

## Archived Content

Information identified as archived on the Web is for reference, research or record-keeping purposes. It has not been altered or updated after the date of archiving. Web pages that are archived on the Web are not subject to the Government of Canada Web Standards.

As per the [Communications Policy of the Government of Canada](#), you can request alternate formats on the "[Contact Us](#)" page.

## Information archivée dans le Web

Information archivée dans le Web à des fins de consultation, de recherche ou de tenue de documents. Cette dernière n'a aucunement été modifiée ni mise à jour depuis sa date de mise en archive. Les pages archivées dans le Web ne sont pas assujetties aux normes qui s'appliquent aux sites Web du gouvernement du Canada.

Conformément à la [Politique de communication du gouvernement du Canada](#), vous pouvez demander de recevoir cette information dans tout autre format de rechange à la page « [Contactez-nous](#) ».

CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES  
JCSP 35 / PCEMI 35

MASTER OF DEFENCE STUDIES

MDS RESEARCH PROJECT/PROJET DE RECHERCHE MED

**NUCLEAR TERRORISM – IS IT INEVITABLE?**

By/par: Lieutenant-Colonel Martin A. Lipcsey

*This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.*

*La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale*

## TABLE OF CONTENTS

<b>ABSTRACT.....</b>	<b>ii</b>
<b>PART I – INTRODUCTION .....</b>	<b>1</b>
<b>PART II – HISTORICAL ROOTS OF TERRORISM.....</b>	<b>5</b>
<b>PART III – ORIGINS OF RADICAL ISLAM .....</b>	<b>13</b>
<b>PART IV – AL-QAEDA: ROOTS, IDEOLOGY AND CAPABILITIES .....</b>	<b>21</b>
<b>PART V – SOURCES OF WEAPONS OF MASS DESTRUCTION .....</b>	<b>35</b>
<b>PART VI – WMD THREAT RESPONSE IN WESTERN DEMOCRACIES.....</b>	<b>50</b>
<b>PART VIII – THE WAY AHEAD: SOLUTIONS TO NUCLEAR TERRORISM..</b>	<b>60</b>
<b>PART VIII – CONCLUSION .....</b>	<b>71</b>
<b>BIBLIOGRAPHY .....</b>	<b>75</b>

## ABSTRACT

This paper examines the possibility of nuclear terrorism. After an initial examination of terrorism's historical origins, this paper conducts an analysis of Al-Qaeda's roots, ideology, and capabilities and demonstrates that the organization intends to conduct a nuclear attack to further its strategic long term goals. This course of action has been made plausible because of the global availability of abundant nuclear technology and materials. These materials can be acquired through state-sponsorship, theft, or from the black market. Efforts aimed at reducing nuclear material throughout the world have fallen seriously short due to insufficient funding, a lack of political will, and poorly directed foreign policies. This paper provides recommendations to reduce the risk of nuclear terrorism that include taking a more proactive approach to reducing nuclear material stockpiles, shifting Western nations' foreign policies, and focusing strategic effort on defeating would-be nuclear terrorists. When combined, these initiatives will minimize the existing threat of nuclear terrorism.

*This is jihad, the sacrifice for God, the testament of martyrdom, the stunning, impressive horror of the power of faith for the witnesses, and the cataclysmic, millenarian violence that will, through the sheer creative power of destruction, instigate the Muslim world, and the cleansing violence of the battle itself, the unleashing of apocalyptic power which will cause cataclysmic change. From the ashes will rise a new world order.*<sup>1</sup>

Jason Burke  
Al-Qaeda: The True Story of Radical Islam

## **PART I – INTRODUCTION**

Though terrorism and attacks against civilians have taken place for centuries, the events of 9/11, with their mix of brutality and sophistication, have fundamentally changed our views on the subject. More importantly, they have reawakened and focused strong sentiment pitting two cultures against each other: liberal Western democracies and fundamentalist Islamic societies. This growing divide demonstrates the fragility of the world order. Though both cultures are not in open war, attacks such as 9/11 have certainly increased the friction between the ideologies. This friction has had a profound effect on the evolution of contemporary terrorism. Non-state actors, such as Al-Qaeda, have emerged as a serious threat to global stability. The 9/11 attacks on the United States' (US) sovereign soil demonstrated the extent to which a motivated group has become willing to strive for and reach in order to achieve its objectives. To complicate matters, the US invasion of Iraq has galvanized the forces that seek to destroy Western democracies and the contemporary global order. This paper intends to demonstrate that as a result of the proliferation of weapons of mass destruction (WMD) and the effects of

---

<sup>1</sup> Jason Burke, *Al-Qaeda: The True Story of Radical Islam* (New York: I.B. Tauris & Co Ltd, 2004), 38.

globalization in an increasing anti-Western global climate, the likelihood of a nuclear strike against a Western state by a terrorist group such as Al-Qaeda has increased from a possibility to a near certainty.

This paper begins by examining the history of terrorism from its origins up to and including modern trends and future possibilities. From historical assassinations for political gain to modern day religious and political unrest, terrorism and various forms of its application have shaped nations and global relations. The radicalization of Islam, particularly in the last half-century, will also be examined because of its strong influence on contemporary terrorism.

Al-Qaeda, the group responsible for coordinating and executing 9/11, has certainly emerged as the frontrunner from scores of terrorist groups in terms of strategic effect, sophistication and resolve. But what makes it so unique and dangerous? How can a small group of men transform their purpose to a global ideology? Careful study of Al-Qaeda will demonstrate that the organization has evolved from its original roots into an ideological mindset aimed at attacking liberal Western democracies in order to fulfill its ultimate goal: to unite the Muslim world. The now decentralized organizational structure makes Al-Qaeda operatives difficult to eradicate, particularly since previous US efforts have focused on capturing and killing organizational leaders. Osama bin Laden, the official leader of Al-Qaeda, has become relatively unimportant to the international scope of his organization and it is doubtful that his death or capture would change the current mindset and focused operations set against Western culture. Countless disenfranchised radical Islamists, the *have nots*, are aiming their frustration at those that *have*, mainly from the Western way of life.

Despite this growing friction, some might question whether Al-Qaeda would actually use a WMD against its sworn enemies. Louise Richardson, prominent author and expert on terrorism, claims that there is no evidence indicating that Al-Qaeda has the desire or motive to attack the US with a nuclear weapon.<sup>2</sup> She further indicates that since there has yet to be a terrorist nuclear attack, acquiring the capability has proven to be too difficult. Documentary evidence revealing Al-Qaeda's motivation and capabilities, including the latest addition to its training doctrine (volume 11) that covers the use of WMD,<sup>3</sup> will be used throughout this essay to counter her arguments. In meeting its intent, Al-Qaeda's agenda includes short and long term strategic objectives that demonstrate a methodical approach to its meticulous planning and preparations. In fact, Al-Qaeda's stated long term goal is to wage war on the US and its allies in collaboration with a nuclear capable coalition of Islamic states.<sup>4</sup>

The next logical step after the non-conventional mass casualty strike of 9/11 would be for Al-Qaeda to actually use a conventional WMD, such as a nuclear strike, in order to once again disrupt world order, further destabilize the existing rift between the Islamic world and the US, and bolster its international reputation. This capability and Al-Qaeda's motivation will be analyzed in order to establish its future intentions. Assuming that Al-Qaeda wishes to employ a conventional WMD, can it actually obtain a device sophisticated enough to achieve strategic success? States that might facilitate this doomsday scenario, including Russia, Pakistan and North Korea, will be examined to

---

<sup>2</sup> Louise Richardson, *Understanding the Enemy, Containing the Threat: What Terrorists Want* (New York: Random House Trade Paperbacks, 2006), 160.

<sup>3</sup> Rohan Gunaratna, *Inside Al Qaeda: Global Network of Terror*, (New York: Berkley Publishing Group, 2003), 94.

<sup>4</sup> *Ibid.*, 119.

prove that the components of a nuclear device can be traded, sold on the black market or even acquired through theft in poorly secured nuclear material storage facilities.

Another critical factor that must be examined is the feasibility of smuggling a nuclear device into the US. The effects of globalization have not only assisted the spreading of goods and technology around the world for financial gain, global accessibility has also serviced terrorists in support of ideological pursuits. Real-time global communications combined with the latest technological advancements have given terrorists a tremendous boost in achieving a global reach. Even though the American government spends billions of dollars per year on homeland security, terrorists can easily smuggle nuclear components into the US because of its heavy dependence on international trade.

Multilateral initiatives such as the Global Partnership, the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism are attempting to coordinate global efforts to reduce the spread of nuclear weapons and related technologies. But have these organizations truly reduced the proliferation and made it harder for terrorists to acquire WMD? Some experts, such as Brian D. Finlay and Paul F. Walker, provide convincing evidence that these initiatives have fallen short of their mark, concluding that terrorists can still manage to acquire nuclear material in order to achieve the ultimate terrorist strike.<sup>5,6</sup>

---

<sup>5</sup> Paul F. Walker, "Looking Back: Kananaskis at Five: Assessing the Global Partnership," *Arms Control Today* 37, no. 7 (September 2007): 47-52; [http://www.armscontrol.org/act/2007\\_09/Lookingback](http://www.armscontrol.org/act/2007_09/Lookingback); Internet; accessed 21 February 2009, 47.

<sup>6</sup> Brian D. Finlay, "Russian Roulette: Canada's Role in the Race to Secure Nuclear, Biological, and Chemical Weapons," *International Journal* 61, no. 2 (Spring 2006): 413.



Finally, this paper suggests a way ahead. Despite evidence that strongly supports the possibility of nuclear terrorism, there are steps that Western democracies – led by the United States – can take to significantly reduce the risk of a terrorist nuclear strike. First, the US, in cooperation with other states and Western democracies, must take a more proactive approach to securing nuclear material sites. This includes reducing the proliferation of nuclear technology. Secondly, the US must make a fundamental shift in its foreign policy as pertains to relations with the Islamic world in an effort to re-establish communication and positive interaction. Through strong leadership and political will, this delicate relationship can significantly improve, thus adding stability to the global environment. Lastly, US diplomacy and power should be focused on striking at Al-Qaeda's centre of gravity: its legitimacy. This can be achieved through a sustained campaign based primarily on supporting Islamic modernists' efforts to solve an internal problem, the radicalization of their religion, and by applying force only if and when absolutely required. Failing to follow these steps will increase the risk of nuclear terrorism that would result in a predictable set of retaliatory global responses, responses that would certainly change the world forever.

## **PART II – HISTORICAL ROOTS OF TERRORISM**

As a result of the constant evolution of terrorism, it is not surprising that experts in the field have had difficulty in agreeing on a common definition. Most historians give the credit for actually coining the word 'terrorist' to Edmund Burke, the eighteenth century political theorist and philosopher. Hence, the modern day use of the word

terrorism can be attributed to the French Revolution of 1794. The head of the RAND terrorism research unit and author of *Inside Terrorism*, Bruce Hoffman, asserts that state-sponsored terrorism resulted in the beheading of 40,000 revolutionaries by guillotine and was the event that caused Edmund Burke to develop the term “terrorist.”<sup>7</sup> But the actual use of terror against civilians can be traced back long before the French Revolution. A review of several historical examples will be useful since there are many parallels to modern day forms of terrorism in terms of strategies, objectives and methods.

Though terrorism may appear to be a relatively new phenomenon, an historical perspective can provide insight into the depths of its violent and significant past dating back to 66 CE. Terrorist political strategies, including what author James Poland calls “fear-inducing violent behaviour” first developed during this period.<sup>8</sup> Jewish religious zealots called Sicarii introduced terrorism as strategy that used panic and fear to achieve political objectives as part of a religious conflict in ancient Palestine. Their political uprising with the initial use of passive resistance motivated by strong religious undertones was employed in an attempt to influence others.<sup>9</sup> However, as a result of severe reprisals at the hands of Roman soldiers that resulted in Jewish atrocities, the Sicarii adopted a strategy of “pure terror.” As James Poland rightly indicates:

[t]he primary purpose of Sicarii terrorist strategy, like so many terrorist groups today, seems to be the provocation of indiscriminate countermeasures by the established political system and to deliberately provoke repression, reprisals, and

---

<sup>7</sup> Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press, 1998), 16-17.

