

Al-Qaeda: Threat of Nuclear and WMD

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Introduction

The dirty bomb threat, attempts to access fissile materials and WMD by Al-Qaeda are perceived as a nightmare of the American administration today. Americans face the most complex situation in their national history after unilaterally opting for preemptive strikes in Afghanistan and Iraq since the September 11, 2001 attacks by Al-Qaeda. They are seriously concerned with the threat of proliferation of the weapons of mass de to rogue states and their possible use by Al-Qaeda. Americans perceive that Al-Qaeda has declared *Jihad* against them, since 1998 and Bin Laden may acquire unconventional weapons for his terrorist operations against them. Most US and international intelligence institutions as well as outside experts agree that Al-Qaeda retains the intention to conduct major attacks in the United States and against her interests abroad. These institutions also appear to agree that US counter efforts in the past few years have weakened Al-Qaeda's central leadership capabilities, and sympathizers. However, there is little agreement among experts over the degree to which the Al-Qaeda may pose a threat with the use of nuclear or WMD in future attacks against the US. Many believe, that there are significant technical hurdles to WMD acquisition and their use by Al-Qaeda hut some other analysts consider this threat is real.

Al-Qaeda has thousands of supporters on several continents, with considerable financial resources to fund its activities. This support base may enable it to plan and execute intricate plots, such

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as the 9/11 attacks. Under the *fatwa* of *Jihad* against the United States Al-Qaeda may continue to launch mass-casualty attacks against American interests around the world as long as it is capable of doing so with the use of WMD or other.

Though significant challenges may obstruct attempts to acquire or develop Nuclear or WMD devices, the vulnerabilities of the critical infrastructure in the United States may allow Al-Qaeda to use 9/11 like more options beyond the use of weapons of mass destruction. During the 1990s, Al-Qaeda used its significant financial resources and global support network to pursue the acquisition of nuclear, biological, chemical and radiological weapons. The attacks on New York and Washington DC reveal the Al-Qaeda's ability to use the infrastructure of the target country as a weapon. The tragedy of 9/11 has shown that the critical infrastructure of the United States, including its nuclear and chemical facilities, as well as its shipping and transport networks, contain glaring vulnerabilities, which if exploited in an Al-Qaeda attack could result in casualties even beyond what the world witnessed on September 11 with, or without weapons of mass destruction."¹

Thousands of nuclear, chemical and biological weapons, huge quantities of weapon related materials and expertise scattered all across the globe pose the most acute threat to international security. The possibility that a terrorist group or a rogue state could acquire and use WMD to inflict unthinkable levels of death and injuries to the United States is more than a theoretical discussion especially in the aftermath of the preemptive strikes.

A number of intelligence sources in the US, Europe and elsewhere as well as media reports have confirmed that terrorist groups like Al-Qaeda have attempted to seek WMD material and capabilities. According to some experts if Al-Qaeda gets any nuclear weapon they may not be constrained by threats of retaliation as they are suicidal and may not easily be located. They may not be deterred even from initiating a nuclear attack as they glorify death as martyrdom for their so-called noble cause.

1 Jack Boureston and Charles Mahaffey, "Al-Qaeda and Mass Casualty Terrorism: Assessing the Threat," *Strategic Insight*, October 1, 2003.

Al-Qaeda has reportedly sought nuclear material since the early 1990s and has made several attempts to buy nuclear components and manufacture crude nuclear devices as an equalizer in their hands.

Proliferation experts worry that material for nuclear weapons could come from Russia, where there are several hundred tons of weapons-usable uranium and plutonium nuclear weapons and fissile material with scientists who might be tempted to sell their expertise on the black market to Al-Qaeda. In addition to the Russian threats, Iran and North Korea are suspected of having defied international nuclear controls and raced to produce nuclear weapons. The revelation in 2004 that Pakistani scientist A.Q. Khan ran a global network that sold nuclear components and expertise to Iran, North Korea, and Libya provides ample evidence of the gaps in the control mechanisms and it is feared that rogue states or terrorists may have got an access to WMD. Therefore, adversary power or rogue states like North Korea, Iran, eventually may sell or help to deliver nuclear weapons and the long-range missiles to Al-Qaeda. The use of a dirty bomb is more likely as Carnegie assessment report has pointed out “if Mushrif’s Pakistan collapsed, this would definitely increase the possibility that Al-Qaeda could get access to nuclear weapons.”

