opposes the Rokkasho-mura reprocessing plant, as the group is located in the Aomori Prefecture where the plant is situated as well. Secondly, the People of Fukui Opposing Nuclear Power have a lot of antinuclear sentiment as the Fukui Prefecture has a high concentration of 15 nuclear power plants in a relatively small area of Japan. Their most recent grievance has been the anticipated start-up of the Monju fastbreeder reactor. Finally, the organization Stop the Monju is perhaps more far-reaching, campaigning nationally against the Monju fastbreeder reactor coming online (WISE-Paris 1998).

2.1.4 International Opposition

Consistent with many of the former antinuclear groups' complaints, Michael Cross, a freelance journalist for the *New Scientist* writes in his February 1992 article, "Japan's Plutonium Stockpile" that Tatsujiro Suzuki, a Japanese nuclear engineer from the Massachusetts Institute of Technology Center for Energy Policy, estimates that 80 to 90 tons of plutonium will have accumulated in Japan by 2010. Cross expresses concern at the effects this stockpile could develop, such as questions of Japan's possible proliferation plans, and pressure on neighboring countries to keep up with Japan's plutonium accretion (Cross 1992). Considering the former assertion regarding possible implications, an article in the *Washington Quarterly* by Matake Kamiya (Kamiya 2002) states that in May 2002, the Japanese Chief Cabinet Secretary, Yasuo Fukuda, and Deputy Chief Cabinet Secretary, Shinzo Abe, made public statements recognizing

that Japan's Constitution allows for limited nuclear weapon possession for defensive purposes only. However, Japan's pacifist attitude continues to persist since World War II, confirming its current antinuclear position in its defense strategies. Kamiya asserts that the Japanese public, and those more informed on such issues, have voiced their increase in opposition to development of a nuclear arsenal through polls taken in 1969, 1978, and 1981. Kamiya contends that Japan has no need to begin such a defense program as long as it has its strong economy and friendship with the United States that assures its security. She states that nuclear weapons proliferation would only prompt a nuclear arms race in Northeast Asia and create tensions in other countries as well. Though it has been more than 50 years since atomic bombs were dropped on Hiroshima and Nagasaki the thought of Japanese nuclear proliferation is strongly opposed by the majority of Japanese public and policymakers.

Moreover, the threat of the antinuclear extremist comes from many sources with much international support. Large nuclear opposition organizations such as Greenpeace and the Citizens' Nuclear Information Center wield influence through international affiliations, yet more regional and local organizations such as No Nukes Asia Forum, the Japan Congress Against Aand H-Bombs, Green Action, Plutonium Action Hiroshima, as well as Plaintiffs Against Nuclear Fuel Cycle Facilities, People of Fukui Opposing Nuclear Power, and Stop the Monju successfully organize protests and present information for the general public.

2.2 Insider Threat

The insider threat comprises the threat of the disgruntled employee, the criminal employee and potentially the employee forced into cooperation via coercion, or a psychotic employee. The literature search does not include examples of the latter two possibilities.

2.2.1 Disgruntled Employee

The disgruntled employee threat has been almost unthinkable in Japan, given the history of Japan's employment system. Japanese workers tend to view their employment to a specific company as a reciprocal relationship where training, teamwork and hard work are emphasized and rewarded. For Japanese, work is a significant contributor to self-identity and self-esteem and a strong loyalty to a specific company is therefore established. Japanese sense of selfaccomplishment is highly integrated with company accomplishment. Much energy is focused on ensuring harmony and collaboration within teams and is believed to be influenced by Confucianism and kinship ties in Japanese society. A company's relationship with its employees can therefore almost be described as paternalistic. They continue to emphasize that training is also highly regarded for all levels of Japanese employment. The prevailing practice is that employees are hired as general employees, and therefore throughout their lifetime transfer many times within a company, making outside job transfers an uncommon phenomenon. Despite the prevalence of mutuality of company-employee relationships, only 30 to 40 percent of companies honor lifetime employment. However, this loyalty echoes throughout Japanese employment. In order to maintain the current percentage of lifetime employment promises, Japanese companies utilize subcontracting practices, thus forcing contractors to layoff their employees if need be, thereby protecting actual companies' guarantees to their employees (Slem, Levi, and Young 1993).