<sup>8</sup> James Poland, *Understanding Terrorism: Groups, Strategies, and Responses* (New Jersey: Pearson Education Inc, 2005), 26.

<sup>9</sup> *Ibid.*, 26.

counterterrorism...[n]o religious terrorist movement had ever been so successful.<sup>10</sup>

This theme of provoking reprisals has survived the test of time, as many minority groups (including terrorists) incite larger forces in the hopes of an overwhelming and out of proportion response that will result in global sympathy and international legitimacy for the smaller group.

Understanding this historical example that used religious undertones within a political context is significant because there are many parallel modern day examples. Take, for example, Northern Ireland, which successfully used the tactic of passive resistance by drawing large numbers of participants into a conflict and subsequently raised their consciousness level. What started out initially as a peaceful Northern Ireland Civil Rights Association protest against the Protestant majority and British government quickly turned violent when British forces fired into the crowd killing eight Catholics. Knowing that another protest would produce similar out of proportion reactions, the Northern Ireland Civil Rights Association marched illegally on 30 January 1972. The result was thirteen killed and at least twelve wounded in what was to be known historically as “Bloody Sunday.”<sup>11</sup> The aftermath of this single event increased the legitimacy of and support for those fighting both Protestants and the British Army and gave birth to the Provisional Wing of the Irish Republican Army.

Another modern day parallel may be found in Palestine with the Irgun Zvai Leumi-al-Israel (National Military Organization of Israel) lead by Menachem Begin. The Irgun used a continuous cycle of terror and counter-terror against the British military

---

<sup>10</sup> *Ibid.*, 26.

<sup>11</sup> *Ibid.*, 27.

government of Palestine between 1942 and 1948.<sup>12</sup> “[M]irroring the terror campaign of the Sicarii and the Roman Empire,” which Begin and Irgun studied in detail,<sup>13</sup> they successfully used this historical example to model their own strategy against British rule. Relating these two examples based on the Sicarri model to present day conflict, one can extrapolate that Al-Qaeda has used a similar strategy to entice the United States and Western democracies into a conflict of attrition. By striking the United States aggressively (9/11), Al-Qaeda has certainly provoked a strong US reprisal that has strengthened its legitimacy and increased the radicalization of Islam. Hence, there is legitimacy to the argument that history can provide valuable lessons.

Assassinations are another politically motivated form of terrorism that date back to ancient times. Roman emperors such as Caligula, Domitian, Comodius and Elagabal were all assassinated, as were other rulers in Byzantium history.<sup>14</sup> During the eleventh through thirteenth centuries, assassins based in Persia, Iraq and Syria killed European crusaders with a golden dagger while under the heavy influence of hashish.<sup>15</sup> Though the “assassins” were eventually killed off by conquering Mongols, their legendary work is said to have inspired contemporary terrorist groups such as Hizballah, Hamas, al Aqsa Martyrs Brigades, Islamic Jihad and Al-Qaeda.<sup>16</sup>

---

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> Walter Laqueur, *The New Terrorism: Fanaticism and the Arms of Mass Destruction* (New York: Oxford University Press, 1999), 10.

<sup>15</sup> Poland, 28. The name ‘assassin’ originates from the Arabic word *hashhashin* which literally means “hashish-eaters”.

<sup>16</sup> *Ibid.*, 28.

Other historical examples that have influenced modern day terrorism include such notorious groups as the Thugs (a well organized society of professional assassins who terrorized India for 300 years starting as early as the 16<sup>th</sup> century), the Fenians (an Irish-American nationalist revolutionary secret society active during the 1860s), and the Narodnaya Volya (the People's Will – a socialist movement in Russia in the 1870s).<sup>17</sup> Though the Narodnaya Volya would only attack targets that were deemed guilty of specific acts (Tzar Alexander II as example), they were the first to use dynamite on a wide scale for assassination. In fact, a suicide bomber killed Alexander II.<sup>18</sup> Though the Narodnaya Volya pale in comparison to modern day terrorists who now strike non-combatants and innocent civilians as a course of action, they were influenced by the writings of Sergey Nechayev, whose notorious book, *The Revolutionary Catechism*, has been described as “the most cold-blooded manual of instruction in terrorist literature.”<sup>19</sup> This work is noteworthy as an historical model because it influenced other revolutionaries such as Régis Debray and Ché Guevara. Inspired by Nechayev, their methods of “indiscriminate terroristic violence designed to produce a situation of intense fear”<sup>20</sup> are found within their own writings. Perhaps the best-known manual for terrorist strategy was written by Carlos Marighella, *Mini-Manual of Urban Guerrilla Warfare*.<sup>21</sup> Both Nechayev's and Marighella's writings have certainly influenced modern day

---

<sup>17</sup> *Ibid.*, 28-31.

<sup>18</sup> *Ibid.*, 32.

<sup>19</sup> *Ibid.*, 33.

<sup>20</sup> *Ibid.*, 33-34.

<sup>21</sup> *Ibid.*, 34. Full electronic copy of manual available at:  
<http://www.marxists.org/archive/marighella-carlos/1969/06/minimanual-urban-guerrilla/>.

terrorism, and their influence is evident in the latest terrorist manuals written by Al-Qaeda.

Since terrorism as a concept has evolved throughout history, it is difficult to establish a concise and relevant contemporary definition. As Hoffman offers: “[t]he cumulative effect of this proclivity towards equivocation is that today there is no one widely accepted or agreed definition for terrorism.”<sup>22</sup> Adding to this complexity are the impacts of cultural, political, historical, social, and religious biases when attempting to interpret a given act of violence. Events such as the assassination of Russian Tsar Alexander II by the Narodnaya Volya and Stalin’s murderous purge some sixty years later, and organizations such as Hitler’s Nazis, the death-squads in Argentina, Chile, Columbia and Peru, and anti-colonial groups in Asia, Africa and the Middle East,<sup>23</sup> have all produced violence, but which ones are, or are responsible for, acts of terrorism?

Interpretations have varied because:

[d]epending on which side of the ideological, racial, religious, or national fence one sits, political violence can be interpreted either as acts of unmitigated terrorist barbarity or as freedom fighting and national liberation.<sup>24</sup>

In other words, without a concise definition, incidents can potentially be viewed as terrorist acts, struggles of national liberation, or the rightful exercise of control by a state over its people.

Over the years, countless definitions have been put forward by experts in the field, but many have lacked the detail or accuracy necessary to gain universal acceptance.

---

<sup>22</sup> Hoffman, 37.

<sup>23</sup> *Ibid.*, 17-25.

<sup>24</sup> Gus Martin, *Understanding Terrorism: Challenges, Perspectives, and Issues*, 2<sup>nd</sup> ed (California: Sage Publications Inc, 2006), 3.

David, J. Whittaker, renowned expert on terrorism and author of *The Terrorism Reader*, lists various definitions:<sup>25</sup>

Contributes the illegitimate use of force to achieve a political objective when innocent people are targeted. (Walter Laqueur)

A strategy of violence designed to promote desired outcomes by instilling fear in the public at large. (Walter Reich)

The use or threatened use of force designed to bring about political change. (Brian Jenkins)

Though these definitions provide insight, Gus Martin points out that they are focused on group terrorism vice state terrorism, the latter of which has accounted for a far greater number of deaths throughout history.<sup>26</sup>

Despite the difficulties and complexities of finding a universally accepted definition, there are certain elements that are common among terrorist strikes. In a detailed analysis of 109 definitions of terrorism, Bruce Hoffman, in his book *Inside Terrorism*, lists the most common definitional elements. Though there are a total of twenty-two common themes in the examined definitions, only the most repetitive ones will be reviewed in order to establish a common understanding and to select an appropriate working definition. Note that these themes often interplay between terrorist acts and their intents.

First, there is the application of violence or force, or at times, just the threat of violence. This fosters the second common element: fear. Fear and terror quickly set in on those that have been directly affected by a given violent act or on others who anticipate further violence. This naturally leads into the third common element, the

---

<sup>25</sup> David J. Whittaker, *The Terrorism Reader* (New York, Routledge, 2001), 8.

<sup>26</sup> Martin, 47.

psychological effects of terrorism. Terrorists hope to invoke a strong psychological effect on their victims to further their cause. They strike at the innocent to maximize fear and induce a strong emotional response from their victims' society. Fourth, maximum publicity can be anticipated to raise support for the terrorist cause and to generate further fear among the victims. Fifth, modern day terrorism aims at attacking a symbolic target to achieve a greater impact both on the physical and morale planes. Lastly, most terrorist acts are, at their root, politically motivated. This is what normally separates a terrorist act from a criminal act. Though both may be violent in nature, a terrorist act is usually linked to a political purpose.<sup>27</sup>

Based on the common thread that links these elements together, and understanding the aspects that influence terrorism such as cultural, geographical, historical and economic factors, not to mention the political landscape, the academic definition that seems to be most fitting is written by Bruce Hoffman:

...the deliberate creation and exploitation of fear through violence or the threat of violence in the pursuit of political change...[It] is specifically designed to have far-reaching psychological effects beyond the immediate victim(s) or object of the terrorist attack. It is meant to instil fear within, and thereby intimidate, a wider 'target audience' that might include a rival ethnic or religious group, an entire country, a national government or political party, or public opinion in general.<sup>28</sup>

This definition, though lengthy, covers most of the critical elements of terrorism: use of violence, political motivation, use of intimidation, intended for a larger audience.

Nevertheless, a more succinct definition to match today's contemporary environment is also needed. Therefore, for the purposes of this work, terrorism will be defined as:

---

<sup>27</sup> Hoffman, 40.

<sup>28</sup> *Ibid.*, 43-44.



a strategy in the use or threat of calculated violence against civilians conducted by either individuals, sub-national, or trans-national groups in order to intimidate, coerce, or manipulate a given government or its general population. The act or threat is intended to achieve foremost political goals but can also be used to achieve ideological, religious or social aims.

This definition, though one of many, has been created through the careful analysis of previous works by experts in the field of terrorism, and aims to meet the realities and challenges within the contemporary operating environment of the twenty-first century.

### **PART III – ORIGINS OF RADICAL ISLAM**

Religiously motivated wars and acts of violence have existed for centuries, yet radical Islam and its directed hatred against Western democracies (particularly the United States) is a rather recent phenomenon. Nevertheless, argues Salim Mansur, the ideology of modern day terrorism has “...been deeply entrenched in the Muslim tradition and reaches far back, into the earliest years of Islam.”<sup>29</sup> Many contemporary radical Islamists and their supportive terrorist networks reach back for inspiration from the Muslims of the first decades of ancient Islam, dating back as far as the Prophet Mohammad. These first few Muslims strongly believed in the purity of their faith and, equally as important, the use of violence was deemed an appropriate measure to convert the non-believers.<sup>30</sup>

As time progressed, there were many interpretations of the Qur’an which left permanent schisms within the faith. These schisms, emanating from the strictest of

---

<sup>29</sup> Salim Mansur, “Osama’s godfathers,” *National Post*, August 24, 2005: 1-3; <http://proquest.umi.com/pqdweb?index=0&did=888072611&SrchMode=1&sid=1&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1233524347&clientId=1711>; Internet; accessed 15 Oct 2008, 2.

<sup>30</sup> *Ibid.*, 2.

Islamic followers, were historically aimed mostly at other Muslims who were more moderate in their application of faith. Some of these more radical groups, such as the Kharijites, whose origins date back to 7<sup>th</sup> century CE, preached radical Islamism and “...accus[ed] the successors of Mohammed of foregoing his true message.”<sup>31</sup> They believed that those Muslims who did not follow the faith to their strictest standard were corrupt, and violent campaigns had to be launched against them. Though the Kharijites were eventually killed off, the seeds of radical Islam were planted and grew within other individuals and groups to include Muhammad ibn Abd al-Wahhab. The Wahhabi sect developed shortly after and is still practiced today in Saudi Arabia.<sup>32</sup> Wahhabism has strongly influenced radical Islamists, including high profile terrorists such as Osama bin Laden.