According to David Singer, ‘threat’ arises out of a situation of armed hostility, in which policy-makers of either side assume that the other entertains aggressive designs.² Further, each side assumes that such designs will be pursued by physical and direct means if estimated gains seem to outweigh estimated losses. Each perceives the other as a threat to its national security, and such perception arises out of both estimated capability and estimated intent. According to Singer, this relationship of estimated capability and estimated intent is greatly influenced by a presence of a powerful predisposition in which a combination of recent events, historical memory, and identifiable socio-cultural difference provide the vehicle by which this vague suspicion leading to threat perception may be readily converted into concrete hostility towards a specific foreign power.

2 D. Singer “Threat Perception and the Armament Tension Dilemma”, *Journal of Conflict Resolution*, Vol.2, No.1, 1958, pp.93-94.

Singer's framework on threat perception (predisposition/capability/intention) was augmented by Jack Nunn's work on the same subject. In the process of evaluating the threat, Nunn asserts that an estimated vulnerability of the one who threatens (source) and the one who feels threatened (target) must be taken into account, to have a complete picture of the impending threat and its credibility. Raymond Cohen puts together the work of Singer and Nunn and presents threat perception in a quasi-mathematical form as $Tp = Ei + Ec + Ev$. In which, Tp = Threat Perception, Ei = Estimated intention of the source with predisposition in the background, Ec = Estimated capability source and Ev stands for Estimated vulnerabilities of both source and the target.³ Against this theoretical background the present study seeks to assess the threat perception about the use of Nuclear or WMD by Al-Qaeda in its future strategy.

Defining Al-Qaeda

Al-Qaeda is not one organization, but a loose confederation of Islamist organizations with members living and operating in over 40 countries including the United States. Recently, the head of Germany's intelligence service estimated that Al-Qaeda is composed of approximately 70,000 people worldwide, with tens of thousands of these undertaking training at Al-Qaeda camps in the Sudan, Yemen, and Afghanistan. The common elements among these groups include their Muslim faith, their support for Osama bin Laden and an intense disdain for anything Western. Bin Laden continues to fund many of these groups. Although an estimated \$120 million of his assets have been frozen, some believe bin-Laden is still worth billions. At one point Bin Laden was reported to own or control some 80 companies worldwide.

Aims and Operational Capabilities of Al-Qaeda

Al-Qaeda's ultimate goal seems to rid the Middle East of American influence and forces. The May 2003 bombings in Saudi Arabia at the Khobar Towers and National Guard building marked a bloody gesture against US presence in Saudi Arabia. The US

3 Raymond Cohen, *Threat Perception in International Crisis* (London: The University of Wisconsin Press, 1979), p.5.

presence in the Holy Land and in the Middle East in general as declared by Osama bin Laden himself, has been one of the primary reasons for the Al-Qaeda's terrorist operations against US.

According to a senior intelligence official, Al-Qaeda is not only trying to beat the United States, it is trying to create a lasting legacy of international insurgencies by supporting conflicts in Philippines, Kashmir, Pakistan, Chechnya, inside Iraq, Malaysia, Indonesia and everywhere on earth where there is an Islamic insurgency. The organization's strong point is not its overall military strength, but its ability to change its operational system at will, in response to the methods needed to approach and attack a new target.⁴

Few consider that Al-Qaeda may try to gain control of one or more states to establish a "nuclear-armed caliphate". Al-Qaeda is still alive and threatens the Americans and their targets across the globe. Through the use of the Internet, Al-Qaeda has successfully enabled millions of Muslim youngsters to create a new sense of identity as members of the worldwide Islamic Nation, the *Ummah*. Al-Qaeda divides the world into two fighting regions as a "House of Islam" (*Dar al-Islam*) and "House of War/Infidels" (*Dar al-Harb*). The United States, on the other hand, divides the world into the "House of Democracy" and "House of War."

