



THE AL-QA'IDA NETWORK AND WEAPONS OF MASS DESTRUCTION

By Jonathan Spyer*

The use of weapons of mass destruction (WMD) by Middle Eastern terrorist groups is one of the world's worst nightmares, albeit a more credible one in the aftermath of September 11, 2001. Finding evidence, however, of such groups' plans or efforts in this direction is difficult. This article assesses the available information on the motives and capabilities of these organizations, and especially the al-Qa'ida network, to carry out such attacks. (This article was originally written for a project and conference on "Countering Threats in the Era of Mass Destruction: Accounts from the Middle East and Europe," co-sponsored by the GLORIA Center and The Military Centre for Strategic Studies (CeMiSS) of Italy.)

The use of weapons of mass destruction (WMD) by a terrorist organization is one of the central threat scenarios currently facing democracies around the world. The seriousness of the danger posed by militant Islamist terror groups has been apparent since the attacks of September 11, 2001. While evidence has been unearthed of attempts by a number of Islamist groups to acquire a non-conventional capability,(1) it is generally accepted that the al-Qa'ida network poses the principle threat regarding the employment of weapons of mass destruction by Islamist terrorists. In order to understand the nature and dimensions of the threat, arriving at a correct understanding of the nature of al-Qa'ida--both in terms of its structure and in terms of the ideas driving and underlying its activity--is therefore crucial. Equally important is the sober analysis of the available evidence detailing attempts by the network to obtain a non-conventional weapons capability, and observation of the more general patterns of use of WMD by insurgent and terrorist groups.

To date, the sole clearly documented example of a terrorist use of WMD resulting in fatalities was that of the Sarin gas attack in the Tokyo subway, perpetrated by the Aum Shinrikyo group in Japan in 1995.(2) A number of terrorist

groups are considered to have developed some non-conventional capability, albeit of a limited and primitive nature. These include: the Kurdish PKK, which experts consider to have weaponized Sarin nerve gas;(3) Hamas, which has coated fragments placed in bombs with pesticides and poisons; and a number of U.S. "Patriot" groups, who have experimented with various rudimentary biological devices.(4)

A number of key questions arise in considering the issue of al-Qa'ida and WMD: To what extent has it succeeded in gaining access to the materials necessary for the preparation of weapons of mass destruction? To what extent does it possess the necessary technical expertise required in the preparation of such weapons? Which state actors might be identified as potential or actual sources of support and assistance in its efforts to acquire such weapons? How does the use of such weapons fit in with the strategy of al-Qa'ida? Finally, why, given the clear evidence that the network has invested with some success in efforts to obtain, for example, a rudimentary biological capability, have there as yet been no examples of successful terror attacks carried out by al-Qa'ida operatives using WMD?

Is it indeed, as Eliza Manningham-Buller, director of Britain's MI5 put it, only a "matter of time" before such an attack takes place?(5) Have measures taken by Western law enforcement and intelligence agencies proven sufficient to foil al-Qa'ida's ambitions in this area? Or, conversely, has al-Qa'ida deliberately held back from the employment of such means of destruction for reasons relating to the role of terrorist violence in the network's overall strategy?

AL-QA'IDA: IDEA AND ORGANIZATION

The origins of al-Qa'ida as both idea and organization are to be found in the units of Arab volunteers that took part in the war against the USSR in Afghanistan in the 1980s. Usama bin Ladin, founder along with the Palestinian Muslim Brotherhood activist Abdallah Azzam of the Maktab al-Khalimat (the Afghan Service Bureau or MAK), was a prime mover in recruiting and organizing these fighters.(6) Utilizing his family's wealth, bin Ladin established training camps for Arab volunteers, constructed essential roads and tunnels, contributed large sums of money, compensated the families of wounded fighters, and apparently also personally participated in important military engagements.(7)

MAK was one of seven recognized principal mujahideen organizations involved in the fight against the Soviets. As such, bin Ladin may have benefited from aid afforded the mujahedeen by the CIA at this time.(8) As victory drew near in the late 1980s, however, bin Ladin and Azzam parted ways. While Azzam wished to continue the focus on Afghanistan, bin Ladin now wanted to use the Afghan experience and infrastructure to continue the jihad in other countries. In 1988, al-Qa'ida al-sulbah (the solid base) was founded, as an organizational structure intended to maintain the links between the "Afghan Arabs" for further jihad operations after the conclusion of the Afghan war. The

name of the new network was taken from the writings of Azzam (who was killed by a car bomb in 1989).(9) But the driving force behind its foundation was bin Ladin.

For bin Ladin and his closest cohorts, the Afghan experience is a "founding myth" whose intensity and central lesson is best captured in his own words: "Those who carried out the jihad in Afghanistan did more than was expected of them because with very meager capacities they destroyed the largest military force (the Soviet Army) and in so doing removed from our minds this notion of stronger nations. We believe that America is weaker than Russia."(10)

The Arab fighters thus drew from their Afghan experience the conviction that through strength of will and dedication their success could be replicated elsewhere. When bin Ladin returned to Saudi Arabia in 1989, it was to a hero's welcome. As a son of one of the kingdom's wealthiest families, who had nevertheless freely embraced the role of mujahid, he was widely seen as embodying those qualities of militant piety and incorruptibility which the kingdom professed itself to uphold.

Bin Ladin rapidly became a key Islamist opponent to the regime, however, criticizing its venality and alleged subordination to the West. His criticisms notwithstanding, he offered the support of his fighters to the kingdom when Saddam Hussein invaded Kuwait in 1990. His offer was rebuffed, and instead, bin Ladin witnessed the inflow of a large U.S. force to Saudi Arabia, tasked to protect the kingdom from invasion. More than any other, it was this issue of the American military presence in the Gulf that formed the focus of bin Ladin's rage at the West, and set him on the road that would lead to his later notoriety. As bin Ladin wrote, "Since God laid down the Arabian peninsula, created its desert and surrounded it with its seas, no calamity has ever befallen it like these Crusader hosts that have spread in it like locusts,

crowning its soil, eating its fruits and destroying its verdure."(11)

Bin Ladin's resentment of the Western military presence in the Hijaz has deep roots in Islam and Islamic history. An infidel military presence in the heartland of Islam--the attacks by Reynold of Chatillon on Muslim convoys in the Hijaz--was the precipitating factor in Salah al-Din's declaration of jihad against the Crusaders.(12) Bin Ladin sought to emulate historical precedent by mobilizing his network of Afghan Arabs. Increasingly, the focus of his attacks would be less on the Saudi regime, which had supposedly failed in its duty by allowing the infidels into the "land of the two holy places." Rather, as the 1990s progressed, bin Ladin's target became the United States itself, as well as the broader Western world.