Centuries after the destruction of the Kharijites, the same fractures between Muslims gained significant attention, particularly during the 1930s and 40s, when fascism, communism and capitalism began to strongly influence the Muslim world. Several theologians and political Islamists such as Syed Abul A'ala Maududi and Hassan al-Banna saw the West as a threat to their very existence and beliefs. Maududi believed that a jihad was required in order to create a pure Islamic state that removed the growing divide between secular leaders and the ulema (religious leadership).<sup>33</sup> His first book preached that jihad should be the first tenet of Islam which inherently “turned religion into an ideology of political struggle.”<sup>34</sup> Maududi founded the Jamaat-e-Islami in 1941,

---

<sup>31</sup> Burke, 29.

<sup>32</sup> Mansur, 2.

<sup>33</sup> Burke, 50-51.

<sup>34</sup> *Ibid.*, 50.

an Islamic revivalist movement designed to promote Islamic values and principles across the Muslim world. By spreading the faith and leading by example, it was his intent that this group be the vanguard of the Islamic revolution where all Muslim societies would practice the 'correct' form of Islamic faith.<sup>35</sup> Though Maududi did reintroduce jihad and a strict following of the Islamic faith, his preachings were mostly peaceful and his aims were achieved through social activism within the parameters of the law.

Hassan al-Banna, another prominent figure in the revival of radical Islam, founded the influential 'Muslim Brotherhood' in 1928. Al-Banna is considered to be the father of modern political Islamism whose group intended to unify all Muslims against Western colonial expansionism and "...the iniquity and social failures of Islamic society."<sup>36</sup> There was a growing divide between stagnant Islamic nations that were falling further and further behind on the technological scale and their antithesis, Western nations that in comparison were advancing at alarming rates. This divide to some extent unified Muslims, especially under the strong leadership of Al-Banna and his ideological beliefs. The Muslim Brotherhood built schools, colleges and hospitals and quickly developed a following of millions in Egypt alone. Like Maududi, Al-Banna pursued his political objectives peacefully and attempted to unify Muslims through stricter adherence to their religion. Nevertheless, the Brotherhood developed violent strands, particularly after the 1948-49 Israel/Palestinian conflict,<sup>37</sup> a conflict that has generated much animosity between Israel (and its supporters) and the rest of the Muslim world. The

---

<sup>35</sup> *Ibid.*, 51.

<sup>36</sup> *Ibid.*, 48.

<sup>37</sup> *Ibid.*, 48-49.

animosity and the growing divide between Muslims and Western based societies strengthened efforts started by Maududi and Al-Banna whose ultimate goal was to create an Islamic state. Their effort was adopted by other influential fundamentalists whose goals became more sinister and aggressive.

The foundation of Islam is based on five pillars (profession of faith, prayer, fasting, alms-giving and pilgrimage) and the original concept behind jihad was a form of collective duty decided by the community, vice an individual. Furthermore, the classical interpretation of jihad was defensive. Only recently have fundamentalists begun to preach and elevate jihad to the status equalling the five pillars.<sup>38</sup> The first to revolutionize the concept of jihad and to expand on the teachings of Maududi and Al-Banna was Syed Qutb, cited historically as the father of modern fundamentalism.<sup>39</sup> Qutb, an Egyptian, professed the legitimacy of violent Muslim resistance in the 1950s against authority figures that were not “perfectly” devoted to their religion. His most influential works that have inspired Muslims throughout the world are *Fi Zalal al-Koran* (*In the Shadow of the Koran*) and *Ma’alim fi-l-Tariq* (*Milestones*). These writings depict the United States as the enemy whose influence has weakened the Muslim world through “intellectual and spiritual colonialism.”<sup>40</sup>

---

<sup>38</sup> Fawaz A. Gerges, *The Far Enemy: Why Jihad Went Global* (New York: Cambridge University Press, 2005), 3.

<sup>39</sup> Robert Irwin, “Is this the man who inspired Bin Laden?” *The Guardian Webpage – News/World News/Afghanistan*, 1 Nov 2001, <http://www.guardian.co.uk/world/2001/nov/01/afghanistan.terrorism3>; Internet; accessed 15 Nov 2008, 1.

<sup>40</sup> Reuven Paz, “Islamists and Anti-Americanism,” *Middle East Review of International Affairs Journal*, Vol 7, no. 4 (December 2003); <http://meria.idc.ac.il/journal/2003/issue4/jv7n4a5.html>; Internet accessed 2 January 2009, 3.

After spending two years in the United States, Qutb's disdain for Americans grew as his ideas became more radical. His book *Milestones* became "...the philosophical basis of a wide spectrum of Jihadi groups"<sup>41</sup> that inspired future terrorists like Osama bin Laden. *Milestones* infers that American society ignores Allah's rule and that Westerners can no longer lead mankind because of their lack of life-giving values. In Qutb's own words:

The leadership of mankind by Western man is now on the decline, not because Western culture has become poor materially or because its economic and military power has become weak. The period of the Western system has come to an end primarily because it is deprived of those life-giving values which enabled it to be the leader of mankind.<sup>42</sup>

Similar to Maududi and Al-Banna, Qutb believed in an Islamic state where Muslims would be unified and lead humankind. He states:

If Islam is again to play the role of the leader of man-kind, then it is necessary that the Muslim community be restored to its original form. It is necessary to revive that Muslim community which is buried under the debris of the man-made traditions of several generations, and which is crushed under the weight of those false laws and customs which are not even remotely related to the Islamic teachings, and which, in spite of all this, calls itself the 'world of Islam.'<sup>43</sup>

Qutb's writings were quite clear, calling for Muslims to unite and fight those that were not 'pure' in their practice of the Islamic faith, including the non-believers such as the United States. It was this influence that brought additional attention and a focused revival to radical Islamism, inspiring such theologians as Mohamed Abd al-Salam Faraj and Abdallah Azzam. As a result of his radical teachings, Egyptian authorities hanged

---

<sup>41</sup> Paz, 2.

<sup>42</sup> Syed Qutb, *Milestones*. <http://www.kalamullah.com/Books/MILESTONES.pdf>; Internet accessed 31 January 2009, 2.

<sup>43</sup> *Ibid.*, 3.

Qutb, but his writings became the theoretical basis for many radical fundamentalist groups today.<sup>44</sup>

Mohamed Abd al-Salam Faraj, the man who coordinated the 1981 assassination of President Sadat in Egypt, was a close follower of Qutb's work and brought subtle yet significant changes to its initial meaning. He changed people's beliefs in jihad, particularly those with radical views to begin with.<sup>45</sup> Faraj's ideas included two distinct changes from previous beliefs that advanced Islamic fundamentalism that much further. First, "...jihad was the way to establish an Islamic State, while the classical conception of jihad required the existence of an Islamic authority to do so."<sup>46</sup> By making this subtle change, it placed the onus on the people, vice higher authorities, to establish an Islamic state. This is a common theme throughout contemporary fundamentalist views on various teachings. Fuelled by an increasing hatred of those who are not purist in their beliefs, the interpretations become significantly diluted from the original intent of the faith. Secondly, Faraj stated that jihad was a personal duty, while previous teachings indicated that it was a collective Muslim duty. This radically changed the fundamentalist movement, even though the "holy war" was still directed at the "enemy nearest you," in other words, most Muslim nations' internal government. It was the further manipulation and twisting of Qutb's work by both Abdallah Azzam and eventually Osama bin Laden that directed the jihad towards the West and the United States, or what renowned author and professor of Middle Eastern affairs Fawaz Gerges describes as the far enemy.

---

<sup>44</sup> Robert Siegel, "Sayyid Qutb's America," *NPR News Webpage*, 6 May 2003, <http://www.npr.org/templates/story/story.php?storyId=1253796>; Internet; accessed 15 November 2008, 1.

<sup>45</sup> Gerges, 10.

<sup>46</sup> *Ibid.*

The year 1979 marked the Islamic revolution in Iran and the Soviet invasion of Afghanistan. Together, these important events inspired a new wave of Islamist movements that toppled the Shah of Iran and defiantly defeated a superpower as the Soviet 40<sup>th</sup> Army eventually withdrew from Afghanistan. These two defining moments in modern Muslim history “precipitated the creation of more than one hundred contemporary Islamist movements in the Middle East, Asia, Africa, the Caucasus, the Balkans, and also in Western Europe.”<sup>47</sup> Some of the founders of these movements created Al-Qaeda al-Sulbah (The Solid Base) with the intent of developing societies around the strictest of Islamic principles.

Abdallah Azzam, a Palestinian-Jordanian ideologue, first developed the concept of Al-Qaeda in 1987.<sup>48</sup> It was Azzam that penned Al-Qaeda’s aims, composition and purpose, became its ideological father, and in turn mentored Osama bin Laden. As bin Laden became increasingly admired throughout the Muslim world, a power struggle between him and Azzam began over differences in their strategic and ideological views. On 24 November 1989, Azzam and his two sons were killed by an explosive blast apparently set by Egyptians who sympathized with Bin Laden. This left Bin Laden as the front-runner in Al-Qaeda where he used his appealing influence to shape the organization in his own image.<sup>49</sup>

Osama bin Laden and Al-Qaeda inspired the radical Islamic movement as we know it today. During the Soviet occupation of Afghanistan in the 1980s, jihadists from

---

<sup>47</sup> Gunaratna, 4.

<sup>48</sup> *Ibid.*

<sup>49</sup> *Ibid.*, 31.

various countries, including Egypt, Algeria, Saudi Arabia, Yemen, Jordan, Pakistan, Iraq and Libya, went to Afghanistan to join their Muslim brothers and take up arms against the invaders. In the rugged terrain of Afghanistan, they learned important skills in tactics, weapons and improvised explosive devices with the intent on bringing that knowledge back to their oppressed countries to begin their own jihad. By the mid 1990s, Al-Qaeda had transformed the radical Islamic ideology further, claiming that the holy war must now be brought to the infidels abroad.<sup>50</sup> Osama bin Laden himself has gone as far as to prioritize *jihad* second in rank within the Islamic faith to *belief* itself. As Fawaz Gerges<sup>51</sup> indicates, the definition of jihad has not changed; what has changed is the definition of the enemy. It is now Western democracies, beginning with the United States.

Though radical Islam and the principle of jihadist ideology has been around since the origins of Islam itself, close inspection of various theologian and fundamentalist views reveal that they have added their own interpretation that has only recently been directed towards the ‘far’ enemy. From an original ideology based on defensive jihad, espoused by Maududi and Al-Banna, to a more aggressive approach inspired by Qutb and Azzam, the transformation and further radicalization of Islam has been now further amplified by Osama bin Laden. With rapidly developing Western democracies bypassing ailing Muslim nations in their quality of life, the friction between the ‘haves’ and ‘havenots’ is approaching alarming rates. These circumstances set the perfect conditions

---

<sup>50</sup> Gerges, 14.

<sup>51</sup> Farwaz Gerges, author of *The Far Enemy: Why Jihad Went Global*, was educated at Oxford University and was a research fellow at Harvard and Princeton universities. He has written extensively on Arab and Muslim politics, Islamist movements, American foreign policy, and relations between the world of Islam and the West.



for influential leaders such as Osama bin Laden to use the guise of spiritual ideology to achieve political aims and accomplish his quest to seek out and strike at the far enemy, the United States.

#### **PART IV – AL-QAEDA: ROOTS, IDEOLOGY AND CAPABILITIES**

Contemporary terrorism that directs violence outside of the Islamic realm is an extremely recent occurrence, especially if one examines the origins of jihad. The word ‘jihad’ is translated from Arabic as *effort*. It originally focused on the good of Muslim society. As seen in the previous chapter, there have been many interpretations of jihad over time with most inferring that Muslims must constantly be on the path of self-improvement, adhere to religious regulations, and follow Islamic behavioural norms.<sup>52</sup> The jihadist movement, or what it is commonly referred to now as “holy war,” does date back to the history of the Islamic faith itself, but for defensive purposes only. For centuries, theologians of the Qur’an interpreted jihad as a defensive tactic to protect one’s faith. Its most recent interpretation by some terrorist groups, such as Al-Qaeda, has led to the targeting of Western nations.<sup>53</sup> It was Osama bin Laden’s Al-Qaeda that brought the fight to the door-step of the US with such skill, complexity and success that the global environment changed dramatically.