Even though after 9/11 Al-Qaeda's monies were frozen and operatives arrested, yet it maintains the ability to deter and adapt to different situations for striking anymore. Attacks on embassies with car bombs, the use of an explosive-laden dinghy to cripple the *USS Cole* and the use of passenger aircrafts as human-guided missile Al-Qaeda adapted in each case optimizing its structure to fit the various environments of its targets.⁵ The group may even be operating mobile training camps to keep their cadres fit and plan upcoming events. Terrorist incidents in Indonesia, Jordan, Kenya, Kuwait, Pakistan, the Philippines, Saudi Arabia, Tunisia, and Yemen may all be linked to Al-Qaeda. The rise in bombings in these countries indicates that the group continues to be capable of

4 Montgomery C. Meigs, 'Unorthodox Thought about Asymmetric Warfare,' *Parameters*, Summer 2003, pp.4-18.

5 *Ibid.*

making attacks. International logistical support for Al-Qaeda may come in many forms. Intelligence agencies report that Al-Qaeda has repeatedly used cargo ships to move conventional weapons and explosives, including the explosives used in the 1998 bombings of two US Embassies in East Africa.⁶

It is perceived by many that Al-Qaeda is capable of causing severe damage using a spectrum of capabilities. Al-Qaeda's conventional weapons range from simple suicide bombs, car and truck bombs to boats and aircrafts. Al-Qaeda's unconventional capabilities remain unknown. Based on their past attempts to develop biological and chemical agents it is clear that the group leaders understand that such weapons may cause mass casualties and mass hysteria. Given the fact that these types of weapons are relatively inexpensive to produce and easy to hide Al-Qaeda may eventually opt to use them in their operations. In a May 2003 report, CIA analysts claim that there is a high probability that there may be a Chemical, Biological, Radiological, or Nuclear (CBRN) attack within the next two years. The assessment states that the attack would probably be small scale, "incorporating relatively crude delivery means and easily produced or obtained chemicals, toxins, or radiological substances."⁷ An analysis of past Al-Qaeda attacks suggests that the group tends to favour high-profile, often simultaneous, suicide attacks on targets of significant symbolic value to the target country.

Main modus operandi of Al-Qaeda has been suicide or martyrdom operations. In an article titled "Has the Global Crusader Alliance Learned the Lessons of the Mujahideen?" The author wrote: "We are really puzzled to see the Americans and their followers in the Western world think that they are able to confront people who wish to die more than they [the Americans] want to live."⁸

The focus on personal martyrdom and suicide attacks by Al-Qaeda as well as other traditional Islamic groups with more local

6 Phillip Shennon, "US Inspectors To Be Placed At Muslim Ports," *International Herald Tribune*, June 13, 2003.

7 Al-Qaeda and the bomb, *Jane's Intelligence Digest*, 03 July 2003.

8 See the translation of the article and commentary – Renven Paz. "The First Islamist nuclear threat against the United State January 10, 2003, at www.ict.org.il

and national aspirations, such as the Chechen Islamists and the Arab volunteers, Kashmiri groups, the Kurdish Ansar al-Islam, or the Palestinian Hamas and the Palestinian Islamic Jihad (PIJ) have so far refrained them from inflicting any WMD attacks. The clerics, scholars and Islamist intellectuals who supply the ideological and doctrinal support for the culture of Islamic Jihad have very rarely mentioned the issue of WMD which remains significant. But after Afghan and Iraq preemptive strike emphasis on martyrdom operations seems changing terrorists to acquire and use WMD.

In the aftermath of Afghan and Iraq, preemptive war on May 21, 2003, the Saudi Shaykh Naser bin Hamad al-Fahd issued the first *fatwa* on the use of WMD, who has published dozens of militant books and articles which are viewed by the followers of Al Qaeda as religious rulings legitimatizing the fight against the United States.⁹

On September 21, 2002 al-Fahd published an article titled "The Divine Verses about the September Attack" in which he praised the execution of the 9/11 attacks, especially for its technical sophistication and use of planes.¹⁰ When asked by an anonymous person whether the use of WMD is allowed, his answer was straightforward: "Yes, it is allowed: If the Muslims could defeat the infidels only by using these kinds of weapons, it is allowed to use them even if they kill them all, and destroy their crops and cattle."

