

Nuclear Terrorism: Hype, Hoax or Waiting to Happen?

Nuclear ambitions and capabilities of terrorist organisations

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«Terrorists want a lot of people watching, not a lot of people dead.»
– RAND Corporation’s terrorism emeritus Brian Jenkins (1985)¹

«Today’s terrorists don’t want a seat at the table; they want to destroy the table and everyone sitting at it.»
– Former CIA Chief R. James Woolsey (1994)²

New trends in international terrorism

As illustrated by these two quotes, the nature of terrorism is changing. Traditionally, the main purpose of terrorism has been to get «a lot of people watching, not a lot of people dead». However, in the 1990s policy-makers and academics started talking about the emergence of a «new kind» of terrorism that was more violent and, seemingly, more arbitrary than previous terrorist incidents.³ It was within this framework that the subject of chemical, biological, radiological and nuclear (CBRN) terrorism also started to draw international attention, in particular after Aum Shinrikyo’s sarin gas attack on the Tokyo subway in March 1995, which killed 12 and injured several thousand.⁴

Statistically, the terrorist attacks of today have become fewer, but more deadly. In that sense, the use of the term «new terrorism» is justified. However, this should not lead us to think that terrorism is necessarily becoming more high-tech – rather it appears that the contrary is true.⁵ In a book on the «new terrorism» phenomenon, written in 1999, Jessica Stern opens by describing a mass-casualty attack on Manhattan, which, at least in retrospect, could make one

form of ominous associations with the September 11 attacks.⁶ The difference is that while Stern predicted an attack involving an atomic bomb, the September 11 attacks were carried out using commercial aircraft. This illustrates that a willingness to commit mass-casualty terrorism does not necessarily mean that the actor will seek to use CBRN materials.

Definition of nuclear terrorism and CBRN terrorism

Ferguson *et al.* have argued that there are four mechanisms by which terrorists may exploit nuclear assets to serve their ends:

1. Acquisition of an intact nuclear weapon
2. Acquisition of fissile material, i.e. weapons-grade highly enriched uranium (HEU) or plutonium, and the construction of an improvised nuclear device
3. Attacks against nuclear facilities
4. Acquisition of radiological materials to be used in a radiological dispersal device (RDD).⁷

Ferguson's study uses a broad approach to the study of nuclear terrorism, including both incidents that cause nuclear explosions and incidents that cause radioactive contamination. It should be stressed, however, that nuclear and radiological terrorism represent two very different scenarios: The effects of radiological contamination may be devastating, but at the same time they can hardly be compared to the effects of a nuclear explosion. Also, while it is extremely hard for sub-state actors to obtain a sufficient amount of fissile material (HEU or plutonium) to construct a nuclear device, radioactive materials have a number of commercial usages, and are therefore presumed to be a more feasible option. In order to avoid confusion regarding the term «nuclear terrorism», this chapter will distinguish between «nuclear terrorism» (causing a nuclear explosion) and «radiological terrorism» (causing radioactive contamination).

Although the topic of this chapter is *nuclear* terrorism, the discussion will largely be based on analysing the *CBRN* intentions and capabilities of terrorist organisations. The simple reason for this is that there are currently no known examples of a sub-state actor ever being close to manufacturing or obtaining a nuclear weapon or device. In order to discuss empirical cases that illustrate the current intentions and capabilities of sub-state actors in the field of nuclear terrorism, it is necessary to look more broadly at cases

that have involved various types of CBRN materials and devices, instead of restricting the discussion to nuclear terrorism only. As of today, nuclear terrorism remains a hypothetical scenario, although there are several examples of terrorists attempting to use chemical, biological and (to a lesser extent) radiological materials with at least the intention, if not the capability, of causing mass destruction. Analysing these cases may also give an indication of where nuclear terrorism actually stands today.