As a result of his declarations and activities against the Saudi regime, bin Ladin's Saudi citizenship was revoked in April 1994 and he was forced to leave the country. He found a willing host in the Islamist regime of Umar al-Bashir in Sudan, to where he repaired with his family and a large group of followers. In Sudan, he set about creating an economic infrastructure which would provide employment and activity for large numbers of his Afghan Arabs, many of whom preferred to continue their lives within the framework of jihad rather than return to their countries of origin. His construction and engineering projects proved of benefit to the Sudanese government, in addition to providing employment for his men. For example, a bin Ladin company, al-Hijrih for Construction and Development, was responsible for building the new airport at Port Sudan in cooperation with the Sudanese military.(13)

But bin Ladin's relationship with the Sudanese regime soured. In 1993, the country was added by the United States to the list of states it considered to be active backers of terrorism. As part of its efforts to remove itself from this list, the

regime requested in May 1996 that bin Ladin leave Sudanese soil. The latter complied with the request, and was able to set up his base once more in Afghanistan.(14)

CHANGE AND EVOLUTION IN AL-QA'IDA

In the course of the 1990s, both al-Qa'ida's organizational base and the idea that drove it underwent considerable change and development. From an organization whose primary concern had been the presence of infidel forces in Saudi Arabia, al-Qa'ida from the mid-1990s onward began to stress much broader themes and grievances. Also from an organization that had been built around the core of Arab veterans of the Afghan war, al-Qa'ida began to expand to form a linking network, bringing together radical Islamist organizations in many different parts of the world.(15)

By metamorphosing into a network, al-Qa'ida became a facilitating element for carrying out attacks that were planned and perpetrated by militants who were not organizationally connected to bin Ladin in any permanent, hierarchical structure. To this effect, the network developed a flexible, multi-faceted modus operandi, establishing safehouses, places of residence and training camps in Afghanistan, Sudan, Pakistan and Yemen in the course of the 1990s. This transnational, facilitating role played by al-Qa'ida was vividly captured in the testimony before a U.S. court by a former member of the network, Jamal Ahmad al-Fadl.(16) One example of al-Qa'ida's role as a network is its ambiguous part in the bombing of the World Trade Center in 1993. Investigators believe that bin Ladin was not personally involved in the planning of this operation. But Ramzi Yusef, the central operative involved in the execution of the attack is thought to have been linked to Islamist groups associated with al-Qa'ida in Pakistan and Afghanistan prior to the bombing.(17)

Alongside the emerging unique organizational structure of al-Qa'ida as a facilitator of Islamic terror worldwide, the governing idea of al-Qa'ida--that of global struggle between the forces of authentic Islam on the one side, and the West and its corrupt and degenerate servants on the other, developed throughout the 1990s. In the course of the decade, bin Ladin's attacks on the Saudi regime grew rarer, while the scope of his attentions expanded.

In a Declaration of War issued in 1996, following his expulsion from Sudan, he defined the enemy as the "Zionist-Crusader alliance," before proceeding to list a long litany of grievances supposedly suffered by the Islamic Umma (nation) at the hands of this alliance.(18) The list included references to Iraq (where bin Ladin was opposed to the sanctions regime as harmful to Muslims), Bosnia, Chechnya, and the Israeli-Palestinian conflict. The first part of the Declaration of War, nevertheless, still deals with specific criticisms of the Saudi regime.

By the time of the landmark declaration of February 23, 1998 (the Declaration of the World Islamic Front for Jihad against the Jews and the Crusaders or *Al-jabhah al-Islamiyya al-Alamiyah li-qital al-Yahud wal-Salabayin*), al-Qa'ida's global focus had become yet more pronounced, but so had its singling out of the United States as the force ultimately responsible for the worldwide attempt to destroy Islam.(19) The 1998 fatwa confirmed the decision of the al-Qa'ida network to launch a holy war, to "glorify the truth and defend Muslim land," as the document put it. The document hardly relates at all to the failings of the Saudi regime, except regarding the two holy places. The example of Afghanistan and subsequent collapse of the Soviet Union was held up to show how the mujahideen of al-Qa'ida would succeed in defeating the apparently much stronger Americans.

By 1998, the al-Qa'ida network's umbrella structure, stated goals, and key leadership cadre had emerged, and they would retain those characteristics until the U.S. invasion of Afghanistan in 2001. By that time, the organization was known to be active in over 20 countries, from Southeast Asia to North America, and included Africa, the Middle East, and Europe. It included militants from a number of Islamist radical movements, including the Jama'a al-Islamiyya and al-Jihad groups from Egypt. The leading figures of these two groups, Rifat al-Taha and Dr. Ayman al-Zawahiri, would play key roles in al-Qa'ida. The disparate groups and individuals involved in al-Qa'ida had previously been focused on replacing the government of a particular state with an Islamic regime. What brought them together were the idea of the Global Jihad and the effective, fluid, and flexible channels of assistance and communication created by al-Qa'ida.(20)

AFTER SEPTEMBER 11

Following the loss of its base of operations after the U.S. attack on Afghanistan late 2001, and the very vigorous and largely successful American pursuit of al-Qa'ida militants over the next two years, al-Qa'ida's capability to launch attacks suffered. Senior figures associated with the organization, such as Khalid Shaykh Muhammad, one of the masterminds of September 11, and "Hambali" (Riduan Isamuddin), leader of the Jemaa Islamiyya in Southeast Asia, have been apprehended.

Al-Qa'ida has not been destroyed, however. Its will to continue attacks is undiminished. Its abilities, though the subject of considerable dispute among experts, remain indisputably considerable, and may well be growing. Regarding the experience of al-Qa'ida since 2001, it might be said that while the idea survives intact, the organization has been transformed in the post-September 11 period.(21)

Having lost its physical base and some high-quality personnel thanks to determined efforts by Western law enforcement, intelligence, and armed forces, al-Qa'ida has searched for and found new bases of operation. Most significantly, al-Qa'ida activists are playing a key role in the insurgency in Iraq. Of crucial significance, too, is the return of al-Qa'ida to active militancy in Saudi Arabia. Other areas of importance, all of which host their own local Islamist insurgency, are Mindanao in the Philippines, the Bangladash-Myanmar border, Yemen, Somalia, Chechnya, the Pankishi Valley in Georgia, and of course, the Afghan-Pakistan border.(22)

Three factors have led to al-Qa'ida's diminished ability to carry out spectacular terrorist attacks of the September 11 type. First, increased vigilance by law enforcement agencies and the wider public. One of the best examples of this was when passengers foiled the attempted suicide bombing by Richard Reid of American Airlines flight 63 on December 22, 2001. Second, September 11 led to greatly increased cooperation between law enforcement and intelligence agencies across national borders. As a result, over 100 attempted terror attacks by al-Qa'ida have been intercepted since September 11.(23) Third, the fact that al-Qa'ida is now being hunted with the full resources available to Western law enforcement and intelligence agencies also inevitably has an effect. Large-scale acts of terror take a long time in terms of planning. They require the participation of a larger number of individuals and are characterized by logistical complexity. Since al-Qa'ida wishes to preserve its personnel and infrastructure, the logical choice was to pursue small- and medium-scale operations, conducted by associate groups with technical and logistical aid from the al-Qa'ida network in a process that has been termed "franchising."