On January 21, the UN Monitoring Group in Afghanistan comprising five independent weapons experts submitted a report to the Security Council expressing concern that Al-Qaeda and the Taliban might be in possession of missiles they could well use...to deliver weapons of mass destruction." According to what the Group described as "competent sources", Taliban/Al-Qaeda may

9 Naser al-Fahd, *Risalah fi hukm istikhdam aslihat al-damar al-shamel didh al-kuffar*, Rabi' Awwal, 1424H (May 2003). See online at: <http://www.al-fhd.com/rsayl/doc/rsayl.damar.doc>. The ruling was also circulated in May 23rd by the Global Islamic Media Centre. See online in: <http://groups.yahoo.com/group/abubanan2/message/221>. For an analysis of the *fatwa* see, "Yes to WMD. The first Islamist Fatwa on the use of Weapons of Mass Destruction" on PRISM website, www.e-prism.org.

10 Ayat al-Rahman fi ghazwat, Sebtember, 14 Rajab 1423. See online in: <http://www.al-fhd.com/mqalat/mqal.ayat.htm>.

be equipped with or have access to a limited number of missiles with a range of 45-190 miles. According to the Group's report: "These missiles may be fitted with conventional, chemical or nuclear warheads... At the moment it is not known whether these missiles are operational, or where they are located." The Group also mentioned reports that Taliban/Al-Qaeda possessed artillery shells loaded with Sarin and VX nerve gas. The Group stressed, however, that "it has not been able to verify the locations or quantities of these weapons."¹¹

On February 25, US officials told reporters that initial investigation of suspected radioactive material in containers discovered at two sites — the Taliban Agriculture Ministry in Kabul, and an Al-Qaeda training camp outside Kandhar — did not constitute grounds for concern. According to an unnamed Pentagon official: "We did not find any type of serious radiological material... The stuff we found was not the real stuff. They [the Al-Qaeda] were swindled, like a lot of other people." Another administration official confirmed that the "value" of the material in the canisters "for a weapon was zero." Referring to the non-nuclear WMD threat, General Tommy Franks, the commander of US forces in Afghanistan, told a press conference on February 25: "We have seen evidence that Al-Qaeda had a desire to weaponise chemical and biological capability, but we have not found evidence that indicates that they were able to do so."

Chemical Weapons

Al-Qaeda operatives have actively pursued chemical weapons. Al-Qaeda document found in Afghanistan in the summer of 2002 gave crude directions for making mustard gas, sarin, and other agents that attack the nervous system. According to the CIA, Al-Qaeda members also had plans for a cyanide-based chemical weapon using components that are easily available and require little training to assemble and deploy.

Chemical weapons gases, herbicides, or other chemical substances that can kill, maim, or incapacitate humans are easily transportable and can be dispersed as liquids, vapours, gases, and

11 Group says, Taliban may have missiles. Associated Press, January 21; US analysts find no sign Bin Laden had nuclear arms, *New York Times*, February 26.

aerosols that attack the body's nerves, blood, skin, or lungs. Saddam Hussein used chemical weapons against Iranian soldiers during the 1980-88 Iran-Iraq war; in 1988, he used mustard and poison gas against Kurds in the northern Iraqi village of Halabja, killing at least 5,000 and wounding 10,000. A terrorist attack using chemical weapons would cause mass casualties and panic if employed by Al-Qaeda.

Many countries have stockpiles of chemical weapons. Some experts perceive North Korea despite its aging chemical plant can still produce nerve, blister, choking, and blood agents. Syria has stockpiles of sarin gas, and has sought assistance from abroad to produce other nerve agents. Libya admitted that it had produced sulphur mustard at a plant near Rabta and had aerial bombs to deliver the gas. It also had the capacity to make mustard gas and nerve agent. Iran is suspected of having stockpiles of nerve, blister, blood, and choking agents.

Efforts to prevent terrorists from using chemical weapons have increased, but experts say it is difficult to measure their effectiveness. A growing number of countries around the world now enforce licensing regulations on 63 chemical-weapons precursors, as well as human, plant, and animal pathogens and dual-use chemical and biological equipment. Many experts worry that Al-Qaeda may steal samples of chemical-weapons or manufacture at their own. Experts also express concern that Al-Qaeda may target the US chemical industry by attacking vulnerable chemical-storage tanks near populated areas.