---

<sup>52</sup> Alexei Malashenko, Stephen R. Bowers and Valeria Ciobanu, “Encyclopedia of Jihad: Islamic Jihad,” *Center for Security and Science*, Liberty University (2001); [http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1023&context=gov\\_fac\\_pubs](http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1023&context=gov_fac_pubs); Internet; accessed 8 January 2009, 4.

<sup>53</sup> Gerges, 3.

As a transnational organization, Al-Qaeda has demonstrated its sophisticated planning and coordination abilities, determination, and strategic aptitude at a global level. But as international terrorism expert Rohan Gunaratna notes, “Al Qaeda is also characterised by a broad-based ideology, a novel structure, a robust capacity for regeneration and a very diverse membership that cuts across ethnic, class and national boundaries.”<sup>54</sup> These characteristics make groups such as Al-Qaeda so illusive and hard to capture, especially since Western enforcement agencies generally have little experience with this specific threat, not to mention their limited ability to reduce Al-Qaeda’s influence within Muslim communities.

As Al-Qaeda developed into a multinational terrorist group operating at a global level, it “created a worldwide strategic framework of Islamist military and political organizations”<sup>55</sup> that has challenged Western influence in the Muslim world. With training bases in Sudan, Yemen, Chechnya, Tajikistan, Somalia and the Philippines, Al-Qaeda has also established ideological, financial and military control over other Islamist terrorist groups which demonstrates its far reaching capability, not to mention its ability to work in mutually supporting groups that share many of the same goals.<sup>56</sup> Unlike Western allies working in a hierarchical structure that are plagued with national “caveats,” terrorist groups share resources, intelligence, and techniques, tactics and procedures (TTPs) to tremendous effect. When terrorist groups work together in a mutually supporting effort, their synergistic output can create devastating results. Their

---

<sup>54</sup> Gunaratna, 72.

<sup>55</sup> *Ibid.*, 8.

<sup>56</sup> *Ibid.*, 7.

preference lies in qualitative vice quantitative targeting by selectively striking high value symbolic targets with the ultimate aim to “denigrate opponent[s], expose ... vulnerabilit[ies] and prompt further retaliation.”<sup>57</sup>

Al-Qaeda has had a profound strategic effect on Western societies. One has to look only at the aftermath of the 9/11 attacks and the billions of dollars spent on homeland security. In order to analyse Al-Qaeda’s capabilities and potential with a view to determining strengths and weaknesses, one has to possess a firm understanding of its roots, ideology and core beliefs. This analysis will explore its strong commitment, and operating procedures, and provide insight into its future intent.

Al-Qaeda’s *raison-d’être* is to unite the Muslim world into a single entity: to rid (or convert) the world of non-believers. To accomplish this goal, it has focused on two grievances that are common among radical Islamists and other terrorist groups. First, American intervention in the Middle East, a predominantly Islamic region, dates as far back as the eighteenth century. To a Muslim extremist, Western presence in the holy land is unacceptable, if not also offensive. Religion is therefore the dominant motivator in this particular grievance.

Historian and author Michael Oren provides a detailed chronology of US involvement in the Middle East in the *New York Times* bestseller, *Power, Faith, and Fantasy; America in the Middle East 1776 to the Present*. America’s first diplomatic mission to the Middle East was conducted by John Lamb in 1785. Thirty years later, President James Madison deployed an American fleet to force Algiers, Tripoli and Tunis to cease attacks on American ships. US diplomacy and presence continued within the region. In 1924, American and European oil companies formed the Iraq Petroleum

---

<sup>57</sup> *Ibid.*, 10

Company (IPC). Other notable US involvements and interventions in Middle Eastern affairs include the 1948 recognition of Israel, the 1967 support of Israel in its six-day victory over Arab armies, the Iran-Contra scandal of 1986, and more recently the US led attacks on Iraq (1991 and 2003) and the toppling of the Taliban regime in Afghanistan in 2002.<sup>58</sup> This well established US presence, particularly in Saudi Arabia, has proven to be a strong irritant to devote Muslims and has served as a rallying cry for radical Islamists against Americans.

The second and equally powerful motivator that shapes Al-Qaeda's core grievances is the US' sustained support for Israel. Since the US recognized Israel in 1948, American administrations have supported Israeli initiatives, and because of their ongoing religious conflict with Israel and the Jewish faith, some members of the Muslim faith have become openly hostile to Americans. Terrorist groups such as Al-Qaeda have also used this grievance as a rallying call to Islamists to take the fight to the US and its allies. The more American support Israel receives (or the more Israel is perceived to be receiving), the more Muslims appear willing to pick up arms and join the ranks of Al-Qaeda.<sup>59</sup>

Poverty and the perceived notion of injustice are worth mentioning again to emphasize their importance as key enablers to both Al-Qaeda recruitment and strengthening its cause. Frustration within various Muslim groups is often experienced because of the average citizen's financial and social status compared to the average member of a Western liberal democracy. As Jason Burke opines, the "model of

---

<sup>58</sup> Michael B. Oren, *Power, Faith, and Fantasy; America in the Middle East 1776 to the Present* (New York: Norton & Company Ltd, 2008), xvii – xxiv.

<sup>59</sup> Qunaratna, 51, 59, 121.

expectation, disappointment and perceived injustice fits the experience of millions of [Muslim] graduates...doctors who drive cabs and ambitious civil engineers who teach basic arithmetic.”<sup>60</sup> Because of their generally poor economic situation, they strongly resent the West and what it represents.<sup>61</sup> Further complicating matters, many Muslim nations, including Egypt, Algeria, Morocco, Syria and Jordan, tend to aggressively repress moderate movements leaving little chance for political or religious reform. This repression fosters internal struggle and anger in youths, some of whom eventually turn to radical Islam as a means to foster change.<sup>62</sup> As Jason Burke, author of *Al-Qaeda: The True Story of Radical Islam*, points out, this “...anger is channelled into the symbolic realm and into the international, cosmic language of bin Laden and his associates.”<sup>63</sup>

The future outlook does not appear to be promising. Burke states that radical Muslim activists are gaining respectability and are in general “...less educated, more violent and follow a more debased, popularized form of Islam.”<sup>64</sup> Since the 1990s, they have become increasingly radical, bigoted and fanatical. This may be attributed in part to greater poverty levels. Terrorist organizations recruit from this group of disfranchised Muslims who are from the poorest and most brutalized elements of society. Examples to confirm Burke’s point include the Deobandi medressa (religious school) in Pakistan, where radical Muslim activists forced various political Islamist groups to cede power, and the teachers and doctors of the Hizb-ul-Mujahideen in Kashmir, who were forced

---

<sup>60</sup> Burke, 282.

<sup>61</sup> *Ibid.*, 281-282.

<sup>62</sup> *Ibid.*, 285.

<sup>63</sup> *Ibid.*

<sup>64</sup> *Ibid.*, 283.

from their leadership roles by semi-educated militants of Jihadi groups. This aggressive takeover by generally lower educated militants is occurring throughout many Muslim states including Egypt, Morocco, Tunisia, Jordan, Saudi Arabia and in much of southeast Asia.<sup>65</sup> The first steps on the road to Islamic extremism are paved with grievances such as injustice, poverty and deprivation.

Al-Qaeda's ideology, created by Abdallah Azzam and further developed by Bin Laden, is based mostly on religion and an unwavering devotion to Allah. Members of Al-Qaeda are psychologically conditioned to be fully willing to die for Allah in the accomplishment of their duty. In fact, this religious indoctrination and mental preparation is considered an operational priority more important than battlefield or terrorist combat training.<sup>66</sup> Aspiring Al-Qaeda terrorists receive religious instruction from madrassas that includes lessons in Islamic law, history and contemporary Islamic politics. Much of the instruction focuses on eight principal reasons where they are urged to partake in jihad:

...first, so that non-believers do not dominate; second, because of the scarcity of manpower; third, fear of hellfire; fourth, fulfilling the duty of jihad and responding to the call of Allah; fifth, following in the footsteps of pious predecessors; sixth, establishing a solid foundation as a base for Islam; seventh, protecting those who are oppressed in the land; and eight, seeking martyrdom.<sup>67</sup>

The eighth and final principal, to achieve martyrdom, is regarded as the ultimate goal of every devout Al-Qaeda member.<sup>68</sup> This reveals a deep-seated conviction that is

---

<sup>65</sup> *Ibid.*, 283.

<sup>66</sup> Gunaratna, 97.

<sup>67</sup> *Ibid.*, 118.

<sup>68</sup> *Ibid.*, 97.

based on the extreme radical following of Muslim faith and more pointedly, Wahhabism and Bin Laden's personal ideological beliefs. This belief has been indoctrinated into the minds of many Al-Qaeda members and entrenched in the minds of its most devout followers, a concept not easily understood by most Westerners. As an example, Rohan Gunaratna cites one Al-Qaeda operative who, after serving on multiple tours of duty, including Lebanon against the Israelis and Afghanistan against the Northern Alliance, stated, "I do not wish to serve in the front line anymore. I wish to become [a suicide bomber] and attain martyrdom."<sup>69</sup> This provides insight into the level of commitment possessed by suicide bombers in order to achieve mission success and that Al-Qaeda, above all other terrorist groups, invest so much time and effort in programming their fighters for death.<sup>70</sup>

This religious ideology that forms the backbone of Al-Qaeda had been fully endorsed by Bin Laden, a charismatic leader who has moulded the organization in his own image. Osama bin Laden was born in Riyadh Saudi Arabia in 1957 into a large family. He was the seventeenth son of fifty-two children. His successful father, Muhammad bin Laden, started one of the most prosperous construction firms in Saudi Arabia. While at university in Jeddah, Bin Laden studied Islamic studies under Mohammad Qutb (the brother of the previously mentioned Sayed Qutb). Qutb had a profound impact on Bin Laden. Though Bin Laden did not graduate from university, he maintained an interest in government and international politics. After his father's death, Bin Laden worked in the family business but also became heavily involved in the

---

<sup>69</sup> Tony Davis, "The Afghan Files: Al Qaeda Documents from Kabul," *Jane's Intelligence Reviews*, Vol 14, no. 2 (February 2001): 19-31; <http://www.janes.com/articles/Janes-Intelligence-Review-2002/The-Afghan-files-Al-Qaeda-documents-from-Kabul.html>; Internet; accessed 18 October 2008, 24.

<sup>70</sup> Gunaratna, 122.

advancement of Islamism. One of his first works was his involvement in the Saudi-based Islamists of South Yemen. Fighting to drive out the communists in that region, Bin Laden assisted them for nearly two decades.

Bin Laden became interested in the Soviet invasion of Afghanistan in 1979. Shortly after the outbreak of war, he moved to Peshawar Pakistan where he joined another influential Islamist, the previously mentioned Abdullah Azzam. Together they formed the Afghan Service Bureau (MAK) in 1984, which became the focal point for recruiting, training and deploying tens of thousands of Arab and Muslim youths in the anti-Soviet resistance and formed the backbone of the infamous *mujahidin* fighters.<sup>71</sup>

Bin Laden initially began as a financial backer but he later developed into a combatant who partook in several battles, including the infamous battle at Jalalabad in 1989. By sharing the hardships and dangers of war with fellow mujahidin, this lead by example style turned Bin Laden into both a spiritual leader and iconic figure, inspiring thousands of fighters from across the Muslim world. During and after the campaign, his spiritual convictions deepened.<sup>72</sup> Interestingly enough, it was also during this time that Bin Laden met Doctor Ayman Muhammad Rabi' al-Zawahiri, who was to become one of his top lieutenants and personal physician. Just like the Qutb brothers and Azzam, al-Zawahiri deeply influenced bin Laden. Some insiders claim he transformed Bin Laden from guerrilla to terrorist.<sup>73</sup>

---

<sup>71</sup> *Ibid.*, 21-24.

<sup>72</sup> *Ibid.*, 24-27.

<sup>73</sup> *Ibid.*, 34.