In short, the organization has become fragmented. Experts consider that in the

period ahead, al-Qa'ida will increasingly work through the three dozen constituent Islamist organizations that it has been helping to train and finance over the last decade. Among the Islamist groups with whom al-Qa'ida operatives are today working closely are Jemmah Islamiya (Southeast Asian group that carried out the Bali bombing, with al-Qa'ida experts assisting), al-Ittihad al-Islami (Horn of Africa), al-Ansar Mujahidin (Caucasus), Tunisian Combatants Group, Jayash-e Mohammad (South Asia), and Salafi group for Call and Combat (GSPC, active in North Africa, Europe, and North America).(24)

This cross-organization cooperation was the *modus operandi* for the attacks in Mombasa, Riyadh, Casablanca, Djerba, and (most probably) at the Marriott Hotel in Karachi. In so far as operations against "hard" Western targets have continued, the toughening of U.S. defenses has led al-Qa'ida to seek opportunities against other Western powers. For example, having failed to target a U.S. warship off the Yemeni coast, the organization struck at a French super-tanker in October 2002.(25) The strike on Madrid in March 2004, carried out by a group named after a bin Ladin aide killed in Afghanistan, may also be seen as part of this picture, though its significance goes beyond it.(26)

The strike in Madrid, coupled with bin Ladin's subsequent offer of a truce to Europe, and the intense activity in Iraq and Saudi Arabia, confirm once more that al-Qa'ida is a political organization with clear political aims and belongs in the category of extreme, violent revolutionary organizations rather than apocalyptic, millennialist sects. This is a matter of much more than semantic distinction. Millennialist sects, such as the Japanese Aum group, are convinced of the imminent intervention of supernatural forces in the human world. Often, their violent acts are intended to bring this event about, or at minimum to hasten the perceived process. The

practical result of such convictions is the immunity of such groups to a rational calculus of cost and effect. They are operating from deep within a world of delusion, and as such, their tactical behavior may follow a pattern apparently in direct contradiction to even the most basic laws of self-interest. Amongst the numerous examples of this type of organization are the Jonestown cult and the Heavens Gate group.

By contrast, al-Qa'ida, while based on a religious world-view, does not include in its theology the notion that a single apocalyptic act of violence may precipitate supernatural events. Rather, the project is to bring about God's rule on earth through the political and military victory of His servants. As such, in the matter of political and military strategy, al-Qa'ida, while acting with precipitate ruthlessness, employs violence for the furtherance of clear political aims. In this respect, then, its calculations regarding the use of WMD may be governed by rational calculations of relative political gain. This by no means rules out the possibility of the use of such weapons, but it does change the way they are likely to be deployed, and will affect the calculation of the likeliness of their being used.

The bomb in Madrid had a clear political aim, namely to weaken and divide the coalition in Iraq. Similarly, the attacks in Saudi Arabia, besides demonstrating the continued vigor of the organization, show al-Qa'ida coming almost full circle, back to the goal of destabilizing the Saudi regime.(27) Reports suggest that the organization has been strengthened by the insurgency in Iraq, with recruitment increasing. One estimate suggests that al-Qa'ida may be able to call on the services of 18,000 militants, based on the numbers of individuals who underwent training at its facilities over the last decade.(28)

Al-Qa'ida as idea--namely, the idea of a global clash between the forces of jihad and the West--is very much alive. Al-

Qa'ida as organization is proving able to transform and adapt itself to events, making use of thousands of militants and supporters, members of different formal groupings--or of no grouping at all--to continue the war of Islamist terror against the United States and the West.

AL-QA'IDA AND WEAPONS OF MASS DESTRUCTION

A question which perplexes researchers is why al-Qa'ida has so far refrained from employing non-conventional means, or at least, has not yet succeeded in a terror strike using them. Much speculation has taken place around the extent to which al-Qa'ida is attempting to develop chemical, biological, radiological, and nuclear weapons.

Chemical and Biological Weapons: The Evidence

In terms of the stated intentions of the organization's leaders and its written documents, the desire to obtain a non-conventional capability is clear. The eleventh volume of al-Qa'ida's 5,000-page Encyclopedia of Jihad is devoted entirely to methods by which chemical and biological weapons may be constructed.(29) In May 2003, Shaykh Nasr bin Hamid al-Fahd, a cleric associated with the organization, issued a fatwa legitimizing the use of weapons of mass destruction. Koranic justifications are a clearly required element prior to an attack. As Manningham-Buller confirmed, "We know that renegade scientists have cooperated with al-Qa'ida and provided them with some of the knowledge they need to develop these weapons."(30)

In the post-September 2001 period, considerable evidence has emerged regarding al-Qa'ida efforts in this regard. During operations in Afghanistan, coalition forces found traces of ricin and anthrax at five or six sites.(31) Evidence of an interest in bubonic plague, cyanide, and botulinum toxin was also

unearthed.(32) In the summer of 2002, CNN researchers gained access to a large archive of videotapes of al-Qa'ida activities, prepared by the organization itself, and apparently found in a house in Afghanistan where bin Ladin had stayed.

The tapes included video-training manuals for terrorists instructing them in the assembling of explosive devices. Independent experts confirmed that the tapes were genuine. They also included depictions of the testing of a poison gas on three dogs. In one of the scenes, a group of unidentified men are seen hurriedly leaving an enclosure in which the dogs are penned. A white gas is then seen seeping in from the left, after which, within a short period, the dog begins showing physical reactions. The tapes were examined by coalition intelligence officials, who consider that the scenes depicted took place at the Durunta camp in Afghanistan. Satellite monitoring had picked up images of the corpses of dogs in this area.(33)

Much additional evidence has been gathered regarding al-Qa'ida's efforts toward obtaining a chemical and biological capability. Testimony in a trial in Egypt in 1999 included claims that al-Qa'ida had already acquired biological agents such as anthrax, the Ebola virus, Salmonella and botulinum toxin. U.S. forces discovered a partly built biological weapons lab near Kandahar in late 2001 designed to produce anthrax, though no actual agents were found.(34) Evidence unearthed with the capture of al-Qa'ida operations chief Khalid Shaykh Muhammad confirmed that al-Qa'ida efforts had reached a considerable level of sophistication in this regard.