Biological Weapons

Biological weapons are based on viruses, pathogens, or toxic agents that occur in nature; these diseases were historically spread only through contact with infected people or animals. They include smallpox, plague, botulism, anthrax, a deadly bacterial spore and viral hemorrhagic fevers which cause internal bleeding. Letters containing anthrax spores mailed to US government agencies and media figures in 2001 killed only a handful of people but caused widespread concern.

Experts say Al-Qaeda had and may continue to have an experimental biological-weapons programme that focuses on using

anthrax for mass-casualty attacks or other biological agents for smaller-scale purposes. International experts have been urgently sifting evidence left behind by Al-Qaeda forces in Afghanistan for evidence of the terrorist network's efforts to acquire weapons of mass destruction.

Nuclear Explosive Devices (Nuclear Weapons)

David Albright and Corey Hinderstein of the Institute for Science and International Security (ISIS) found that there was "no credible evidence that either Bin Laden or Al-Qaeda possesses nuclear weapons or sufficient material to make them." However, they commented that, if Al-Qaeda obtained enough plutonium or highly enriched uranium, "we believe it is capable of building a crude nuclear explosive, despite several difficult steps." Albright said that, "if Al-Qaeda were to build nuclear weapons, it would likely build relatively crude, massive nuclear explosives, deliverable by ships, trucks, or private planes." Annette Schaper of the Peace Research Institute Frankfurt (PRIF) agrees that a terrorist group could produce a nuclear explosive device with a design similar to the ones dropped on Hiroshima and Nagasaki. According to Schaper, "This terrorist weapon would have a large mass that could only be transported by ship, boat, or lorry, but not by a ballistic missile. Moreover, the creators of such a device could never be entirely sure that it would really explode." Terrorists probably would not be able to test such a device before its initial use. The simplest way that terrorists might side-step technology issues would be to recruit scientists abroad or to send their personnel overseas for training. Scientists from nations that have programmes such as Pakistan have already been linked to Al-Qaeda. Other possible sources of scientists with this knowledge are Great Britain, the former Soviet Union, France, or even the United States itself

If Al-Qaeda fails to develop a nuclear weapon without foreign assistance its technicians might be able to obtain the weapons design information from an abundance of unclassified documents and drawings on the Internet. Many freely available documents describe the fundamentals of nuclear explosive theory and design; CNN uncovered some of these in a safe house of an Al-Qaeda

member arrested in Pakistan. Given the open source nature of such documents, however, the information contained in these documents turns out to demonstrate Al-Qaeda's interest in nuclear weapons but not its mastery of nuclear physics.

After analyzing some of the documents, David Albright says that in

over 25 neatly hand-written pages, the author discusses various types of nuclear weapons, the physics of nuclear explosions, properties of nuclear materials needed to make them, and the effects of nuclear weapons. It is not systematic in its coverage and the author sometimes covers some subjects in depth and others superficially or incorrectly. Nor is it a cookbook for making nuclear weapons, as many critical steps to make a nuclear weapon are missing from the document.¹²

According to Annette Schaper, "there are many laborious steps that separate the basic understanding of the operating principles and an actual technical blueprint." Schaper believes it would take several years for an organization to understand these principles, design, and test a device.¹³ Even if they do obtain the capability to construct a device, they would still need to obtain the fissile material that makes up the nuclear weapon's core. In the past, acquiring fissile material has been greater obstacle than acquiring access to theories of nuclear weapons design to states interested in developing nuclear weapons. But the first recorded incident of Al-Qaeda's attempts to acquire nuclear devices and nuclear materials came up in 1992. In 1993, an operative testified that he had gone to a meeting to purchase what he thought was going to be "enriched" uranium.¹⁴ In 1998, an operative was captured in Germany while attempting to purchase what he also thought would be "enriched" uranium.¹⁵ The Russian mafia was also reported to have obtained weapons and material from facilities in the former Soviet Union, and was offering to sell this to Al-

12 David Albright, "Al-Qaeda's Nuclear Program: Through the Window of Seized Documents," *Policy Forum Online*, November 16, 2002.