For the purpose of this chapter, «CBRN terrorism» is understood as «chemical, biological, radiological or nuclear means to achieve a mass-impact terror incident in terms of physical, psychological and social effects». ⁸ «CBRN weapons» and «non-conventional weapons» are used as synonyms. The term «CBRN weapons» was preferred over the more common term «weapons of mass destruction» due to the ambiguities connected to the latter. While there are hardly any historical examples of CBRN terrorism causing «mass destruction», in the real sense of the word, there are several examples of conventional terrorism causing mass casualties. When discussing the phenomenon of non-conventional terrorism, it therefore makes more sense to define the weapon or device in terms of its components (CBRN material), rather than in terms of its effects (mass destruction).

The term «weapons of mass destruction» is widely used, however, also in al-Qaida's own literature and discourse. When al-Qaida members have talked about weapons of mass destruction (*asliha al-damar al-shamil*) the term usually refers to state-produced nuclear, biological or chemical weapons. But the term «weapons of mass destruction» may also be used as a rhetorical tool or as a form of psychological warfare. The quote below, taken from an insider account of discussions taking place within al-Qaida's Shura council prior to 2001, may serve to illustrate this. According to the account, some al-Qaida members argued that due to technical obstacles, al-Qaida would never be capable of obtaining but a «primitive» CBRN capability. Nevertheless, such a capability should be pursued: «...this type of weapons, if bin Laden could obtain them, would be tactical by virtue of its primitiveness and weak destructive capability. However, they will *continue to call it «weapons of mass destruction» to create fear* [emphasis added]». ⁹

Characteristics of past CBRN terrorists

As already mentioned, there are hardly any historical examples of terrorism involving «weapons of mass destruction» in the real

sense of the word. The two most serious cases of terrorism involving CBRN materials in recent years are probably Aum Shinrikyo's attack on the Tokyo subway with sarin gas in March 1995,¹⁰ and the so-called «anthrax letters» that caused widespread panic on the East coast of the US in the fall of 2001. The anthrax spores that were spread through the U.S. postal system killed five and infected a total of 23.¹¹ In spite of frequent reports of attempted smuggling and black-market trade with radioactive or nuclear materials, there are very few examples of such material actually being acquired or used by terrorist groups. An infamous incident occurred in 1995, when Chechen separatists placed a package with a small amount of the radioactive isotope caesium-137 in a park in Moscow, followed by a tip-off to the Russian press. There was no attempt to disperse the material, however.

There are several assumptions about what kind of groups that would be most likely to carry out an attack with CBRN materials or devices. These assumptions are often made by analysing what kinds of groups that have planned or committed acts of chemical or biological terrorism in the past. In *Toxic Terror*, Tucker *et al.* have closely examined twelve historical cases of chemical and biological terrorism, occurring between 1945 and 1998, in order to pinpoint the characteristics and motivations of such groups. The cases include suspected, planned and actual use of chemical or biological agents by sub-state actors. Cases of radiological and nuclear terrorism were not included in Tucker's study due to the lack of historical examples of such cases at the time. The study concluded that the groups engaging in chemical and biological terrorism had very diverse motivations for doing so, although a set of common characteristics could be identified. Rather than having a political motivation, the individuals or groups were motivated by «religious fanaticism, supremacist ideology, or apocalyptic prophecy», and the terrorists «... manifest personality traits of paranoia and grandiosity, are innovative in their use of violence, tend to escalate [their violence] over time, typically have no clearly defined base of political support and hence are unconcerned about adverse public opinion, and are often convinced that they are fulfilling a divine command or prophecy that legitimates murder».¹²

One example of a group displaying all of these characteristics is The Covenant, Sword and Arm of the Lord (CSA), founded in Arkansas in the 1970s. It was a right-wing, white supremacist group inspired by the Christian Identity movement, who planned to commit mass murder by poisoning the water supplies of several

US cities with potassium cyanide. The objective was to «hasten the return of Messiah by *carrying out God's judgements* against unrepentant sinners». ¹³ It used very selective interpretations of the Bible to justify its ideology, in a way resembling that of militant Islamists (ab)use Koranic verses. The Japanese cult Aum Shinrikyo, also described in detail in Tucker's study, represents the largest known effort by a terrorist group to produce and disseminate chemical and biological agents. Similar to the CSA, it was also driven by a mixture of apocalyptic ideology, paranoia, defensive aggression and a charismatic leadership.