This Japanese employee loyalty may be in part born from the historical structure of Japanese businesses in which Keiretsu, modern versions of the original Zaibatsus, are conglomerates which fuse a bank and trading company as well as manufacturers in order to secure financial partnership and viability between different sectors of the economy. After World War II, the Allied Forces were in the process of dividing up these monopolies of the Japanese market. However, with the rise of conflict in Korea and other Asian countries, they realized a strong Japan with a strong economy was necessary for stability in the region. Thus, they encouraged the continuation and formation of two new conglomerates to produce the modern big six Keiretsu. Through the practice of interlocking shares, the Keiretsu secure their viability and selfsustenance by not allowing foreign companies to hold enough shares to own a company. Japanese economic dependence on Keiretsu keeps Japanese prices high, and creates efficiency by having only one company in any specific category of business. Thus, employee loyalty to a company has been strong, and the ability to transfer within any specific conglomerate allows for both worker efficiency and satisfaction. This system also encourages innovation due to the free flow of advances made in information and knowledge, which reduces research costs, and eventually leads to the creation of products of superior quality (Evans).

This loyalty may be beginning to erode because recent economic dislocations have hit businesses hard, and layoffs have begun to occur. Major companies in Japan including Toshiba and Hitachi, Japan's largest manufacturers of computer chips and electrical machinery, respectively, planned to layoff up to 10 percent of their labor forces workers as did electronics producers Matsushita Electric and NEC.(Conachy 2001). The unemployment rate in Japan stands at 4.8% in August 2004. This is partially due to the fact that many Japanese are voluntarily separating from their jobs in search for better employment. However, much is due to the decade-long recession that has gripped the Japanese economy (Kageyama 2004).

Layoffs pose hardships for Asian companies since loyalty to companies has been elemental in an employee's relationship to the company in the past. Many Asian employees reportedly signed over their annual bonuses or endured pay cuts in order to save jobs and companies. Layoffs are an extreme last resort in Asia, and most companies are only recently being forced to succumb to such managerial practices that are common in the United States. Some massive layoffs have been executed better than others, resulting in different levels of responses, fluctuating from feelings of betrayal to feelings of disappointment; however, all employees apparently seem to understand the company's economic dilemma. One company that was relatively successful in performing layoffs notified all of its employees that were to be eliminated within just a few hours and gave them a few days to gather their personal items and computer files. In contrast, another company informed the unfortunate employees via an impersonal letter and did not allow them to gather their things. According to the article, the latter example especially illustrates a trend of erosion in company-employee loyalty (Gharemani 2001).

2.2.2 Criminal Employee

According to "Economic Crime Survey 2003" conducted by Pricewaterhouse Coopers Financial Advisory Services, the threat of economic crime in Japan is significant, if not increasing in recent times. The survey found that 13 percent of Japanese companies report that economic

crime has occurred between 2001 and 2003, and that asset misappropriation is the most prevalent crime reported. Companies acknowledge that crimes such as misrepresentation, cybercrime, corruption, and bribery are much less visible crimes and are reported less often, though they are believed to be much more common than statistics indicate. Corporations that are reported to suffer most from fraud include financial services, such as banking and insurance companies, and highly regulated corporations, which may not incur more crime, but only have better avenues for detection.

Large corporations, with an employee base of greater than 1,000, tend to incur more employee crime than smaller corporations with an employee base of less than 1,000—37 percent versus 48 percent—because in the larger corporations there is more opportunity for coworker collusion, more multifarious finances, and more distance from the core of the industry, allowing employees to experience more freedom, while at the same time less guilt. While only a reported 15 percent of Japanese companies were insured against the incident of fraud, 98 percent of sufferers of such activity were only able to recover 20 percent of what they lost. An important aspect of corporate crime in Japan is that it results not only in economic losses, but also loss of loyalty between employees and businesses on personal as well as business levels.

Despite these seemingly significant losses, only eight percent of Japanese industries provide antifraud training for their employees. The survey explicitly states that Japan needs to consider creating and requiring such training since the global community has recently placed much importance on uncovering and combating fraud in the workplace. Due to the historically reciprocal loyal nature of Japanese businesses and its employees, companies largely rely on the honor system in preventing corporate crime, and are very unlikely to implement training to prevent, measures to uncover, or punishment for such activity. Looking to the near future, the "Economic Crime Survey 2003" illustrates that Japanese companies are mostly concerned about cybercrime – 59 percent – and product piracy and counterfeiting – 46 percent. Though this indicates increased concern, Japan still has many opportunities for improving its managerial practices in order to reduce the risk and occurrence of corporate crime (PWC 2003).

Studies of the history and structure of Japan's employment system show that the environment of Japanese employment may be changing. This, together with the overlooked occurrence of corporate crime, can aid in determining the insider threat.

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3. Summary and Conclusions

This report summarizes a review of the open literature concerning threats, including sabotage and theft, related to fissile material transport in Japan in order to aid in the development of a subsequent design basis threat. The design basis threat consists of the external threats of the terrorist, criminal, and extremist, and the insider threats of the disgruntled employee, the criminal employee and potentially the employee forced into cooperation via coercion or a psychotic employee.