13 A. Schaper, "Nuclear terrorism: risk analysis after 11 September 2001," *Disarmament Forum, Nuclear Terrorism*, 2003, No.2, p.8.

14 "Testimony of Prosecution Witness Jamal Ahmed al-Fadl," US District Court United States v. Usama Bin Laden, et al., defendants, 7 February 2001.

15 "US Says Bin Laden Aide Tried to Get Nuclear Weapons," *New York Times*, 26 September 1998.

Qaeda members.¹⁶ Although there is as yet no physical evidence that Al-Qaeda has ever been successful, it does not mean they have not obtained this material by some means. From 1992 to 2002, there have been no less than 175 known attempts by terrorists or criminals attempting to acquire or smuggle radioactive substances.¹⁷ There also are cases of impoverished workers attempting to steal fissile materials, presumably to sell them on the open market. In 1998, workers at a Russian nuclear weapons facility conspired to steal 18.5 kilograms of highly enriched uranium (HEU). Fortunately, authorities thwarted the theft before the material ever left the facility.¹⁸ The documentary record, however, is mostly filled with cases of failed attempts to obtain nuclear materials.

Al-Qaeda may have attempted to acquire nuclear material by stealing it from vulnerable sites or by purchasing it from anyone willing and able to sell it. Global stockpiles of weapons grade material can be found in a number of countries. Over 10 years after the end of the Cold War, more than 30,000 nuclear weapons exist worldwide. These weapons amount to approximately 450 tons of military — and civilian — separated plutonium, and over 17,000 tons of HEU. Most of this material can be found within, the borders of the five nuclear weapon states, with the overwhelming majority in the United States and Russia. However, there are stocks of plutonium in Belgium, Germany, India, Israel, Japan, and Switzerland. Additionally, there are over 2000 kilograms of HEU used or stored in research reactors in 43 countries, often in sufficient quantities to make a nuclear weapon.¹⁹

It is therefore theoretically possible that Al-Qaeda may develop a nuclear explosive device, provided it overcame important challenges. First, it must obtain the fissile material needed for the core of the device. After achieving this step, it must then gain access to the nuclear expertise needed to create a design

16 "Report Links Bin-Ladin, Nuclear Weapons," *Al-Watan Al-Arabi*, 13 November 1998.

17 "Nuclear Contraband on Sale." *Jane's Intelligence Digest*, 30 June 2003.

18 M. Bunn, G. Bunn, "Reducing the Threat of Nuclear Theft and Sabotage," IAEA-SM-367/4/08.

19 *Ibid.*

compatible with the acquired fissile material. Finally, the group may need to find a way to test the device to ensure its success, although Al-Qaeda may determine that this final step is not necessary. The first two steps, however, present significant challenges to any attempt to develop a nuclear weapon. Moreover, Al-Qaeda justifies its threat to use nuclear bombs with offering the example of President Harry S. Truman who said that America's use of such bombs against Japan both shortened the world war, and was also a fitting retaliation for the barbaric behaviour of the Japanese. According to Al-Sun, the US today is no different from Japan in World War II, and therefore deserves the use of WMD against her.

Radiological Dispersal Devices (RDD)

Radiological dispersal devices, commonly known as dirty bombs, are more within the reach of Al-Qaeda's capabilities. An RDD is essentially a conventional weapon that when detonated spreads radioactive material over a wide area, thus contaminating it. This type of weapon is more suited to terrorist activities for several reasons. First, the ingredients needed are more readily available. They are used in commercial enterprises, medical facilities, and university laboratories. Second, these widely available radiological materials are less radioactive than the materials needed for a device that will generate an explosive nuclear yield. They are relatively easy to handle when it comes to assembling and transporting an RDD. The radioactive material that might be used within an RDD can vary. Third, creating an RDD is much less technically challenging than developing a conventional nuclear explosive device. The design is relatively simple: one needs only wrap radioactive material around conventional explosives.

The threat posed by Al-Qaeda is not limited however to that group's ability to acquire nuclear or radiological weapons. As evidenced by the September 11 attacks, the group is capable of using a target country's infrastructure against it. In February 2003, the Department of Homeland Security (DHS) announced that while construction of a RDD is well within the group's capabilities, "Al-Qaeda operatives also may attempt to launch conventional attacks against the US nuclear/chemical-industrial infrastructure to cause

contamination, disruption, and terror. Based on information, nuclear power plants and industrial chemical plants remain viable targets.”²⁰ These attacks could involve the use of airplanes or ships as delivery vehicles for conventional weapons against chemical or nuclear facilities to generate a mass casualty event.