To date, there have been four occurrences which may point to attempts by al-Qa'ida to perpetrate terrorist acts involving the use of non-conventional weaponry: one involving nine Moroccan citizens in Rome in February-March of 2002; one ending in the arrest of six North African men in London in 2003; the reported foiling of a major act of

terror involving the use of chemical weapons in the Jordanian capital Amman in April 2004; and the charging of eight suspected al-Qa'ida members in London on August 18, 2004, with conspiracy to murder, and "conspiracy to to commit public nuisance by using radioactive materials, toxic gases, chemicals and/or explosives to cause disruption, fear or injury."

The Rome case began in February 2002 with the apprehension of four Moroccan citizens for allegedly plotting an attack on the U.S. Embassy in Rome. The men were found to have potassium ferrocyanide (a cyanide compound) in their possession, along with maps detailing the location of water pipes serving the U.S. embassy.(35) An additional five men were arrested in the days that followed. The discovery of a hole leading into an underground passageway next to the U.S. Embassy increased the sense that the authorities had come upon what looked like a major chemical terrorist attack. An additional six men were arrested on March 3, 2002, suspected of links with al-Qa'ida. These individuals had been heard discussing, among other things, the use of a cyanide compound.(36)

As the investigation proceeded, however, doubts began to emerge as to the seriousness of the plan, and indeed, whether there was a plan at all. In the first place, it was noted that the hole bored into the concrete blocking off the tunnel beneath the embassy might well have been the work of municipal employees, who in the past have created similar openings in order to transfer tools back and forth. It was also noted that the particular compound found in the possession of the suspects, potassium ferrocyanide, has in fact a very low toxic content (it is often used as a food additive). As such, if the suspects intended to use this substance to poison the water supply, this suggested a low level of competence on their part.(37)

The fact that al-Qa'ida operatives have trained with cyanide was confirmed during the interrogation of Ahmad Ressam, who was convicted in October 2001 of planning to place a bomb at the Los Angeles International Airport. Ressam described al-Qa'ida operatives training to make use of liquid cyanide to poison individuals. Details of the preparation of this material are unavailable.(38)

The arrests that took place on January 5, 2003, in north London involved seven men who were suspected of producing ricin, a highly toxic substance derived from castor beans, in an apartment. Official UK sources indicated that at least one of the individuals arrested had attended an al-Qa'ida training camp in Afghanistan. Others, it transpired, had undergone similar training in Chechnya and the Pankisi Gorge region of Georgia. On January 13, an additional five men and a woman in Bournemouth were taken into custody. A day later, another Algerian Islamist, Kamal Bourgass, killed a policeman while being arrested.(39)

The discovery of this ring has serious implications since it appears to offer more concrete proof than had hitherto existed of the intentions of Islamist terrorists to develop biological weaponry. The organizational affiliation of the suspects was not immediately clear. While they were suspected of al-Qa'ida membership, specifically of links to the al-Qa'ida-affiliated, Algerian based Groupe Salafiste pour la Predication et le Combat (GSPC) it was also considered possible that they could be linked to the Algerian Groupe Islamiste Algerien (GIA).(40) In the course of the investigation, suspicions strengthened concerning the likely al-Qa'ida link.

Instructions concerning the production of ricin have appeared in al-Qa'ida training manuals in the past. Moreover, traces of it, along with other substances, were found at sites searched by coalition forces in Afghanistan.(41) U.S. officials

have stated that four of the Islamists arrested in north London were associated with a well-known al-Qa'ida operative, the chemical warfare specialist Abu Mus'ab al-Zarqawi. Zarqawi is suspected of organizing both the murder of American diplomat Lawrence Foley and the January 2000 plot to bomb bridges and luxury hotels in Jordan, which was foiled by the authorities.(42)

There is as yet no clear evidence as to whether the suspects intended actually to employ ricin in a mass terror attack. Some biological warfare experts have indeed suggested that ricin is more likely to be used as an instrument of assassination than as a weapon of mass destruction. Indeed, ricin is most famous for its use in the assassination of Bulgarian dissident Georgi Markov.(43)

Of course, the first successful example of a bio-terror attack took place in the period following September 11: namely, the anthrax mailings carried out by persons unknown in the United States. According to investigators, the individual or individuals concerned appear to have had access to specific weaponization technology and immunization against anthrax.(44) These seemed to point to access to a weapons-related research facility. Since no one has been apprehended for these attacks, and no one has taken responsibility for them, the question remains open.

The foiled attack in Amman in April 2004 remains shrouded in mystery. Press reports at the time spoke of a plan to detonate 20 tons of explosives at the headquarters of the General Intelligence Department in Amman. A possible casualty figure of as many as 80,000 people was mentioned, had the authorities not succeeded in foiling the plan.(45) No authoritative details, however, including the nature of the chemicals to be used in the attack, have since emerged. Al-Qa'ida, for its part, has denied that the planned attack on the intelligence building in Amman contained any non-conventional aspect.(46)

The alleged leader of the plot, a Jordanian citizen named Azmi al-Jayusi, was shown on television confessing to having planned the chemical attack in cooperation with Abu Musab al-Zarqawi, a Jordanian leader of the insurgency in Iraq. Four days after details of the plot were revealed, an audiotape was passed to several Arabic news bodies, claiming to contain the voice of Zarqawi, in which the chemical aspect of the plan was denied, though it was admitted that a strike on the headquarters had been planned. The authenticity of the tape remains uncertain.

The arrest and charging of eight men in London in August 2004, including Dhiren Barot, who is thought to hold a prominent position in al-Qa'ida, may represent the most serious evidence yet of plans by al-Qa'ida to actively prepare operations using chemical and biological weapons. The men were seized by police in a series of armed raids in the London area and the county of Lancashire, in the north of England, in one of the largest counter-terror operations launched to date against al-Qa'ida. Of those arrested, Barot, 32, a British-born Hindu convert to Islam, was found to have in his possession notebooks containing detailed information on the preparation of explosives, chemicals, poisons, and related matters. He also possessed details on U.S. financial buildings, thought to be among the planned targets of the cell. Qaisar Shaffi, 25, another of the eight men held, is charged with possessing sections of the "Terrorist's Handbook" dealing with the preparation and use of chemical and explosive devices.(47)

There has so far been a single case of chemical weapons being used in the insurgency in Iraq. On May 17, 2004, a roadside bomb containing a quantity of Sarin was detonated next to U.S. forces, in which a number of military personnel were lightly wounded. The shell appears to have been a stray weapon scavenged by insurgents rather than part of any larger strategy.(48)

That al-Qa'ida has attempted, and is attempting, to develop a biological and chemical capability is clear. It would also be generally accepted today that the organization probably has the ability to carry out small-scale operations involving the use of chemical and biological weaponry. Serious technical difficulties remain, however, for terrorist organizations wishing to make use of such weaponry. It should be borne in mind that the storage and effective dissemination of most biological and chemical weaponry requires specialized knowledge and equipment not easily obtained by non-state actors, unless acting with state support or sponsorship. Furthermore, terrorists would run the risk of contaminating themselves throughout the process of the development and attempted use of WMD.