Both al-Zawahiri and Bin Laden are followers of the Salafi strand of Islam which is associated with Wahhabism, the ultra-conservative form of Islamic faith that strongly preaches against political weakness and moral dilapidation within the Arabian Peninsula.<sup>74</sup> It was these beliefs that generated and fostered Bin Laden's vision of what is known as the *Caliphate* which serves as part of Al-Qaeda's ideology. The Caliphate is the spiritual desire to unite the Muslim world. Bin Laden was going to accomplish this by launching a global jihad against America and Israel with the hopes of destroying them both.<sup>75</sup> These goals that have shaped Al-Qaeda's stratagem and make the organization such a dangerous threat.

Compared to other terrorist groups, Al-Qaeda is unique in its organizational structure and global reach. It began as a small hierarchal organization led by Bin Laden. However, it has evolved since its original creation into a large decentralized grouping described as a "cellular (also known as the cluster) model."<sup>76</sup> Cells operate independently of each other and often do not know that others exist. That in turn provides systemic protection and security from infiltration. Furthermore, Al-Qaeda's operational and support components function semi-independently of each other and their training program is "designed to create self-contained cells that operate independently of a central command."<sup>77</sup> This decentralized and independent cell system makes the cells extremely hard to either track or penetrate. The cells receive broad-based input through a strategic ideology and more specific tasks through a sophisticated agent-handling system

---

<sup>74</sup> *Ibid.*, 36.

<sup>75</sup> *Ibid.*, 28, 30.

<sup>76</sup> *Ibid.*, 102.

<sup>77</sup> *Ibid.*, 105, 109.

that easily defeats Western intelligence agencies' efforts of penetration.<sup>78</sup> Furthermore, the penetration of one cell appears to have little effect on the organization as a whole.

In 2003, when the US was having some success at killing or capturing top Al-Qaeda operatives, key figures such as Congressman Porter Goss, US House of Representatives Intelligence Committee, and George Tenet, Director of Central Intelligence, both stated that Al-Qaeda was nearly at its end. As the former CIA director erroneously announced: "We've got them nailed...[w]e're close to dismantling them."<sup>79</sup> Bruce Hoffman uses this point to illustrate that a kill/capture top down approach is problematic when used against a decentralized organization."<sup>80</sup> Bruce Hoffman uses this point to illustrate that a kill/capture top down approach is problematic in a decentralized organization which does have unique advantages.<sup>81</sup>

The strength of a decentralized model is that once an overarching ideology has been disseminated and accepted among diverse groups around the world, cells or sub-groups can act independently of each other but maintain focus on a single goal. In this case, the single goal is to unite the Muslim world by directing jihad against Western democracies. This simple ideology can easily be proliferated around the world through globalization (internet, rapid world transit, etc) and copied to meet regional aims and

---

<sup>78</sup> *Ibid.*, 102.

<sup>79</sup> Dana Priest and Susan Schmidt, "Al Qaeda's Top Primed To Collapse, U.S. Says," *The Washington Post*, 16 March 2003.

<sup>80</sup> *Ibid.*

<sup>81</sup> Bruce Hoffman, "Al Qaeda, Trends in Terrorism and Future Potentialities: An Assessment," *Studies in Conflict and Terrorism.*, Vol 26, Iss 6, (Nov/Dec 2003); <http://proquest.umi.com/pqdweb?did=734310711&sid=1&Fmt=2&clientId=1711&RQT=309&VName=PQD>; Internet; accessed 13 January 2009, 2.

goals. In *The Starfish and the Spider: the Unstoppable Power of Leaderless*

*Organizations*, Ori Brafman and Rod Beckstrom explain:

[d]ecentralized organizations are very amorphous and fluid. Because power and knowledge are distributed, individual units quickly respond to a multitude of internal and external forces – they are constantly spreading, growing, shrinking, mutating, dying off, and reemerging.<sup>82</sup>

This compartmentalized system has proven hard to defeat. The authors add that when states try to destroy ideological leaders such as Bin Laden (Al-Qaeda’s catalyst), the organization becomes even more decentralized and harder to stop.<sup>83</sup> Decentralized command and control systems have many characteristics that have synergistic value such as longevity, security, shared resources, initiative, and perhaps the most critical – a global reach. At the centre of this global reach is what can potentially be assessed as their strategic centre of gravity: “their ability to appeal to Muslims irrespective of their nationality, giving it unprecedented resources.”<sup>84</sup> In other words, their legitimacy. Consequently, as the world is heavily influenced by globalization, so has it amplified Al-Qaeda’s reach and penetration throughout the world.

An in-depth study of Al-Qaeda’s tactics, techniques and procedures will demonstrate their offensive capabilities and uncover potential future trends and intent. One of their main guiding documents that provide doctrinal instruction is a 7,000 page booklet called the *Encyclopedia of the Afghan Jihad*. The first ten volumes (of eleven) cover a wide range of tactics that cater to urban, nonurban, mountain, desert, and jungle terrains. Methods for destroying large structures, including buildings, bridges and statues

---

<sup>82</sup> Ori Brafman and Rod A. Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (New York: Penguin Books, 2006), 50.

<sup>83</sup> Brafman and Beckstrom, 140.

<sup>84</sup> Gunaratna, 129.

are also described explicitly.<sup>85</sup> Though the encyclopedia was initially intended for the sole use of the mujahidin fighting the Soviets in Afghanistan, it quickly began the training doctrine for terrorist strikes against the West. The latest addition to Al-Qaeda's training doctrine (volume 11) covers the use of weapons of mass destruction (WMD) and is only distributed to handpicked members.<sup>86</sup>

Al-Qaeda is focused on self-improvement, and as a result its targeting and scheme of manoeuvre has become increasingly sophisticated. In fact, after every major attack against a Western target, the senior leadership of the organization conduct what most professional armies call 'an after action review' to determine the strengths and weaknesses of the operation.<sup>87</sup> By learning from its mistakes or previous successes, it is often successful at subsequent operations. For instance, the initial attack on the World Trade Center in 1993 was followed by a more successful attack in 2001. The level of increased preparedness, quality of training and commitment in the 2001 strike was unprecedented. More importantly, the terrorists that were handpicked for the 9/11 operation were notable for their "unshakable willingness to kill and die for Allah"<sup>88</sup> in accordance with Bin Laden's aims and strategic lines of operation.

Furthermore, over the past forty years there has been a notable increase in the amount of violence unleashed against the civilian populous where terrorist strikes are generating greater numbers of casualties. It would appear that achieving larger scale attacks in increasing cataclysmic proportion is what motivates groups like Al-Qaeda. As

---

<sup>85</sup> Gunaratna, 93.

<sup>86</sup> *Ibid.*, 94.

<sup>87</sup> *Ibid.*, 100-101.

<sup>88</sup> *Ibid.*, 147.

Jerold Post stated, “[a]n act which would have attracted world attention years ago now barely gets a yawn from a jaded public, so there is a momentum arguing for ‘bigger and better’ terrorist events to capture attention.”<sup>89</sup> There are few terrorist organizations that could achieve an attack of significant global impact. However, Al-Qaeda does possess the wherewithal to surpass its strategic strike of 9/11. It has the greatest global reach, a strong commitment from its members, the demonstrated ability of self-improvement and the continued desire to strike symbolic targets within the US. Should Al-Qaeda succeed in a nuclear strike, it will significantly transform the global environment once again.

Hidden within the populous of numerous Western cities are terrorist cells - or what may be referred to as sleeper cells - that lie dormant until activated. The agents in these cells have already received their training and live normal lives until contacted by their superiors. Western intelligence agencies believe there are numerous layers of deep penetration Al-Qaeda sleeper cells awaiting future contact in order to strike at the moment of their handlers’ choosing.<sup>90</sup> Cells of this nature certainly add a layer of depth to Al-Qaeda’s offensive capability, particularly if active ones are compromised. Sleeper cells are better protected against infiltration since their inactiveness generates little to no attention. Furthermore, since time is on their side, some of these agents could penetrate Western societies in sensitive areas such as security forces or even engineering firms that handle or develop nuclear power. A landed immigrant or home-grown terrorist with hidden ties to Al-Qaeda could potentially wait up to ten years in a Western city to finally strike. This inconspicuous agent could blend into society while working through the

---

<sup>89</sup> Jerold M. Post, *Superterrorism: Biological, Chemical and Nuclear* (New York: Penguin Books, 2004), 167.

<sup>90</sup> Gunaratna, 103.

hierarchy of a nuclear plant or perhaps achieving an advanced education at a university or college. Within this scenario, a sleeper agent with an abundance of resources, time and a particular skill set can be called forward to facilitate another cataclysmic strike at the time of its choosing against the US or other Western nation.

Osama Bin Laden has created an organization that functions at the tactical, operational and strategic levels based on an ideology and framework that permeates local, regional, national and global spheres. Al-Qaeda utilizes military, political and socioeconomic lines of operation within a decentralized structure that increases security while effectively pursuing its aims. As a result of its decentralized and goal-oriented approach, Al-Qaeda demonstrates tremendous flexibility and an ability to adapt to Western counter-terrorist initiatives. Its short and mid term goals include the removal of US troops from the Arabian Peninsula and the creation of the true Islamic state. Bin Laden's stated long term goal is to use this nuclear-capable coalition of Islamic states to wage war on the US and its allies.<sup>91</sup> In one of his public addresses to the American people, Bin Laden confirmed his intent: "[w]e want to restore freedom to our nation, and just as you lay waste to our nation, so shall we lay waste to yours."<sup>92</sup> This mindset has permeated radical Islam and, as a result, the entity known as Al-Qaeda has reached every corner of the world.

Perhaps the greatest strength of Al-Qaeda is its members' entrenched ideology based on a strict devotion to a radicalized form of Islam. This mindset pits the mujahidin fighter, regardless of country of origin, against its sworn enemy, the US and its military

---

<sup>91</sup> Gunaratna, 294, 318, 78,119.

<sup>92</sup> Kepel, Milelli, *Al Qaeda in its Own Words* (Cambridge: Belknap Press of Harvard University Press, 2008), 71.

forces: “As a Muslim’s duty is *jihad*, all Muslims are expected to participate, if not support, the *mujahidin* fighting the US.”<sup>93</sup> As a result of Al-Qaeda’s ideology, advanced capability and unrelenting desire, using a nuclear weapon against its eternal enemy in order to achieve their long term goal is highly possible.

## **PART V – SOURCES OF WEAPONS OF MASS DESTRUCTION**

One of the greatest challenges for a would-be doomsday terrorist is to acquire a weapon of mass destruction (WMD). Though it is easy to lump chemical, biological, radiological and nuclear threats (CBRN) into one collective group, each of these potential terrorist threats possesses different characteristics and exploitable opportunities. Because of the sheer devastation and shock value a terrorist would achieve by virtue of a nuclear explosion, this specific threat will be the focus of this chapter. Terrorist organizations such as Al-Qaeda have the desire to use such a device, but can they actually acquire one? And if they can, when is the right time to strike? This question is perhaps the most difficult to answer since there is a school of thought that suggests building or obtaining a nuclear bomb is far too complex and technical in nature to be feasible.<sup>94</sup> Conversely, there are numerous experts that believe opportunities to acquire nuclear weapons have increased significantly as a direct result of nuclear proliferation, globalization and increased tensions against Western democracies. Both sides of this issue will be explored

---

<sup>93</sup> Gunaratna, 306.

<sup>94</sup> Laqueur, *The New Terrorism*, 73.

in order to determine the likelihood of a terrorist group acquiring and using a nuclear device.

The feasibility of acquiring nuclear weapons is another key aspect of Al-Qaeda's efforts to become a nuclear force. Can terrorist groups actually get their hands on nuclear weapons or at least the critical components to make a bomb? Twenty to thirty years ago, a terrorist nuclear strike did not seem feasible because of technological limitations, operational difficulties and most importantly, because terrorists demonstrated a certain level of self-imposed restraint.<sup>95</sup> However, that has all changed since modern technologies have become more readily available, the proliferation of WMD has significantly increased and, lastly, an increasing number of Islamic terrorists have put aside moral issues involving killing thousands of innocent people. But where can a terrorist actually acquire nuclear components?