Even before the September 11 attacks, militant Islamists were singled out as potential CBRN terrorists because of their expressed willingness to kill thousands of people. The clearest example of this was the bombing of the World Trade Center in 1993, which apparently had intended to make the towers collapse. ¹⁴ Al-Qaida's attacks on New York and Washington on September 11 2001 left no doubt about these intentions. Still, it is an undeniable fact that the majority of terrorist attacks carried out by militant Islamists so far have been conventional in nature. After September 11, while Western analysts and policy-makers were expecting al-Qaida to carry out a devastating CBRN attack within few years, ¹⁵ conventional bombs went off in London and Madrid, killing 243 and injuring more than 2,500. ¹⁶ The case of Madrid also suggests that al-Qaida's short-term strategic goals (in this case, influencing the Spanish election results to cause a pullout of Spanish forces from Iraq), can very well be achieved by the use of conventional explosives. ¹⁷ The rest of this chapter will analyse the CBRN intentions and capabilities of the al-Qaida network in somewhat more detail.

Al-Qaida's CBRN intentions and capabilities

The role of CBRN weapons in al-Qaida's discourse

Generally, two types of statements about CBRN weapons can be found in al-Qaida's discourse: statements providing *moral and religious justifications* for the use of CBRN weapons, and statements providing a *strategical rationale* for their use.

Through a series of statements, al-Qaida ideologues have attempted to legitimise the acquisition and use of CBRN weapons. In an interview with *TIME Magazine* published in January 1999, Osama bin Laden reportedly said that it is a «religious duty» for Muslims to acquire weapons to defend Muslims, including chemical

and nuclear weapons.¹⁸ While bin Laden stressed that CBRN weapons should be used for defensive purposes only, later ideologues took a more aggressive stand, such as Sulayman Abu Ghayth, a spokesman of the al-Qaida network. In an article published on the *al-Neda* website¹⁹ in June 2002, entitled «In the Shadow of the Lances», he pointed out the atrocities already committed by the U.S. against Muslim populations, including the mass killing of people, and the alleged use of chemical and biological weapons. Based on the principle of equal retaliation, he argued: «We have not reached parity with them. We have the right to kill four million Americans – two million of them children – and to exile twice as many and wound and cripple hundreds of thousands. Furthermore, it is our right to fight them with chemical and biological weapons, so as to afflict them with the fatal maladies that have afflicted the Muslims because of the [Americans’] chemical and biological weapons.»²⁰

The call for retaliation and revenge against America and Israel’s direct and indirect killing of millions of Muslims is echoed by several other statements, usually backed up by quoting from the Koranic verse (2:194): «If then any one transgresses the prohibition against you, Transgress ye likewise against him.»²¹ However, the most significant statement regarding the legitimacy of CBRN weapons was a fatwa issued by a well-known militant Islamic scholar in Saudi Arabia, Nasir bin Hamd al-Fahd, in May 2003: «The attack against it [the United States] by weapons of mass destruction is accepted, since Allah said: «If you are attacked you should attack your aggressor by identical force. Whoever looks at the American aggression against the Muslims and their lands in recent decades concludes that it is permissible... Some brothers have totalled the number of Muslims killed directly or indirectly by their weapons and come up with a figure of nearly 10 millions.»²²

Al-Fahd’s ruling was based on the same argumentation that Abu Ghayth and others had used previously, namely that of equal retaliation, but carried considerably more weight because it came from a religious cleric with an authority to interpret the Koran and issue legal rulings. It is not clear whether there is any connection between al-Qaida and the issuance of the fatwa, but in any case, should al-Qaida members decide on carrying out a CBRN attack against the U.S., they would be able to cite this fatwa to deflect criticism for violating Islamic law.