Exploiting Other Vulnerabilities

Al-Qaeda’s past operations suggest that the organization might be attracted to several weaknesses in US security efforts. The August 2003 blackout which left over 50 million Americans without power illustrates the vulnerability of the American energy supply. The security procedures of some air carriers and freight forwarders remain vulnerable to terrorist activity due to inadequate standards regarding the screening of cargo-handler personnel. Airport security continues to pose challenges to government agencies. In December 2002, a General Accounting Office assessment found that although much was done after 9/11 to strengthen airport security, the Departments of Transportation and Homeland Security faced long-term transportation security challenges.²¹ More than 6 million cargo containers arrive in the United States from overseas each year. Robert Bonner, commissioner of customs and border protection at the Department of Homeland Security notes that there is a continuing concern that Al-Qaeda and other terrorists groups may try to place weapons of mass destruction in some of those containers.²²

A recent GAO study also found that, excluding reactor material, there is a great risk of radiological materials falling into the wrong hands. The report’s findings identify the many vulnerabilities of radiological stockpiles: a complete tally of sources worldwide does not exist; thousands of sources have been lost; many countries have weak regulations; the United States does not adequately monitor the import and export of its own sources; cases of smuggling of sealed sources increased in the late 1990s;

20 “Al-Qa’ida Chemical, Radiological, And Nuclear Threat And Basic Countermeasures,” National Infrastructure Protection Centre, February 2, 2003.

21 “Transportation Security: Post-September 11th Initiatives and Long-Term Challenges,” GAO-03-616T, April 2003.

22 Phillip Shannon “US, Inspectors To Be Placed At Muslim Ports,” *International Herald Tribune*, June 13, 2003.

and US and international assistance to help nations track and secure sources is inadequate.²³

Conclusions

Al-Qaeda's ability to attack the United States is not just a function of the weapons it may buy, produce on its own, or steal but vulnerabilities in US homeland security. There may be numerous other vulnerable socio-economic aspects such as hospitals, power grids, water purification or agriculture. The vulnerability of these potential targets may become a serious disaster if any unfortunate attack upon such facilities is triggered by Al-Qaeda. Hereunder, we may enumerate some major arguments known for justifying possible threats of using WMD against the United States by Al-Qaeda:

- Al-Qaeda holds preemptive strikes as an attack on Islam by the United States marked as "West and the Rest" by Neo-Cons.
- Al-Qaeda holds herself bound by the Islamic divine law and thus disqualifies any terms of falling within the ambit of international law used by the West for lighting terrorism.
- Al-Qaeda holds CBRN WMD as an equalizer to the western powers.
- Al-Qaeda pleads her right to use WMD against the US and UK, as both used WMD in the Second World War and ongoing preemptive strikes killing millions of innocent Muslims.
- Al-Qaeda holds that both powers with Israel possess WMD in their homelands.
- Al-Qaeda bases its *Jihad* on the injunctions of the Quran and *Hadith* to protect and uphold Islam.
- Bin Laden and other Al-Qaeda leaders criticize the Muslim heads of states for following American policies and consider the Islamic world their first audience.

23 "Nuclear Non-Proliferation: US and International Assistance Efforts to Control Sealed Radioactive Sources Need Strengthening" (GAO-03-638).

- Al-Qaeda holds that West is publicizing and waging war against Muslims through its policies, media, and preemptive strikes based on 'Clash of Civilizations' theory.

Considering above justifications Al-Qaeda may use biological or chemical agents than nuclear weapons, as an access to nuclear weapons looks difficult. We may conclude whether the threat of acquiring and using WMD proves true or false the suicidal attack threat posed by Al-Qaeda may remain real. Al-Qaeda may recruit and use new generation of operatives from Afghanistan, Iraq and Muslim communities in Europe if new Western policies fail to satisfy them. These developments may also accelerate Al-Qaeda's opportunities to mature her threats of acquiring and using WMD.