The collapse of the former Soviet Union will create significant challenges to humanity in 21<sup>st</sup> century. With several of the now independent weaker states struggling to survive in a near authority and lawless vacuum, people will revert to their primal instincts to survive. As economies began to collapse soon after the fall of communism, and inflation rates skyrocketed to over 2000%, many people began to "protect" their interests. The slogan was "[e]verything is for sale,"<sup>96</sup> which was not an exaggeration, and it fostered tremendous criminal activity, including significant expansion of the black market.

---

<sup>95</sup> Brian M. Jenkins, "Nuclear Terror: How Real?" *The Washington Times*, 13 May 2007; <http://www.rand.org/commentary/2007/05/13/WT.html>; Internet; accessed 14 March 2009, 1.

<sup>96</sup> Graham Allison, *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (New York: Henry Holt and Company, 2004), 69.



Admiral Igor Khmelnov, commander of the Russian Pacific Fleet, was convicted by authorities of selling sixty-four “decommissioned” ships that included two aircraft carriers.<sup>97</sup> During the war in Grozny, just about anything could be purchased for the right price. As writer Olivia Ward rightly said, “somebody’s profiting from this war in a big way.” Even Russian soldiers could sell their tanks.<sup>98</sup> Ward also pointed out another concern: “[t]here’s little doubt the Chechen arms bazaar includes at least some officers far more senior than the troops on the streets,”<sup>99</sup> senior officers that have greater access to weapons of greater lethality. With this type of chaos, it is conceivable that a well-funded terrorist group could have purchased a small tactical nuclear weapon that would certainly be more transportable than a couple of aircraft carriers.

What further complicates matters in Russia and its former states is the sheer scale of the former Soviet nuclear arsenal. Even if the Russians could account and properly secure 99% of their estimated 25,000 to 30,000 nuclear weapons, a remarkable feat under such dire circumstances, that would still leave approximately 250 nuclear weapons outside of their control.<sup>100</sup> Some of these weapons are what military experts call tactical (vice strategic) nukes and are the size of a small briefcase, making them highly transportable, concealable and for these reasons desirable. There have been reports that many of these suitcase nukes have gone missing, presumably sold to the highest

---

<sup>97</sup> *Ibid.*, 69-70.

<sup>98</sup> Olivia Ward, “Chechens Buying Arms – from Russian Troops,” *Toronto Star*, 21 April 1995; <http://micromedia.pagesofthepast.ca/PageView.asp>; Internet; accessed 29 March 2009, A2.

<sup>99</sup> *Ibid.*, A2.

<sup>100</sup> Allison, 61.

bidder.<sup>101</sup> In a 1997 *60 Minutes* interview with host Steve Kroft, retired Russian General Alexander Lebed alleged that Russia's military had lost track of one hundred suitcase-sized nuclear bombs.<sup>102</sup> Other independent sources have supported this claim. Kenneth Patchen of the *National Observer* reported that Professor Alesky Yablokov confirmed Lebed's allegation.<sup>103</sup> Despite the difficulties in substantiating Lebed's claim, the possibility of nuclear weapons disappearing is feasible, especially given the extent of Russia's corruption and its black market activity.

With nuclear energy being used more readily throughout the world, stockpiles of nuclear waste, including weapons grade material, are being left relatively unattended. As Nikolai Kravchenko, a Russian customs chief, reported, there were "more than five hundred incidents of illegal transportation of nuclear and radioactive materials across Russian state borders in the year 2000 alone."<sup>104</sup> There are countless examples of insecure nuclear sites and dozens of security violations across Russia and its former states. John Holmes, director of the US Arms Control and Disarmament Agency, explained: "[many] of the controls and disciplines that the Soviets had in place are now nonexistent."<sup>105</sup> Other sources have also substantiated these statements:

---

<sup>101</sup> *Ibid.*, 43.

<sup>102</sup> Steve Kroft, "The Perfect Terrorist Weapon," *60 Minutes*, 7 September 1997; [http://www.drudgereportarchives.com/dsp/specialReports\\_pc\\_carden\\_detail.htm?reportID=%7B7DF19E68-C62C-4D6D-8124-86599A099AAA%7D](http://www.drudgereportarchives.com/dsp/specialReports_pc_carden_detail.htm?reportID=%7B7DF19E68-C62C-4D6D-8124-86599A099AAA%7D); Internet; accessed 29 March 2009.

<sup>103</sup> Kenneth Patchen, "The Nuclear Suitcase Bomb and Nuclear Terrorism: the Lebed Claims," *National Observer*, no. 41 (Winter 1999); [http://www.nationalobserver.net/1999\\_winter\\_patchen.htm](http://www.nationalobserver.net/1999_winter_patchen.htm); Internet; accessed 29 March 2009.

<sup>104</sup> Allison, 74.

<sup>105</sup> James Kitfield, "The Age of Superterrorism," *Government Executive*; Vol 27, Issue 71 (Washington, July 1995); <http://proquest.umi.com/pqdweb?index=1&did=7719920&SrchMode=1&sid=3&Fmt=3&VInst=PROD&V>

[c]ontrary to the Russian government's claims, there can be no doubt about the fact that enough nuclear material to build more than 20 nuclear weapons was lost in the transition from the Soviet Union to Russia.<sup>106</sup>

Needless to say, the chances of a couple of pounds of weapons grade material from just one of these easy-access sites would be sufficient for a person with a relative amount of intelligence to create a small tactical nuclear device, or at the very least create a dirty bomb.

Pakistan is another possible supplier of nuclear weapons and material to extremist terrorist groups. Known for its shady deals with the Taliban and Al-Qaeda, there are good indications according to CIA officials that many of Pakistan's top military and governmental officials have been infiltrated by Al-Qaeda's "ideological soul mates."<sup>107</sup> As one of many examples, a former leading Pakistani nuclear scientist, Abdul Qadeer Khan, has proliferated more nuclear technology than any global organization and has earned millions for doing so. Pakistan's nuclear technology proliferation dealings are linked to North Korea, Iran, Libya, Iraq, Saudi Arabia, Myanmar, the United Arab Emirates, South Africa and others.<sup>108</sup>

Furthermore, Pakistan's political history is rife with instability. Former leader Pervez Musharraf survived several assassination attempts, and Benazir Bhutto, a leading candidate in Pakistan's 2008 election campaign, was assassinated by a gunman/suicide

---

[Type=PQD&RQT=309&VName=PQD&TS=1237939955&clientId=1711](#); Internet; accessed 23 February 2009, 3.

<sup>106</sup> Graham Allison and Douglas Dillon, "Nuclear Terrorism: How Serious a Threat to Russia?" *Belfer Center for Science and International Affairs*, September/October 2004; [http://belfercenter.ksg.harvard.edu/publication/660/nuclear\\_terrorism.html#\\_ftn23](http://belfercenter.ksg.harvard.edu/publication/660/nuclear_terrorism.html#_ftn23); Internet; accessed 29 March 2009.

<sup>107</sup> Allison, 77.

<sup>108</sup> *Ibid.*, 75.

bomber, clearly demonstrating the fragility of the state. To make matters worse, possible replacements may lie in the ranks of radical Islamic extremists who have penetrated various levels of government, or at very least, individuals who are sympathetic to their causes. Furthermore, high-ranking Pakistani officials fear that radical Islam has begun to seep into the military's officer corps.<sup>109</sup> This unstable state of growing global concern can easily find itself victim to a violent coup by a radicalized group that would then have its hands on a substantive nuclear arsenal.

North Korea is another state of concern that has recently broken away from the Non-Proliferation Treaty (NPT) and developed an aggressive nuclear weapons programme that has the capacity to produce a dozen warheads per year.<sup>110</sup> Since "North Korea is a country wracked by food shortages, a stagnant economy, and mass deprivation,"<sup>111</sup> it is not too far a stretch to imagine the Pyongyang government selling just about anything to stave off an economic collapse. This would naturally include the retailing of fissile material or even nuclear weapons to would-be buyers, including potential terrorist organisations, should the price be right. In an economy propped up by the sales of missiles, drug running and counterfeiting, North Korea is "supremely qualified to move fissile material around the globe to willing buyers."<sup>112</sup>

---

<sup>109</sup> Bryan Bender and Farah Stockman, "Extremist Influence Growing in Pakistan, U.S. Officials Fear," *Boston Globe*, 11 January 2004.

<sup>110</sup> Gary Samaore, "North Korea's Weapons Programme: A Net Assessment," *International Institute for Strategic Studies*, 21 January 2004; <http://www.iiss.org/conferences/korea-forum/>; Internet; accessed 29 March 2009.

<sup>111</sup> Allison, 80.

<sup>112</sup> *Ibid.*, 81.

When describing the perceptions of those who do not believe a nuclear terrorist event is possible, renowned terrorist expert Walter Laqueur explains that many apparent threats have originated from either mentally disturbed people or criminal blackmailers who turned out to be bluffing.<sup>113</sup> This repeated bluffing can reduce credible threats and even desensitize the public to the potential realities regarding nuclear terrorism. Furthermore, desensitization has been ongoing since the end of the Second World War where the last (and only) nuclear strikes against non-combatants occurred in Hiroshima and Nagasaki.<sup>114</sup> This false sense of security may lead people to believe that a threat does not exist when there is ample evidence suggesting otherwise.

Another argument that sceptics use to dismiss the potential use of nuclear weapons is the extensive human challenges in developing weapons grade material (enriched plutonium or uranium), the main and critical component of a nuclear weapon. In his 1999 book, *The New Terrorism: Fanaticism and the Arms of Mass Destruction*, Laqueur states that because of the easy access to weapons design that resides in the public domain, terrorists should have certainly developed one by now, but they have not. He further states that “critics point to the fact that sovereign states with substantial resources at their disposal have failed to construct nuclear devices.”<sup>115</sup> However, this does not take into account that a terrorist group would in most likelihood *not* attempt to create enriched uranium on its own. In fact, the most likely source of weapons grade nuclear material would be obtained by either a state that already possesses a nuclear

---

<sup>113</sup> Laqueur, *The New Terrorism*, 73.

<sup>114</sup> *Ibid.*, 74.

<sup>115</sup> *Ibid.*, 73.

capability (Pakistan as example), the black market, or even by theft. These examples will be pursued in more detail shortly. It is worth adding that though Laqueur initially dispelled the likelihood of nuclear terrorism, he did admit before the events of 9/11 that there can always be an exception or two and that the possibility of nuclear terrorism does exist.<sup>116</sup>

Laqueur's more recent book, *No End to War: Terrorism in the Twenty-First Century*, written in 2003, offers a slightly different perspective. The author's belief in the possibility of terrorists using WMD has increased significantly. In writing on the challenges of acquiring WMD, Laqueur affirms that one should not be blind "...to the fact that with every year that passes, access [to WMD material] becomes easier and the opportunities to use these weapons greater."<sup>117</sup> He also clearly identifies fanaticism, particularly among religious-nationalists, as an increased threat that has become more radicalized in the twenty-first century. Because of this radicalization, self- "... restraints have become weaker or are no longer existent,"<sup>118</sup> and the killing of thousands of innocent civilians has become more acceptable. Laqueur singles out radical Muslim groups and their strong motivation to "frighten and demoralize their enemies...and those [that] oppos[e]them."<sup>119</sup> Frank Barnaby, a member of the Oxford Research Group into

---

<sup>116</sup> *Ibid.*, 74.

<sup>117</sup> Walter Laqueur, *No End to War: Terrorism in the Twenty-First Century* (New York: Continuum International Publishing Group Inc, 2003), 227.

<sup>118</sup> *Ibid.*

<sup>119</sup> *Ibid.*, 228.

terrorists' use of WMD, also supports this idea: "The events of 11 September 2001 showed that such self-imposed constraints on mass killing no longer apply."<sup>120</sup>

Should terrorists acquire WMD, there is little doubt that they would use them at a time of their choosing. As Rohan Gunaratna poignantly indicates: "[i]t [Al-Qaeda] will have no compunction about employing chemical, biological, radiological, and *nuclear* [emphasis added] weapons against population centers."<sup>121</sup> Taking a more solemn position to the problem, Laqueur offers the following: "[t]hose arguing that since a disaster has not yet happened, it will not happen in the future, are on weak ground."<sup>122</sup>

There are varied opinions on Al-Qaeda's motivations, including those published by author and terrorism specialist, Louise Richardson. She professes that despite there being an availability of nuclear material and expertise, there is no evidence to suggest that Al-Qaeda has the desire or motive to attack the US with a nuclear weapon.<sup>123</sup> However, this argument is quickly refuted by several published facts. First, Al-Qaeda's training doctrine, Volume 11 (Encyclopedia of Afghan Jihad), unmistakably states that the organization is pursuing a WMD capability.<sup>124</sup> Second, demonstrating his clear intent, Bin Laden has made several public statements regarding the use of WMD and

---

<sup>120</sup> Frank Barnaby, *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction* (London: Granta Publications, 2003), 108.