In addition, Osama bin Laden himself has repeatedly warned the United States that an attack more deadly and destructive than September 11 will befall them if they do not mend their ways and

stop their aggression against Muslims. He has in several statements urged Americans to change their government's policies by the power of the vote. By doing so, he has covered his back against criticism levelled against him from Islamic circles that the September 11 attack was a violation of the Islamic injunction that Muslims should not attack their enemies before warning them beforehand and calling them to repentance and conversion to Islam.²³ He has thereby proved that «he has exhausted every available means to prevent the necessity of using weapons of mass destruction against the Americans».²⁴

Another part of al-Qaida's CBRN discourse is of a strategic rather than a religious character. In the late 1990s, there was apparently a debate within the al-Qaida leadership on the necessity of obtaining CBRN weapons. According to Mustafa Hamid, better known as Abu Walid al-Masri, an al-Qaida insider who wrote a detailed account of the history of the Arab Afghans, the issue was raised because some members were concerned that the U.S. might attack Muslims, and especially Afghanistan, with CBRN weapons.²⁵ The «hawkish» wing in al-Qaida's Shura council argued that in order to defend Muslims, and to retaliate in case of an attack, there was a strategic need for al-Qaida to obtain such weapons as well. Others completely opposed this view, pointing to the risk of provoking a U.S. attack, to lose popular support, and other factors. According to al-Masri, Osama bin Laden was at this point convinced that the war against the U.S. could be fought with conventional means, but nevertheless the «hawks» were allowed to pursue their CBRN development plans.²⁶

Mustafa bin Abd al-Qadir Setmariam Nasar, better known as Abu Mus'ab al-Suri, has been portrayed as the clearest example of an al-Qaida theorist providing a strategic rationale for the use of CBRN weapons against the U.S.²⁷ In his main strategy book, *The Global Islamic Resistance Call*, he points out the extreme imbalance of power between the Muslim world and the U.S., and argues that obtaining and using CBRN weapons against the West is the only way to redress this balance. Al-Suri is often quoted for talking in favour of CBRN weapons, and in one of his most infamous statements, he said that if he had been involved in the planning of the September 11 attacks, he would have filled the planes with weapons of mass destruction.²⁸ A closer study of al-Suri, however, reveals that this is more a characteristic of his blunt, often sarcastic style of expression than a core idea of his strategic thinking.²⁹

In a lecture held in Kabul, 1999, al-Suri described nuclear weap-

ons as «...quick and easy and can be obtained from most mafias in the world»,³⁰ and encouraged his audience to carry out CBRN attacks in Western countries. By the time he finished *The Global Islamic Resistance Call*, more than three years after September 11, and the destruction of al-Qaida's sprawling training complexes in Afghanistan, he had apparently realised that obtaining CBRN weapons was outside the reach of al-Qaida. Although the role and importance of CBRN weapons are briefly touched upon in *The Global Islamic Resistance Call*, he emphasises early on that his strategy is one of «exhausting the enemy, not demolishing him». Viewing the current security environment as extremely harsh, he argues that the era of hierarchical organisations has ended, and that resistance has to rely on acts of «individual terrorism» carried out by small cells with no organisational ties except a common ideology. Similar to Louis Beam's *Leaderless Resistance* concept, he envisions the *Global Islamic Resistance* as a campaign of small- and medium-scale terrorist operations that are difficult to counter because they spring out from individual initiatives, rather than from a central organisation.³¹ It is, therefore, a misconception that CBRN weapons occupy a central part in al-Suri's strategic thinking, at least in his post-2001 writings.³²

This brief overview suggests that although non-conventional weapons have not played a central part in al-Qaida's discourse, al-Qaida has made certain efforts at legitimising the use of CBRN weapons against the West, both in religious, moral and strategic terms. Initially, CBRN weapons were described as deterrent weapons, but after September 11 it has become more common to describe them as legitimate first-strike weapons. This does not necessarily mean that al-Qaida has become more determined to actually *obtain* a non-conventional capability. In order to get a more accurate picture of al-Qaida's CBRN ambitions, it is necessary to also look at al-Qaida's actual activities in this field.