Beginning with the external threat, the terrorist threat is determined by Japanese demographics; known terrorist groups in Japan including the Red Army, Aum Shinrikyo, Chukaku-Ha, and Seikijuku; and international relations. Japan has a relatively homogenous population, ethnically and religiously, although a history of terrorism is illustrated by known terrorist groups in Japan. The Red Army's goals were to overthrow the Japanese government and ignite global revolution using revolutionary violence. The Red Army split up into three factions: the Yodo Group, the Japanese Red Army, and the United Red Army, operating in North Korea, Lebanon, and Japan, respectively. Each faction eventually adopted a local doctrine and set of goals, although their plots of global revolution never came to fruition. They did succeed in inciting fear and intimidation worldwide. The Aum Shinrikyo, now called Aleph, organization sought spiritual enlightenment in a modern world where westernization and materialism seemed to be the focus of Japanese society. The religious aspect of Aum Shinrikyo spiraled out of control, and members engaged in illegal and terrorist acts, most notably the Matsumoto incident and 1995 Tokyo subway sarin attack. These episodes had strong global repercussions. Aum Shinrikyo no longer has religious organizational privileges, and remains under the surveillance of the Japanese government. Chukaku-Ha, the Middle Core Faction or Nucleus, sought to demonstrate frustration with what they considered Japan's imperialism, the imperialism of the West, and the Gulf War through protests and some violence in the form of rudimentary rockets and incendiary devices. Seikijuku, or Sane Thinkers School, is a right-wing group whose goal is to keep prominent the role of the Emperor in Japan.

International relations and policies also affect Japan's security. Japanese support of the United States' wars on terrorism and Iraq may result in terrorist activity on its islands of the sort represented by the Madrid train bombings in 2004. The reality of this threat is indicated by the discovery of Al Qaeda advocates in Japan. The *Council on Foreign Relations* contends that Japan is vulnerable to an attack from North Korea, due to its close proximity and good relations with the United States. The possibility was made very clear when North Korea launched a long-range Taepodong Missile over the Japanese islands in August 1998 as well as the testing and deployment of medium-range Nodong missiles capable of reaching Japan. Japan holds several grievances against North Korea as well, notably its weapons-of-mass-destruction proliferation, including the kidnappings of 11 Japanese in the early 1980s, which continue to hamper progress towards improving relations. Japan is a relatively peaceful nation, but its history illustrates that it is not immune to terrorism.

The criminal threat takes into account Japan's crime rate. Overall, Japan's crime rate appears to be relatively small. However, sources note that the foreign crime rate is increasing as the amount of foreign nationals in Japan increase as well.

The antinuclear extremist threat is defined by the threats of several international, as well as local, antinuclear groups including Greenpeace, Citizens' Nuclear Information Center, No Nukes Asia Forum, Green Action, Plutonium Action Hiroshima, BUND, Plaintiffs Against Nuclear Fuel Cycle Facilities, People of Fukui Opposing Nuclear Power, and Stop the Monju. All of these groups collaborate to protest nuclear technology, especially transportation of MOX fuel and nuclear proliferation. Examples of such demonstrations include Greenpeace boarding the British-flagged *Pacific Swan* as it passed through the Panama Canal to hang a "stop plutonium" sign onboard the vessel. For several of the large organizations including Greenpeace, Citizens' Nuclear Information Center, and BUND, there is much international support, and therefore generous amounts of money and people supporting their antinuclear causes.

The insider threat must first consider the threat of the disgruntled employee. Throughout Japan's history, Japanese tended to view their employment by a specific company as a reciprocal relationship where training, teamwork, and hard work are emphasized and awarded. This loyalty may have been the result of the formation of the Keiretsu which helped to ensure lifetime employment through collaborations between production businesses, banks, and trading companies. However, sources note that recent economic difficulties have hit businesses hard, and layoffs have begun to occur. Acknowledgement of this trend may aid in determining the insider threat along with the threats of the employee forced into cooperating via coersion and the psychotic employee. The threat of the criminal employee must acknowledge the occurrence of economic crime in Japan—reported and unreported—and Japan's lack of motivation to implement systems to prevent such activity. The honor code is an important element in the Japanese culture and may be one of the reasons that Japan has not implemented systems to prevent these economic crimes. However, it should be noted that the honor code may not be a perfect deterrent, since one in 10 Japanese corporations have reported themselves as victims of corporate fraud from 2001 to 2003.

Any design basis threat must take into consideration the factors of external and insider threats. This report summarizes a review of open literature sources for information on potential threats, including sabotage and theft, related to fissile material transport in Japan to aid in the development of such a design basis threat.

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