<sup>121</sup> Gunaratna, 15.

<sup>122</sup> Laqueur, *No End to War*, 228.

<sup>123</sup> Richardson, 160.

<sup>124</sup> Gunaratna, 94.

some specifically aimed at Pakistan, urging Muslims to prepare for a jihad to include a nuclear force.<sup>125</sup>

Within the same body of work, Richardson also states that the claims made by Bin Laden to be pursuing the acquisition of weapons of mass destruction are mainly designed to have a psychological effect on Westerners. In other words, she claims that Al-Qaeda's interests lie more in having a psychological impact based on the perception of possessing nukes than actually acquiring the capability. Regardless of this argument's accuracy, dismissing this possibility as an empty threat is erroneous and simply dangerous, particularly when a trend in increased violence and hatred against Americans has been clearly established. Furthermore, Al-Qaeda's motivation and capabilities combined with an abundance of poorly secured nuclear material throughout the world, makes the possibility of nuclear terrorism a genuine threat and not merely leverage for psychological impact.

Another argument offered by Richardson is that Al-Qaeda might have tried to build or acquire nuclear weapons but has failed in its attempts and that it is far from being in a position to deploy them.<sup>126</sup> However, as Walter Laqueur adeptly points out, terrorists of this calibre and with this singular aim must only be lucky once in a thousand attempts in order to be successful.<sup>127</sup> Conversely, those who defend against such a potential strike must be successful (and lucky) all the time. If Al-Qaeda is serious in its desire to acquire a nuclear capability (and it has openly stated that it is), the organization

---

<sup>125</sup> Allison, 48-49, 65.

<sup>126</sup> Richardson, 162.

<sup>127</sup> Laqueur, *No End to War*, 228.



is certainly capable, willing and in a position to obtain a device, if it has not already done so. Increasing this risk is the rapid spread of Al-Qaeda's radical ideology and its greater flexibility achieved through a decentralized organization. The growth of small diversified cells that share a common purpose throughout the world certainly increases the chances of nuclear terrorism.

Perhaps the most obvious question many critics pose is why have terrorists not already used a nuclear device? The answer must consider the complexities of planning, timing, and meeting a desired strategic intent. Al-Qaeda can pick and choose the time and location to strike in order to meet its political aims. Timing, therefore, does play a critical factor in mass casualty event planning because of its strategic impact and the anticipated global response. The fact that Al-Qaeda has not yet repeated its dramatic 9/11 attack or responded to the US invasion of Afghanistan and Iraq leads some to believe that it is incapable of further attacks. Richardson opines: "[t]hey did not demonstrate that they had the wherewithal to repeat the act [9/11] or to wage a military campaign against us; we just assumed that they could."<sup>128</sup> Once again, Richardson makes a dangerous assumption that since there has not been a decisive strike since 9/11, Al-Qaeda and other similar groups are incapable of doing so. There are several reasons to discount Richardson's assertion.

Why should Al-Qaeda strike now? It can be argued that terrorist groups such as Al-Qaeda have not used or demonstrated their nuclear capability because they have not seen the need to. One of Al-Qaeda's goals was to draw the US into a prolonged conflict similar to bin Laden's experience in the Soviet invasion, where mujahidin fighters

---

<sup>128</sup> Richardson, 167.

destroyed them through an extended insurgency. As Graham Allison, author of *Nuclear Terrorism: The Ultimate Preventable Catastrophe*, expresses – “Al Qaeda’s leadership has always wanted to draw the US into a protracted battle, especially one where its soldiers would find themselves based in a hostile environment, open to hit-and-run tactics.”<sup>129</sup> Bruce Hoffman also supports this view:

If it is accepted that one of bin Laden’s aims in the 9/11 attacks was to draw the United States into a costly ground campaign in Afghanistan, where American forces would be ground up and defeated much as the Red Army was more than a decade ago, then Iraq arguably presents him with a crucial, second (final?) bite of the apple.

In Afghanistan, this never materialized since the United States wisely used the indigenous Northern Alliance fighters with strong support from US special operations forces (SOF) that had tremendous reach back to lethal and far ranging weapons. By using the local knowledge of the Northern Alliance, the US SOF did not get bogged down in an attritionist battle and quickly defeated the Taliban and Al-Qaeda forces. Despite hitting the Al-Qaeda terrorist ring hard, the initial slow US response time and public announcements of its intentions facilitated the safe retreat of many of their fighters long before US SOF even arrived. Conversely, the US invasion of Iraq in 2003 proved exactly what Al-Qaeda leadership was hoping for in Afghanistan a few years prior.

With the massive US military invasion of Iraq, the envisioned insurgency Bin Laden was hoping for materialized as a direct result of US foreign policy, arguably driven to some extent on retaliation for 9/11 and the ongoing “global war on terror.” Upon careful review of Richardson’s assertion that Al-Qaeda no longer possesses the wherewithal to repeat their 9/11 strike, a strong case can be made to state that there is no requirement for it to do so at this time repeats. Simply stated, US foreign policy in Iraq

---

<sup>129</sup> Allison, 11.

has been disastrous, much to the delight of Islamic extremists. After spending trillions of dollars in an extended war they now realize cannot be won, senior US officials and spin-doctors are trying to make good from a bad thing. Furthermore, the actions of senior governmental and military officials, combined with abuse stories, are stoking the fires of insurgency and consequently of Islamic fundamentalism.<sup>130</sup>

Secondary and tertiary effects from the war in Iraq include the use of the conflict by Al-Qaeda to reinvigorate the jihadi cause and to train a second generation of terrorist fighters. Bruce Hoffman provides additional detail in his RAND article “Combating Al-Qaeda and the Militant Islamic Threat”: “[h]aving been bloodied in battle in Iraq, they [insurgents] will possess the experience, cachet and credibility useful for both jihadi recruitment and operational purposes elsewhere.”<sup>131</sup> Furthermore, the war and its exceedingly high cost have certainly affected the US economy and the Al-Qaeda propaganda machine is taking advantage of the US’ weakened position as a global economic leader. Bin Laden has cleverly linked the collapse of the World Trade Center buildings on 9/11 to the current economic crisis in the US.<sup>132</sup> One can make a safe assumption that terrorist organizations such as Al-Qaeda will continue to take advantage of some of the spill over effects caused by the US invasion into Iraq, namely the increased radicalization of Islamic extremists and a recruitment tool for future terrorists, while adding legitimacy to their cause.

---

<sup>130</sup> Gwynne Dyer, *The Mess They Made: The Middle East After Iraq* (Toronto: McClelland & Stewart Ltd, 2007), 7-12.

<sup>131</sup> Bruce Hoffman, “Combating Al Qaeda and the Militant Islamic Threat,” RAND Publication, February 2006, RAND Corporation; [http://www.au.af.mil/au/awc/awcgate/congress/hoffman\\_testimony16feb06.pdf](http://www.au.af.mil/au/awc/awcgate/congress/hoffman_testimony16feb06.pdf); Internet; accessed 22 October 2008,12.

<sup>132</sup> *Ibid.*,8.

Though there is potential for change as a result of the recently elected President Barack Obama and his administration, the fact remains that there are still significant numbers of Western forces on what Bin Laden considers Muslim ground. With every day that passes, more and more Muslims are developing radical philosophies as a direct result of the extended US occupation, not to mention the many abuses of Iraqi civilians and the detainees at the Abu Ghraib prison facility during the course of the invasion. Though a quantitative measurement on the extent of Islamic radicalization would assist in proving this point, little empirical evidence is available. However, Pascal Boniface, director of the Institute for International and Strategic Relations (IRIS) in Paris summarizes the US invasion pointedly:

Most leaders and the international public thought that a war to topple Saddam was a cure worse than the disease. The fear that the Iraqi population would suffer was significant, but other outcomes were feared even more: the destabilization of the Middle East, the radicalization of the Arab and Muslims worlds, an increase in antagonism between the Western and Muslim worlds, the growth of terrorism, and the weakening of the UN. These fears are not speculative but grounded in the lessons of history.<sup>133</sup>

Equally as poignant in his words was CIA director Porter Goss, as quoted by Stewart Patrick – “the US-led invasion and occupation [in Iraq] transformed a brutal but secular authoritarian state into a symbol and magnet for the global jihadi movement.”<sup>134</sup> Therefore, it is not in Al-Qaeda’s best interests to conduct a nuclear attack that would upset the current situation in Iraq. With a prolonged US intervention in the Middle East expending 20 millions dollars every ninety minutes and the war costing Americans

---

<sup>133</sup> Pascal Boniface, “What Justifies a Regime Change,” in *The Washington Quarterly*, Vol 26, no. 3 (Summer, 2003), 62.

<sup>134</sup> Stewart Patrick, “Weak States and Global Threats: Fact or Fiction?,” in *The Washington Quarterly*, (Spring 2006), 35-36.

trillions of dollars to this point, not to mention the cost of US soldiers lives and the overextension of the military,<sup>135</sup> Al-Qaeda must be pleased with the current US plight and one must wonder why it would do anything drastic to upset the current situation. As Gwynne Dyer articulates: “[i]t is certainly within al-Qaeda’s interest to keep American troops pinned down in Iraq, where their presence and their behaviour serve to radicalize people throughout the Arabic and broader Islamic world.”<sup>136</sup> When the time is right and Al-Qaeda has something further to gain, the organization will accelerate its efforts to launch a nuclear strike.

To say that the American led “Global War on Terror” has not hurt terrorist rings including Al-Qaeda would be erroneous. The United States and its allies have managed to kill numerous top Al-Qaeda operatives throughout the world, but does that mean that Al-Qaeda is no longer operational? As portrayed earlier, the benefits of a decentralized organization are that it can continue to flourish despite having several leaders arrested or killed. Furthermore, it would appear that US foreign and domestic policies against terrorist networks are akin to a game of chess, filled with deception, counter-moves and skilled strikes. Extrapolating simple conventions of warfare to include planning, execution, offensive and defensive operations, one might conclude that Al-Qaeda is in a state of transition. As it absorbs and adjusts to new counterterrorist measures, Al-Qaeda is constantly scrambling and struggling “to adapt itself to the new, less congenial operational environment in which it must exist.”<sup>137</sup> As such, it would be wrong to

---

<sup>135</sup> Dyer, 15-17.

<sup>136</sup> *Ibid.*, 71.

<sup>137</sup> Bruce Hoffman, “Al Qaeda, Trends in Terrorism”, 13.

assume that because of its recent strategic pause, it is unwilling, permanently incapable, or insufficiently resourced to actually conduct the next logical step in a patten of escalating violence, a nuclear strike.

Upon examining much of the available evidence regarding the feasibility of Al-Qaeda acquiring nuclear weapons or sufficient material to develop one, two key deductions can be made. First, Al-Qaeda is still a capable organization making good use of a decentralized cellular model that uses a strong ideology to spread its organizational goals. Its lack of recent global activity may be a conscious decision to profit from the ongoing US difficulties in Iraq and to perhaps adapt to improved counterterrorist techniques developed by Western democracies in what can be described as a transitional phase. Secondly, numerous opportunities exist to acquire nuclear weapons or material through state sponsorship, the black market or simply theft. The recent increased proliferation of nuclear technology to unstable states certainly provides ample opportunity for the serious terrorist organization.