Al-Qaida's CBRN activities

Most accounts agree that Osama bin Laden's interest in non-conventional weapons started in the early 1990s, when he allegedly tried to purchase uranium in Sudan.³³ Most of this information stems from the trial following the bombing of the American embassies in Kenya and Tanzania on 7 August 1998. In the trial, Jamal Ahmad Al-Fadl, a former al-Qaida member and U.S. government informant, stated in his testimony that al-Qaida had tried to buy uranium in Sudan

in the early 1990s, and that he himself attended a meeting in order to purchase what he expected to be enriched uranium.³⁴ Apart from this, however, there is little evidence of al-Qaida's CBRN efforts in this early period.

When bin Laden moved with his followers to Afghanistan in 1996, he allegedly continued the efforts to acquire an unconventional capability. Rumours of al-Qaida's possession of various types of CBRN weapons, including portable nuclear arms, started to multiply in the late 1990s. Of the most dubious accounts is a story that appeared in *al-Watan al-Arabi* in November 1998: the story held that in September 1998, Osama bin Laden bought «more than twenty» nuclear warheads from the Chechen mafia for US\$ 30 million and two tonnes of heroin.³⁵ Such stories are widely disregarded by experts, however, as no hard evidence has ever been presented to verify the claims. Another controversial claim is that the al-Shifa pharmaceutical plant in Sudan, which was bombed by the US in 1998, was producing chemical warfare agents for Osama bin Laden.³⁶ The numerous unverified reports on al-Qaida's alleged possession of unconventional weapons have probably contributed to scare public opinion rather than to illuminate the nature of the threat.

Coming in the aftermath of Aum Shinrikyo's sarin gas attacks in Japan, the concern about CBRN terrorism seemed to overshadow all other concerns about, for example, the potential lethality of inventive forms of conventional terrorism.

On the other hand, it is widely agreed that during the Afghanistan period (1996–2001), al-Qaida members reviewed open-source information on CBRN materials and weapons, and conducted experiments with crude chemicals and toxins. Possibly, they also attempted to recruit nuclear scientists and to purchase viable biological and chemical warfare agents.³⁷ According to documents found in Kabul by a journalist from the *Wall Street Journal*, al-Qaida had a CBRN programme codenamed *zabadi* (curdled milk), with an initial budget of 2,000–4,000 USD. (In comparison, it is claimed that the Aum Shinrikyo cult invested a total of 30 million USD in its sarin manufacture programme alone.³⁸) These figures, along with documents and facilities found in Afghanistan after the 2001 invasion, indicate that to the extent al-Qaida had a «CBRN programme» it was merely in an early conceptual phase by 2001, carried out by a few dedicated people within the al-Qaida core. One reason why al-Qaida did not dedicate more time and resources to pursuing a non-conventional capability, might have been that there were internal disagreements within al-Qaida on whether or not to

pursue such a programme, as reflected by Abu Walid al-Masri's account of the Shura council discussions mentioned above.

The Dhiren Barot case from 2004 is probably the most serious al-Qaida plot we know of that has included radioactive materials. Dhiren Barot planned to construct a «dirty bomb» from americium-241, gathered from 10,000 smoke detectors (a plan that most experts agree would not work, due to the small amount of material, but the attack might still have caused widespread panic and fear). He allegedly presented his final plans to senior al-Qaida commanders in Pakistan in February–March 2004, before returning to Britain in April the same year.³⁹ He was then arrested, and in November 2006 sentenced to life imprisonment by the British. In June 2007, seven co-conspirators received jail sentences from 15 to 26 years for playing supporting roles in the plot.⁴⁰