In other words, while in theory al-Qa'ida may have the ability to use a chemical or biological weapon, it is highly unlikely that its use would actually result in massive casualties--especially when compared to al-Qa'ida's proven ability to cause large-scale loss of life using conventional weapons. Moreover, should al-Qa'ida launch a chemical or biological attack that resulted in few casualties, it might actually undermine al-Qa'ida's ability to instill fear and uncertainty in the societies it seeks to disrupt--a psychological asset with which a terrorist group will be loth to part. These technical hurdles may form a major element in explaining why until now there has been no major attack by al-Qa'ida using biological or chemical weapons, despite the considerable evidence that the network possesses some capabilities in this regard.(49)

Nuclear and Radiological Weaponry

Since September 11, there has been much speculation regarding the possibility that al-Qa'ida has acquired operational nuclear devices. Various estimates have claimed that the organization possesses between one and

forty-eight nuclear warheads.(50) None of these estimates seem to derive from reliable sources, however, and they may be filed under the general heading of hearsay. U.S. forces discovered documents and blueprints for the design of a nuclear device in a house in Kabul in November 2001, but the documents were found to be technically inaccurate, and incapable of producing a working nuclear device.(51) Intelligence sources indicate that it is likely that bin Ladin received advice from two Pakistani nuclear scientists.(52) The precise knowledge that the scientists themselves possessed, and the extent to which they chose to share this knowledge with bin Ladin, is not known.

The testimony of the former al-Qa'ida member turned U.S. government informant Jamal Ahmad al-Fadl, according to which al-Qa'ida attempted to purchase uranium in Sudan in the early 1990s, is perhaps the most concrete evidence of al-Qa'ida's nuclear ambitions in the public domain.(53) There is little reason for doubting the bare facts of his story. Bin Ladin himself, in an interview with Time magazine in December 1998, admitted his nuclear ambitions in the following terms: "Acquiring weapons for the defense of Muslims is a religious duty. If I have indeed acquired these weapons, then I thank God for enabling me to do so."(54)

He responded similarly in an ABC News interview in the same period, stating, "If I seek to acquire such weapons, this is a religious duty. How we use them is up to us."(55) Additional evidence of al-Qa'ida's efforts in this regard has emerged as a leaked Israeli intelligence report related that bin Ladin paid over 2 million pounds sterling to a middleman in Kazakhstan, who promised to deliver a "suitcase bomb" within two years. According to the report, the initiative was frustrated.(56)

The Arabic press reported efforts by al-Qa'ida also to acquire nuclear materials through contacts with organized crime in

Chechnya.(57) These reports also contained the claim that bin Ladin has created his own team of nuclear scientists from Muslim republics of the former Soviet Union. However, no concrete evidence exists, at least in the public domain, to indicate that al-Qa'ida has succeeded in its efforts in this area.

The obvious gravity of this possibility notwithstanding, a more immediate threat is the possibility that al-Qa'ida has acquired and may use the technology for producing a radiological bomb. Such devices (also known as "dirty bombs") consist of conventional explosives wrapped in radiological substances. When the explosives are detonated, the radioactive materials are spread across a wide area, bringing death and serious illness in their wake. The nuclear states of the world have generally proved successful in guarding the technology, knowledge and substances required for producing nuclear weaponry. By contrast, the materials required for producing a radiological bomb are not hard to acquire and the technological knowledge needed not prohibitive.

Many of the materials--such as strontium-90 and cesium-137--can be found in civilian industrial installations. There is strong evidence to suggest that al-Qa'ida has made considerable advances in this area. During his interrogation, senior al-Qa'ida member Abu Zubaida reportedly confirmed that the organization has already succeeded in constructing such a weapon.(58) Jamal Ahmad al-Fadl also revealed in courtroom testimony that after much effort, the organization had succeeded in constructing a radiological device using stolen radioactive materials.(59) An al-Qa'ida manual discovered by CNN in Kabul, entitled "Super bomb," contained a working blueprint for the production and detonation of a radiological bomb.(60) Also, a Thai national was arrested in June 2003 by Thai authorities, acting on an American tip-off, while in possession of 30kg of radioactive cesium-

137, possibly intended for use in a radiological bomb attack.(61)

Additional evidence of al-Qa'ida attempts to use a radiological bomb in a terror attack came with the arrest of an American, converted Muslim and former Chicago gang member Jose Padilla, in June 2002, on suspicion of attempting to construct a radiological bomb, with the intention of detonating it in an American city. Padilla's arrest was apparently the result of information given by Abu Zubaida under interrogation. Since Padilla has yet to be charged, and is being held as an "enemy combatant" at a naval facility in South Carolina, exact information on the nature of the plan in which he was involved is not available.(62)

To sum up this section, then, it may be said with reasonable confidence that al-Qa'ida possesses weapons capabilities in the biological, chemical and radiological areas. The evidence in support of the claim that the organization has made progress in its ambitions regarding nuclear weaponry is sketchy and unreliable.

THE INTERNATIONAL ANGLE

Which state actors, if any, may be aiding al-Qa'ida in the search for and development of weapons of mass destruction? Since the destruction of the Ba'athist regime in Iraq, the two states that should be looked at in considering this matter are Iran and Pakistan.

Iran

The United States considers that Iran is offering safe haven to al-Qa'ida operatives, including individuals actively involved in terrorism. After the attacks in Riyadh in May 2003, which killed 34 people, Defense Secretary Donald Rumsfeld openly accused Iran of harboring the organizers of the attacks, adding that the United States considered this to be in itself an act of terrorism. Among the al-Qa'ida operatives offered shelter by Iran is Saif al-Adel, an

Egyptian considered by some to be the number-three figure in al-Qa'ida.(63)

Iranian motivation for offering support to al-Qa'ida is clear, especially given that Tehran is the largest state sponsor of terrorism. Through its Islamic Revolutionary Guards Corps, it offers training, weaponry, and safe haven to a variety of terror organizations, including Hizballah, Islamic Jihad, and Hamas.(64) The Iranian regime and the increasingly powerful Revolutionary Guards Corps in particular remain wedded to an Islamist ideology which rejects the very existence of Israel on principle and maintains a complete and fierce hostility to the West.