Documents written by Barot reveal that he had conducted considerable research into RDDs, drawing from open sources. In particular, he had used a report published by the Center for Non-proliferation Studies in 2003, in which the dangers of commercially available radioactive sources were discussed.⁴¹ When discussing what radioactive material would be most suitable, he emphasised that ease of access was more important than the strength of the hazard. Americium-241, which can be found in small amounts in smoke detectors, was therefore found to be a more attractive choice than for example the powerful radioactive sources found in hospitals, as «security is tight in these places». He also noted that an RDD «... does not need to cause casualties to be effective as long as it causes disruption and panic, and requires a costly clean-up».⁴² The core of his plan was not the «dirty bomb», however, but a series of conventional explosions set off in underground car parks. The plan, known as the «gas limos project» consisted of blowing up several limousines filled with explosives and gas canisters. The purpose of the «dirty bomb» seems mainly to have been to cause additional chaos and disruption.

Concluding remarks

Judging from al-Qaida's own publications and practices, there is little evidence that al-Qaida's interest in CBRN weapons has increased after 2001, despite numerous claims to the contrary.⁴³ For example, there are no strong indications that al-Qaida would prefer CBRN weapons over other kinds of devastating tactics, which may partly explain why al-Qaida has not dedicated more time

and resources to pursuing a non-conventional capability. On the contrary, al-Qaida seems to have planned or considered a range of operations involving conventional explosives or hijacked airplanes after September 11. The September 11 mastermind, Khalid Shaykh Mohammad, stated during interrogations that he had plans for a second wave of attacks on the U.S. that was to be carried out in the same way as the September 11 attacks, targeting the Empire State Building and other high-rise buildings on American soil.⁴⁴ He also alleged to have been involved in a number of other plots, a majority of which were aimed at destroying various buildings, bridges, planes and ships. CBRN materials were not mentioned as a part of any of these plots, except for in one instance where he claimed responsibility for «... surveillance needed to hit nuclear power plants that generate electricity in several U.S. states».⁴⁵ Since obtaining militarily effective CBRN weapons, under the present security environment, is extremely difficult, al-Qaida will most probably continue to do what it does best, namely to carry out attacks with truck bombs and conventional explosives or by exploiting the built-in vulnerabilities of modern society.

Notes

- 1 Quoted in Brian Jenkins, «Will terrorists go nuclear?», *Orbis* 29 (3) (Fall 1985), 511.
- 2 Quoted in: *Countering the changing threat of international terrorism*, Report from the National Commission on Terrorism, June 2000.
- 3 See, for example, Jessica Stern, *The ultimate terrorists*, 3rd printing (Cambridge: Harvard University Press, 2000), 8.
- 4 Aum Shinrikyo was a Japanese doomsday cult that carried out a series of attacks with biological and chemical materials between 1990 and 1995. The attack with sarin gas on the Tokyo subway in March 1995 was the deadliest and most well-known of these attacks.
- 5 Adam Dolnik, *Understanding terrorist innovation: Technology, tactics and global trends* (New York: Routledge, 2007), 53.
- 6 Stern, *The ultimate terrorists*, 1–3.
- 7 Charles Ferguson et al., *The Four Faces of Nuclear Terrorism*, Monterey: CNS, 2004: 3.
- 8 This definition was formulated by the Centre for Asymmetric Threat Studies (CATS) in Stockholm.
- 9 Abu Walid al-Masri, «The story of the Arab Afghans from their arrival in Afghanistan until their departure with the Taliban» (in Arabic). *Al-Sharq al-Awsat*, 8–28 December 2004.
- 10 Detailed accounts of Aum Shinrikyo's CBRN efforts can be found in Jonathan B. Tucker (ed.), *Toxic terror: Assessing terrorist use of chemical and biological weapons* (Cambridge: MIT Press, 2000): 207–226; Jonathan B. Tucker, *War of nerves: Chemical warfare from World War I to al-Qaeda* (USA: Pantheon, 2006): 326–350; and Anthony T. Tu, *Chemical terrorism: Horrors in the Tokyo subway and Matsumoto city* (Alaken, Inc., 2002).
- 11 See «The anthrax letters», *Council on Foreign Relations*, updated January 2006, <http://>