Iran, while a signatory to the Nuclear Non-Proliferation Treaty and the Chemical and Biological Weapons Conventions, is actively seeking to develop an indigenous capability in these three areas. Regarding its nuclear ambitions, the regime in Tehran claims that its efforts, in fact, merely constitute a peaceful attempt to develop nuclear fuel capabilities. The evidence suggests otherwise. Iran has consistently sought to hide its activities from the International Atomic Energy Agency (IAEA). In June 2003, IAEA Director General Muhammad Baradai stated in a report to the organization's Board of Governors that Iran had failed "to meet its obligations... with the respect of reporting of nuclear material, the subsequent processing and use of that material and the declaration of facilities where the material was stored and processed."(65) Iran possesses ample non-nuclear energy resources, and thus there is no apparent purpose to its exploration of nuclear energy other than as a cover under which it may acquire expertise and materials necessary for weapons production.(66)

The evidence of Iranian chemical and biological capabilities is even less ambiguous. Iran is considered to retain a stockpile of weaponized chemical agents, despite the fact that Tehran has been a signatory to the Chemical Weapons Convention since 1997. Similarly, the

U.S. government considers that Iran has produced biological agents and possesses a "limited" ability to deploy them. Once again, Iran has sought to conceal development in this area within its extensive civilian bio-technical and pharmaceutical industry. In a recent non-compliance report, nevertheless, the U.S. government determined that Iran is capable of producing "at least rudimentary" biological warheads for a variety of delivery systems.(67)

This combination of an Islamist regime known for harboring and offering assistance to terrorists, and an established non-conventional capability would seem to make Iran the most likely candidate for affording al-Qa'ida aid in the development of its own non-conventional program. At least as far as open sources indicate, however, no evidence has so far come to light of systematic cooperation in this regard between Tehran and al-Qa'ida. There are a number of possible reasons for this. Iranian support for Islamist insurgent groups, while no doubt informed by Islamist ideology, is not divorced from the needs and interests of the Iranian state. Its extreme rhetoric notwithstanding, Iran does not seek at the present time to enter into an apocalyptic confrontation with the United States and the West. There is certainly no support among the Iranian public for such a move. Consequently, Iran has good reason for caution regarding cooperation on non-conventional weaponry with al-Qa'ida, an organization not restricted by considerations of geography or pragmatism, and committed to the idea of global jihad.

It is therefore perfectly feasible that Iran may continue with a policy of selective assistance to al-Qa'ida, allowing the organization some access to Iranian territory, while keeping its non-conventional programs hermetically sealed from involvement with non-state clients.

Pakistan

Pakistan, under President Pervez Musharraf, is an additional source of concern, despite its pro-Western orientation in terms of official policy. According to open-source evidence, elements within Pakistan continue to support Islamist forces in Afghanistan and Kashmir.(68) It is also suspected that bin Ladin has found refuge in the so-called Federally Administered Tribal areas close to the border with Afghanistan.(69) Concern regarding Pakistan centers on the combination of Pakistan's known non-conventional capabilities--most importantly, its nuclear capability--and the known sympathy of significant elements in the Pakistani security services for militant Islamist ideas and organizations.

During Operation Enduring Freedom, U.S. forces discovered documentation which revealed the presence of two Pakistani nuclear experts--Sultan Bashirudeen Ahmad and Abdul Majid, in Kandahar at a time when bin Ladin had also been there.(70) Under interrogation by the FBI, the two admitted that they had been present in Kandahar, but insisted that their visit was connected to a humanitarian organization with which they were involved. No conclusive evidence to the contrary emerged, and the two were eventually released.

Leakages and theft by Pakistani nuclear scientists are a matter of record.(71) So far, it is clear that information has been provided on the production of weapons of mass destruction by such means to Iran, Libya and North Korea. Indeed, reports indicate considerable panic in the Pakistani scientific and military communities at Colonel Qadhafi's recent announcement of the discontinuance of Libya's WMD program. They feared that the extent of Pakistani aid to Libya on this would now become apparent.(72)

The extent of complicity of the highest levels in Pakistan in this process is becoming clearer. Pakistan has been

revealed as the intellectual and material hub of a loose alliance of countries seeking to develop clandestine nuclear weapons programs. This alliance includes Iran and North Korea, and at one time also involved Libya. But the technological know-how and material came from Pakistan.(73) The fact that it was able to happen at a time when Musharraf repeatedly issued assurances that Pakistan's WMD capabilities were effectively controlled by the army gives cause for concern. Al-Qa'ida's links to the Lashkar-e-Toiba (LET or Jamaat al-Dawa) organization, which is supported by some members of the scientific elite in Pakistan, would be the most likely route for the organization to attempt to tap into Pakistani WMD knowledge. LET members have close access to members of Pakistan's military and intelligence establishment.(74)

CONCLUSIONS

The working assumption of intelligence professionals is that the use by al-Qa'ida of weapons of mass destruction is a matter of "when" rather than "if." Certainly, the organization wishes to acquire a capability in this area and to a considerable extent appears to have already done so. The question of the actual use of such weapons, however, remains worthy of consideration.

In an interview given to al-Jazira, senior al-Qa'ida activist Ramzi Bin al-Shibh depicted a long-term strategy which by its very nature would involve a certain restraint in the use of weapons and the level of destruction.(75) It should always be born in mind that al-Qa'ida employs violence in the service of an idea and as part of a political strategy, and not simply for destruction as an end in itself. The organization is pursuing a long-term strategy designed to bring about an "awakening" of Muslims worldwide. Eventually, it is hoped that this awakening and the consequent growth of militant Islamist movements across the

globe will eventually bring about the fall of the region's "godless" regimes.

Events in Iraq and Saudi Arabia are testimony to the extent to which the organization has enjoyed success in using violence to place its agenda at the center of world affairs. Terrorist violence is used to inspire Muslims, demonstrate the vulnerability of the seemingly powerful West, cause disruption, and instill an atmosphere of crisis and insecurity in society.

As such, it should not automatically be assumed that the possession of weapons of mass destruction by al-Qa'ida must imply their imminent use. The strategy is one of "a thousand cuts," of incremental, ongoing attacks, as described by bin Ladin.(76) Should a single attack be too extensive and apocalyptic, it would lead to a more determined response against the organization, and thus, could even prove counter-productive. It might be added that the very perception among its enemies that the network possesses a non-conventional capability is in itself a potent weapon in the hands of al-Qa'ida. If the goal, or one of the goals, is the spreading of uncertainty, insecurity, and disruption among the populations of Western democracies, then such a perception is of significance indeed.

Another element to be considered is the very great effectiveness that al-Qa'ida has already demonstrated using conventional means, as opposed to the relatively primitive nature, as far as we know, of the WMD in its possession and its ability to use them (e.g. one could compare the devastation of the September 11 to the subsequent anthrax attacks in the United States). This may lead the organization, for the moment at least, to prefer to keep within the boundaries of its proven competence, rather than risk using WMD. According to bin al-Shibh, for example, the organization cancelled a planned attack on a nuclear power plant because it feared unforeseen and perhaps uncontrollable results.(77) In this respect,

the motivation for not using WMD, while keeping the perception of its possession as a handy weapon of propaganda and psychological warfare is clear. At the same time, an employment of WMD which resulted in a limited number of casualties would severely dent the fear and panic factor associated with the perception that the network possesses a non-conventional capability. Hence, conventional attacks, causing maximum disruption, will certainly continue. Alongside this, al-Qa'ida will try and increase the quantity, variety and sophistication of the non-conventional means at its disposal.

Al-Qa'ida has a complete disregard for civilian casualties, and will continue to use terror to further its long-term Islamist revolutionary strategy. Despite considerable success by law enforcement and intelligence since September 2001, the network has not been destroyed, and is constantly adjusting its modus operandi in response to circumstances. The struggle between democracies and al-Qa'ida will remain one of the core issues shaping world affairs in the years to come.

**Dr. Jonathan Spyer has served as a special advisor on international affairs to Israeli Cabinet ministers. He is currently a Research Fellow at the Global Research in International Affairs Center, Herzliya, Israel.*

NOTES

1. See Statement by Vann H. Van Diepen, Director, Office of Chemical, Biological, and Missile Non-Proliferation, Department of State, to the Senate Governmental Affairs Committee Subcommittee on International Security, Proliferation and Federal Services, July 29, 2002. <<http://www.acronym.org.uk/docs/0207/doc07.htm>>.
2. For an overview of the threat of non-conventional weaponry in the hands of terror organizations see Amy Sands,

- "Deconstructing the Chem-Bio Threat: Testimony for the Senate Foreign Relations Committee," March 19, 2002.
3. Ibid.
4. Jean Chichizola, "Les Islamistes prepaient une arme chimique," Le Figaro, December 18, 2002.
5. Eliza Manningham-Buller, Speech given at conference on "The Oversight of Intelligence and Security," Royal United Services Institute, London, June 17, 2003 <<http://www.mi5.gov.uk/output/Page210.html>>.
6. Peter L. Bergen, *Holy War, Inc.* (London: Weidenfeld and Nicholson, 2001), p. 56.
7. Benjamin Orbach, "Usama Bin Ladin and Al-Qa'ida: Origins and Doctrines," Middle East Review of International Affairs (MERIA) Journal, Vol. 5, No. 4 (December 2001). <<http://meria.idc.ac.il/journal/2001/issue4/jv5n4a3.htm>>.
8. For an in-depth discussion of the role of the "Afghan Arabs" in the war against the Soviet occupation of Afghanistan, see Michael Rubin, "Who is Responsible for the Taliban," MERIA Journal, Vol. 6, No. 1 (March 2002) <<http://meria.idc.ac.il/journal/2002/issue1/jv6n1a1.html>>.
9. Rumors regarding the possible role of bin Ladin in the death of Azzam have proliferated. See Daniel Benjamin and Steven Simon, The Age of Sacred Terror (New York: Random House, 2002), pp. 103-4.
10. Interview with Usama bin Ladin in Barry Rubin and Judith Colp Rubin (eds), Anti-American Terrorism in the Middle East, a Documentary Reader (Oxford: Oxford University Press, 2002), p. 155.
11. Bernard Lewis, "License to Kill: Usama Bin-Ladin's declaration of Jihad," Foreign Affairs, Vol. 77, No. 6 (Nov./Dec. 1998), pp. 14-20.
12. Ibid., p. 14.
13. Yael Shahar, "Osama Bin-Ladin: Marketing Terrorism," August 22, 1998 <<http://www.ict.org.il>>.
14. Lisa Beyer, "The Most Wanted Man

- in the World," Time Magazine, September 2001.
15. Shaheen Chughtai, "Al-Qaida: Enemy of the States," al-Jazeera, November 9, 2003.
16. "USA vs. Usama Bin-Ladin, Testimony of Jamal Ahmad al-Fadl," February 6-7, 2001 in Rubin & Rubin (eds.), Anti-American Terrorism, pp. 169-172.
17. Alan F. Fogelquist, "Al-Qaeda and the Question of State Sponsorship," International Monitor Institute, August 2002.
<<http://eurasia-research.com/ga/archive/ercarchive/2002-08-29%20Al-Qaeda%20and%20State%20Sponsorship.htm>>.
18. "Declaration of War Against the Americans Occupying the Land of the Two Holy Places," Rubin & Rubin (eds.), Anti-American Terrorism, pp. 137-42.
19. Available at
<<http://www.fas.org/irp/world/para/docs/980223-fatwa.htm>>.
20. Bruce Auster, "The Recruiter for Hate," US News Online, August 31, 1998. <<http://www.usnews.com>>.
21. See Rohan Gunaratna, "The New al-Qaeda: Developments in the Post 9-11 Evolution of al-Qaeda," draft.
22. Ibid.
23. For further detail on advances made in counter-terror since September 11, see the Statement of Magnus Ranstorp to the National Commission on Terrorist Attacks Upon the United States, March 31, 2003
<<http://www.allamericanpatriots.com/mwsection+article+articleid-760.html>>.
24. Ibid.
25. Gunaratna, "The New al-Qaeda."
26. Ghaida Ghantous, "Qaeda group targets Europe for attacks," Reuters, July 2, 2004.
27. Audrey Kurth Cronin, "Al Qaeda after the Iraq conflict," Congressional Research Service report for Congress, May 23, 2003.
<<http://fpc.state.gov/documents/organization/21191.pdf>>.
- See also William Dalrymple, "Saudi Arabia Created the Monster Now Devouring it," The Guardian, June 14, 2004.
28. Various Authors, International Institute for Strategic Studies, Strategic Survey, 2003-4 (Oxford: Oxford University Press, May 2004).
29. Kimberly McCloud, Gary A. Ackerman, and Jeffrey M. Bale, "Al-Qa'ida's WMD Activities," Monterey Center for Nonproliferation Studies, January 21, 2003.
<http://cns.miis.edu/pubs/other/sjm_ch.htm>.
30. Manningham-Buller, speech to Conference on "The Oversight of Intelligence and Security."
31. Audrey Kurth Cronin, "Terrorist Motivations for Biological and Chemical Weapons use: placing the threat in context," Congressional Research Service, March 28, 2003, p.7.
<<http://www.fas.org/irp/crs/RL31831.pdf>>.
32. Judith Miller, "Labs Suggest Qaeda Planned to Build Arms, Officials Say," New York Times, September 14, 2002.
33. Transcript of CNN 'Insight' program, broadcast August 19, 2002.
<http://edition.cnn.com/TRANSCRIPTS/0208/19/i_ins.01.html>.
34. "Crude Weapons Site found in Afghanistan," Fox News, March 24, 2002.
<<http://www.foxnews.com/story/0,2933,48613,00.html>>.
35. Rory Carroll, "Four held in Rome after 'Islamist plot to poison water'," The Guardian, February 21, 2002.
36. Eric Croddy, Matthew Osborne, and Kimberly McCloud, "Chemical Terrorist plot in Rome," Monterey Center for Non-Proliferation Studies, March 11, 2002.
<<http://cns.miis.edu/pubs/week/020311.htm>>.
37. Ibid.
38. Ibid.
39. Jeffrey M. Bale, Anjali Bhattacharjee,