- www.cfr.org/publication/9555/ (accessed 8 July 2007).
- 12 Tucker, *Toxic terror*, 266–267.
 - 13 *Ibid.*, 139.
 - 14 *Ibid.*, 202.
 - 15 See for example, «Letter dated 17 April 2003 from the Permanent Representative of the United States of America to the United Nations addressed to the Chairman of the Committee», *United Nations Security Council* (22 April 2003), <http://www.globalsecurity.org/security/library/report/2003/n0335167.pdf> (accessed 14 Nov 2007).
 - 16 «Madrid train attacks: Introduction», *BBC News*, undated, <http://news.bbc.co.uk/2/shared/spl/hi/guides/457000/457031/html/default.stm> (accessed 25 July 2007); «7 July bombings: Overview», *BBC News*, undated, http://news.bbc.co.uk/2/shared/spl/hi/uk/05/london_blasts/what_happened/html/default.stm (accessed 25 July 2007).
 - 17 For more on this, see Brynjar Lia and Thomas Hegghammer, «Jihadi strategic studies: The alleged Al Qaeda policy study preceding the Madrid bombings», *Studies in Conflict and Terrorism* 27 (2004): 355–375.
 - 18 «Wrath of God: Osama bin Laden lashes out against the West», *TIME Asia* 153, No.1 (January 11, 1999), <http://www.time.com/time/asia/asia/magazine/1999/990111/osama2.html> (Accessed 25 June 2007).
 - 19 *Al-Neda* (www.alneda.com) was a well-known al-Qaida outlet. The link no longer works.
 - 20 Suleyman Abu Ghayth, quoted in «Contemporary islamist ideology authorizing genocidal murder», *MEMRI Special Report*, no. 25, <http://memri.org/bin/articles.cgi?Page=archives&Area=sr&ID=SR2504> (accessed 25 June 2007).
 - 21 Translation by Yusuf Ali, via www.searchtruth.com (accessed 25 June 2007).
 - 22 Nasir bin Hamd al-Fahd, «A treatise on the legal status of using weapons of mass destruction against infidels» (in Arabic), Rabi‘i 1423h (May 2003). See translation and analysis in Reuven Paz, «YES to WMD: The first islamist fatwah on the use of weapons of mass destruction», *PRISM Series of Special Dispatches on Global Jihad* No. 1, www.e-prism.org/images/PRISM%20Special%20dispatch%20no%201.doc (accessed Oct 2004).
 - 23 See discussion in Anonymous, *Imperial hubris: Why the West is losing the war on terror*, Washington: Brassey’s, 2004: 152–154.
 - 24 *Ibid.*, 157.
 - 25 Abu Walid al-Masri, The story of the Arab Afghans from their arrival in Afghanistan until their departure with the Taliban (in Arabic). *Al-Sharq al-Awsat*, 8-28 December 2004.
 - 26 The story of the Arab Afghans from their arrival in Afghanistan until their departure with the Taliban. Part (1), *al-Sharq al-Awsat*, 8 December 2004.
 - 27 See, for example, Robert Wesley, «Al-Qaida’s WMD strategy after the U.S. intervention in Afghanistan», *Terrorism Monitor* 3 (20) (21 Oct 2005), http://www.jamestown.org/terrorism/news/article.php?issue_id=3502
 - 28 «Communique from the office of sheikh Abu Mus‘ab al-Suri in response to the statement by the U.S. Department of State (in Arabic), 27 December 2004. Downloaded via al-Suri’s website at www.deluxesuperhost.com/~morshid/tophacker/index.php?subject=18rec=29 (accessed Jan 2005).
 - 29 See Brynjar Lia, *Architect of Global Jihad: The Life of Al Qaeda Strategist Abu Mus‘ab Al-Suri*, London and New York: Hurst and Columbia University Press, 2007, especially pp. 303–317.
 - 30 Quoted in *ibid.*, 316.
 - 31 *Ibid.*, 6.
 - 32 *Ibid.*, 305.
 - 33 Rohan Gunaratna, *Inside al Qaeda: Global network of terror*, New York: Berkley Books, 2002: 49.
 - 34 «United States of America v. Usama bin Laden, et al., Defendants», *United States District Court, Southern district of New York* (see transcripts from 7, 13 and 20 February, 2001),

- <http://cryptome.org/usa-v-ubl-dt.htm> (accessed 19 Dec 2007).
- 35 It was perhaps this story that Ayman al-Zawahiri mocked when he allegedly told the Pakistani journalist Hamid Mir in late 2001 that «Mr. Hamid Mir it is not difficult [to purchase nuclear weapons]. If you have thirty million dollars, you can have this kind of suitcase bombs from the black market of central Asia». The existence of so-called «suitcase nukes» has been widely dismissed by nuclear experts. Peter Bergen, *The Osama bin Laden I know: An oral history of al Qaeda's leader* (New York: Simon & Schuster, 2006): 348–349; Anonymous, *Through our enemies' eyes: Osama bin Laden, radical Islam, and the future of America* (Washington D.C.: Brassey's, 2003): 191–192.
 - 36 Peter Bergen, *Holy War, Inc.: Inside the secret world of Osama bin Laden*, 4th ed. (London: Phoenix, 2003): 126–129.
 - 37 For example, two Pakistani nuclear scientists were arrested and charged with providing support to Osama bin Laden, but were later released. Bergen, *Holy War, Inc.*, 243–244.
 - 38 Adam Dolnik, *Understanding terrorist innovation: Technology, tactics, and global trends* (Oxon: Routledge, 2007): 76.
 - 39 Duncan Gardham, «Average student who met 9/11 mastermind», *Telegraph*, 17 June 2007, <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/06/15/nbomb315.xml> (accessed 8 July 2007); and Craig Whitlock, «Homemade, cheap and dangerous», *Washington Post*, 5 July 2007 A01, <http://www.washingtonpost.com/wp-dyn/content/>
 - 40 «UK al-Qaeda cell members jailed», *BBC News* 15 June 2007, http://news.bbc.co.uk/2/hi/uk_news/6755797.stm (accessed 20 June 2007).
 - 41 Charles D. Ferguson, Tahseen Kazi, and Judith Perera, «Commercial radioactive sources: Surveying the security», Center for Nonproliferation Studies, January 2003, <http://cns.miis.edu/pubs/opapers/op11/> (accessed 2 Oct 2007).
 - 42 Dhiren Barot, «Rough presentation for Gas Limos Project», 34. Accessed via *Metropolitan Police Homepage*, <http://www.met.police.uk/pressbureau/rhyme/> (accessed 22 Oct 2007).
 - 43 See, for example, Reuven Paz, «Global jihad and WMD: Between martyrdom and mass destruction», *Society for Internet Research*, 25 Sept 2005, <http://www.sofir.org/sarchives/005026.php> (accessed 29 Aug 2007).
 - 44 «Substitution for the testimony of Khalid Sheikh Mohammed», *U.S. v. Moussaoui*, <http://www.rcfp.org/moussaoui/pdf/DX-0941.pdf> (accessed 29 June 2007); «Verbatim Transcript of Combatant Status Review Tribunal Hearing for ISN 10024 [Khalid Shaykh Mohammad]», *United States Department of Defense*. Available on http://www.defenselink.mil/news/transcript_ISN10024.pdf (accessed 29 June 2007).
 - 45 «Verbatim Transcript of Combatant Status Review Tribunal Hearing for ISN 10024 [Khalid Shaykh Mohammad]», *United States Department of Defense*, 19.