- Eric Croddy, Richard Pilch, "Ricin Found in London: An al-Qaida Connection?" Monterey Center for Nonproliferation studies, January 23, 2003.
<<http://cns.miis.edu/pubs/reports/ricin.htm>>.
40. Ibid.
41. Jonathan Weisman, "Possible Anthrax Lab Unearthed," USA Today, March 26, 2002; Matt Kelley, "Traces of Anthrax Found at Suspected al-Qaida Site," Associated Press, March 26, 2002.
42. Hisham al-Qarwi, "Bin Ladin's Local Deputies," Al-Arab al-Alamiyah (London), November 8, 2002. Al-Zarqawi has since, of course, risen to notoriety as a key figure in the leadership of the insurgency against Coalition forces in Iraq.
43. See Kate Noble, "The Science of Ricin," Time Europe Magazine, January 12, 2003.
44. Ely Karmon, "Countering NBC Terrorism," January 12, 2003.
<www.ict.org.il>.
45. "Al-Qaeda Chemical Attack in Jordan could have killed 80,000: Officials," Agence France Presse, April 26, 2004.
46. "Al Qaeda denies WMD Plot," BBC News, April 30, 2004.
47. Stewart Tandler, Michael Evans and Daniel Mcgrory, "Gang charged with Plot to hit UK with 'Dirty Bomb,'" The Times, August 18, 2004. See also "Anti-Terror Investigation: the Full Charges," The Guardian, August 18, 2004.
48. "Sarin Nerve Agent Bomb Explodes in Iraq," Associated Press, May 17, 2004.
49. John Haddon, "CB Protective Measures in the Commercial Environment," Royal United Services Institute (RUSI) Security Monitor, March 2003.
<<http://www.arup.com/securityconsulting/Issues/CB%20Issue%20paper.pdf>>.
50. Gary A. Ackerman and Jeffrey M. Bale, "Al-Qa`ida and Weapons of Mass Destruction," Monterey Center for Non-Proliferation Studies, December 31, 2002
<<http://cns.miis.edu/pubs/other/alqwmd.htm>>.
51. Ibid.
52. Arnaud de Borchgrave, "So Many Fingers on the Trigger," Washington Times, December 30, 2003.
53. Daniel Mcgrory, "Al-Qaeda's \$1m Hunt for Atomic Weapons," The Times, November 15, 2001.
54. Usama bin Ladin, interview with Time Correspondent, Time magazine, December 23, 1998.
55. Rahimullah Yousafzai, "Interview with Osama Bin-Ladin," ABC News, December 22, 1998
<http://more.abcnews.go.com/sections/world/DailyNews/transcript_binladen1_981228.html>.
56. Marie Colvin, "Holy War with us in his sights," The Times, August 16, 1998.
57. "Report links Bin-Ladin, nuclear weapons," al-Watan al-Arabi, November 13, 1998.
58. Gary A. Ackerman and Jeffrey M. Bale, "Al-Qa`ida and Weapons of Mass Destruction," Monterey Center for non-proliferation studies, December 31, 2002.
<<http://cns.miis.edu/pubs/other/alqwmd.htm>>
59. Ibid.
60. Martin Savidge, "Was Al-Qaeda working on a Super Bomb?" CNN Transcripts, January 24, 2002.
<<http://www.isis-online.org/publications/terrorism/transcript.html>>
61. Reuters, June 13, 2003.
62. Walter Pincus, "Zubaida, Senior Al-Qaida Member, Said to Provide 'Good' Information," Washington Post, August 30, 2002.
63. "US hunts al-Qaeda's new terror chief, special report," The Observer, May 25, 2003.
<<http://observer.guardian.co.uk/international/story/0,6903,963131,00.html>>.
64. Ely Karmon, "Hizballah and the War on Terror," August 1, 2002.
<<http://www.ict.org.il>>.
65. "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," Report of the Director

of the IAEA to the Board of Governors (GOV/2003/40), June 6, 2003, p. 7.

66. Ambassador Kenneth C Brill, "U.S. deplors quality of Iran's co-operation with IAEA inspections," June 22, 2004 <<http://www.iranvajahan.net/cgi-bin/news.pl?l=en&y=2004&m=06&d=21&a=13>>.

67. Paula A. DeSutter, Assistant Secretary for Verification and Compliance, "Iranian WMD and Support of Terrorism," Testimony Before the U.S.-Israeli Joint Parliamentary Committee, Washington, D.C., September 13, 2003.

<<http://www.state.gov/t/vc/rls/rm/24494.htm>>.

68. See, for example, Iffat Malik, "The Kashmir Factor," Al-Ahram Weekly, October 25-31, 2001.

69. Scott Baldauf, "New thrust in hunt for bin-Ladin," Christian Science Monitor, March 4, 2004.

70. B. Raman, "WMD Terrorism: Another Wake-Up Call From Pakistan," South Asia Analysis Group Paper no. 867, December 22, 2003.

<<http://www.saag.org/papers9/paper867.html>>.

71. See eg Elizabeth Neuffer, "A US Concern: Pakistan's Arsenal," Boston Globe, August 16, 2002.

72. See "N Korea sent Uranium to Libya," BBC News, May 23, 2004.

<<http://news.bbc.co.uk/2/hi/africa/3740289.stm>>.

73. For further information on Pakistan's central role in clandestine nuclear proliferation, see David E. Sanger and William J. Broad, "From Rogue Nuclear Programs, Web of Trails Leads to Pakistan," New York Times, January 4, 2004. Also Patrick E. Tyler and David E. Sanger, "Pakistan Called Libyans' Source of Atom Design," New York Times, January 6, 2004. And Raymond Bonner and Craig S. Smith, "Pakistani Said to Have Given Libya Uranium," New York Times, February 21, 2004.

74. See testimony of Bahukutumbi Raman to the House Committee on

International Relations, October 29, 2003.

<http://www.house.gov/international_relations/108/rama1029.htm>.

75. Ranstorp.

76. As described in bin Ladin's two-minute broadcast on al-Jazeera, October 6, 2002.

<http://news.bbc.co.uk/1/hi/world/south_asia/1585636.stm>.

77. Ranstorp.