## **PART VI – WMD THREAT RESPONSE IN WESTERN DEMOCRACIES**

As a result of the clear and present danger posed by non-state actors and the potential use of WMD against Western democracies, most governments have adopted aggressive national and foreign policies. But have they done enough? Have their efforts, priority of weight and resources been appropriately directed? Has the threat significantly been reduced as a result of these national and global initiatives? A quick evaluation of American and Canadian policies will reveal that despite significant effort and billions of

dollars expended, the threat is ever present and much of the focus has been either misdirected or haphazardly applied. Specifically, a review of the US Homeland Defense, Canada's readiness posture and participation in various global initiatives to include the Global Partnership will demonstrate that terrorist groups such as Al-Qaeda still have the advantage in a target rich and unprepared environment.

Despite the fact that prior to 9/11, top US governmental officials including President Bush were briefed and acknowledged that terrorist attacks, including mass casualty scenarios, were possible, little was done to actually prevent or reduce the threat.<sup>138</sup> This pattern of behaviour is common, particularly when victims of vicious attacks, in this case unsuspecting US civilians, seldom believe the threat is plausible. The thought of crashing airliner passenger jets into populated buildings was certainly not considered credible simply because of the sheer audacity of the idea. Since the event, numerous defensive measures have been activated and Western democracies are now alert of the potential threat. However, despite numerous upgrades to US internal security, they have not been sufficient in scope to reduce or stop the threat of nuclear terrorism.

After billions of dollars spent on homeland security and numerous physical security measures that have been established, illicit material still finds its way into the US. Take for example narcotics that are smuggled into North America. As Graham Allison points out, there are countless ways to bring illegal drugs into the US, including extensive tunnel systems between Mexico and the state of California. He also notes that

---

<sup>138</sup> Melvyn P. Leffler, "9/11 and the Past and Future of American Foreign Policy," *International Affairs*, 79, no. 5 (2003): 1048.

migrants can penetrate deep into the US without detection and that a sophisticated terrorist group could surely do better.<sup>139</sup> Allison provides further corroboration:

Everyday, 30,000 trucks, 6,500 rail cars, and 140 ships deliver more than 50,000 cargo containers with more than 500,000 items from around the globe. Approximately 21,000 pounds of cocaine and marijuana are smuggled into the country each day in bales, crates, car trunks – even FedEx boxes. Any one of these containers could hold something far more deadly.<sup>140</sup>

Would not an improved level of security assist in the slowing of drugs into the US? How about the smuggling of a modest nuclear weapon that could easily fit into a mini-van? Some believe that smuggling a nuclear device into the US is far too complex an action to successfully complete, especially with the recently added defensive upgrades in homeland security. However, Graham Allison easily refutes this theory by analysing the sheer volume of US imports.

Much of US homeland security is psychologically based. Actual physical defences are more limited. While families boarding aircrafts are checked for nail clippers, bottles of shampoo and toothpaste, select terrorist cells with a strategic effect capability are meticulously planning for their next strike while demonstrating their well established aptitude for patience and methodology. With thousands of un-inspected cargo containers, railcars and trucks entering continental US every day, combined with countless miles of coastline, it is possible for a sophisticated terrorist group to smuggle nuclear components into the US: “Unfortunately, terrorists who do their homework will realize that they can simply ship their nuclear cargo by land, air, or sea to any address in

---

<sup>139</sup> Allison, 113-116.

<sup>140</sup> *Ibid.*, 107.



the country and expect it to arrive unimpeded up to 95 percent of the time.”<sup>141</sup> Despite the billions of dollars spent on homeland security, there are still vulnerabilities that may be exploited by determined terrorists at the time and place of their choosing.

Given the interdependence of the global economy and the consequent reliance of all developed nations on foreign trade, there is little chance that security measures will change in the foreseeable future. Most of the requisite pieces for a nuclear bomb can be shipped easily into the US through FedEx without physical inspection. As Allison attests when expanding on the power of globalization: “[w]ith only a phone and an Internet connection, you can send such materials across the world.”<sup>142</sup> The critical requirement to move materials around the world to support the US economy results in exploitable gaps in homeland security defences.

Another scheme US governments have pursued in the past with varying degrees of success is the policy of pre-emption. Though many believe pre-emption is a newly developed action under the Bush Administration of the twenty-first century, in reality, it has been used previously on numerous occasions. As professor of history at the University of Virginia and renowned author, Melvyn Leffler articulates: “in many respects, Bush’s national security strategies are more firmly rooted in the past than most people think.”<sup>143</sup> Pre-emption has been a tool US governments have used (successfully or not) in Libya, Cuba, Cambodia, Laos, Haiti, Dominican Republic, and Nicaragua, among others. However, since 9/11, the US main focus has been in Afghanistan and

---

<sup>141</sup> *Ibid.*, 113.

<sup>142</sup> *Ibid.*, 79.

<sup>143</sup> Leffler, 1051.

Iraq. In the words of Gwynne Dyer: “[t]he occupation of Iraq was the most spectacular incompetent and corrupt operation carried out by the government of any developed country in many decades.”<sup>144</sup> Though this statement is perhaps over the top, it certainly provides a succinct and penetrating analysis of the invasion. The reasons why the US decided to invade Iraq<sup>145</sup> are beyond the scope of this work. It is sufficient to underline the fact that the intervention in Iraq has cost Americans dearly, has further radicalized Islamic extremists, and has not really solved the real threat of non-state actors and the proliferation of nuclear materials and technology.

A critical component in defeating potential access to nuclear material by terrorists is multilateral initiatives, including the “Global Partnership.” Launched in June 2002, it aims to prevent the proliferation of WMD and composite materials by providing a framework for increased cooperation.<sup>146</sup> At the founding meeting in Canada, most G8 nations were eager to pledge resources and funding to assist with the overall aim. A common understanding of the current threat situation was established: the Former Soviet Union (FSU) “alone do[es] not have sufficient resources to eliminate or properly secure” its stockpiles of nuclear weapons and fissile material.<sup>147</sup> As a result, these materials are vulnerable to theft (or black market purchase) by terrorists and could be potentially used

---

<sup>144</sup> Dyer, 18.

<sup>145</sup> Some analysts such as Gwynne Dyer believe that the US invasion into Iraq was to limit the flow of oil to a one day potentially hostile China. By establishing a strong US foothold in the Middle East, the US would be in a position to control the flow of oil. Dyer asserts that the invasion had little to do with the alleged Iraqi possession of WMD. For more information see Gwynne Dyer’s *The Mess They Made: The Middle East After Iraq*.

<sup>146</sup> Department of Foreign Affairs and International Trade, *Global Partnership Program: A Tangible Canadian Contribution to Reducing the Threat of Weapons of Mass Destruction* (Ottawa: Canada Communications Group, 2007); [http://www.international.gc.ca/gpp-ppm/assets/pdfs/GPX\\_AnnualReport\\_07-en.pdf](http://www.international.gc.ca/gpp-ppm/assets/pdfs/GPX_AnnualReport_07-en.pdf). Internet; accessed 15 February 2009, 3.

<sup>147</sup> Global Partnership Program, 7.

against Western targets. The overall intent behind the partnership was to adopt a “more coherent and coordinated global response to address these threats.”<sup>148</sup> However, this goal has thus far proved more difficult to attain than the easy initial buy-in from global leaders.

Despite expressions of good intentions by the G8 nations, the Global Partnership to date has disappointed and faces significant shortages in contributing nation funding.

As Paul F. Walker, Legacy Program director at Global Green USA, establishes:

...most 10-year goals for elimination of former Soviet weapons of mass destruction (WMD) are less than half accomplished, and many Global Partnership members have not yet fulfilled their sizeable financial pledges...the Global Partnership’s expansion appears to have stalled.<sup>149</sup>

Walker emphasises the lack of funding as well as the challenges in negotiating complex bilateral agreements with Russia that when combined cause extreme difficulties in project planning and management to the point where progress is assessed as impossible.<sup>150</sup> This equates to massive amounts of weapons-useable nuclear materials (1,250 tons), including 600 tons of highly enriched uranium (HEU) and plutonium outside of actual nuclear warheads in Russia alone.<sup>151</sup> Other countries that have similar problems with bomb-grade material sitting in civilian power and research reactors include Iran, Indonesia,

---

<sup>148</sup> *Ibid.*, 7.

<sup>149</sup> Paul F. Walker, “Looking Back: Kananaskis at Five: Assessing the Global Partnership,” *Arms Control Today*, Vol 37, no. 7 (September 2007); [http://www.armscontrol.org/act/2007\\_09/Lookingback](http://www.armscontrol.org/act/2007_09/Lookingback); Internet; accessed 21 February 2009, 1.

<sup>150</sup> *Ibid.*, 2.

<sup>151</sup> *Ibid.*, 4.

South Africa and even Jamaica, some of which is “secured” behind a chain-link fence with a simple padlock.<sup>152</sup>

Global financial instability can only exacerbate this problem. Fragile economies will cater to priority institutions such as health, education and industry. These priorities will take precedence over potential funding for projects such as the Global Partnership. Since “only one-quarter of former Soviet nuclear materials have received comprehensive security upgrades”<sup>153</sup> and there is an apparent lack of financial commitment, the road ahead to greater security will be a long and difficult one. Projects such as these will likely continue to be marginalized in the foreseeable future, facilitating the acquisition of nuclear materials by terrorists.

While Canada has certainly provided strong leadership and timely funding to the Global Partnership initiative, its own defence and response posture is another matter. Similar to the US, Canada relies heavily on the international global market and imports thousands of goods on a daily basis, making it susceptible to terrorist infiltration. Furthermore, Canada’s response posture to chemical, biological or radiological attacks is still in its infancy and the country has yet to develop a fully integrated program: The Canadian Joint Immediate Reaction Unit (CJIRU) is “still in the process of being fully developed.”<sup>154</sup> Though the unit is continuing to build its capabilities, its current shortfalls reveal the Canadian government’s priorities and will almost certainly not change until a major terrorist event hits Canada.

---

<sup>152</sup> Brian D. Finlay, “Russian Roulette: Canada’s Role in the Race to Secure Nuclear, Biological, and Chemical Weapons,” *International Journal*, Vol 61, Issue 2 (Spring 2006), 413.

<sup>153</sup> *Ibid.*, 419.

<sup>154</sup> National Defence Webpage (CJIRU / SOFCOM / DND); <http://www.cansofcom.forces.gc.ca/cji-iii/index-eng.asp>. Internet; accessed 17 March 2009, 1.

To address serious threats to global security, other initiatives such as nuclear reversal and restraint are being aggressively pursued by international stakeholders, including the United States. Professor, writer and political figure (former deputy national security advisor for defence policy – Israel), Ariel Levite describes nuclear reversal as a process where nations initially embark on a path to acquire nuclear weapons capability but at some point in time reverse course (for example, South Africa).<sup>155</sup> Such an initiative is highly encouraging but does not hide the fact that nuclear material to manufacture potential weapons is already available.

Furthermore, numerous countries are moving towards “nuclear hedging”: a strategy to maintain a *near* nuclear capability without the stigma associated with being part of the nuclear club. A nation can then quickly produce nuclear weapons on reasonable demand (from within several weeks to a few years).<sup>156</sup> The nuclear hide and seek game is filled with “extraordinary secrecy, intentional cover-up, and deliberate misinformation”<sup>157</sup> at the highest political levels. Though nuclear reversal is a positive idea worth pursuing, it does not hide the fact that the proliferation of nuclear technology has already reached alarming levels and can be acquired by what Alex Schmid describes as determined and sufficiently resourced “non-state actors.”<sup>158</sup>

---

<sup>155</sup> Ariel E. Levite, “Never Say Never Again: Nuclear Reversal Revisited,” *International Security*, Vol 27, no. 3 (Winter 2002/3): 59-88; [http://iis-db.stanford.edu/evnts/3863/LeviteAriel\\_2004-0513.pdf](http://iis-db.stanford.edu/evnts/3863/LeviteAriel_2004-0513.pdf); Internet; accessed 26 October 2008, 61.

<sup>156</sup> *Ibid.*, 69.

<sup>157</sup> *Ibid.*, 64.

<sup>158</sup> Alex P. Schmid, “Terrorism and the use of weapons of mass destruction: from where the risk?” *Terrorism and Political Violence*; Vol 11, no. 4 (Winter 1999), 112.

Schmid also addresses a unique problem associated with non-state actors or, to make the possible link, terrorist organizations. Nuclear technology has the potential now to reach non-state actors (and terrorists) that cannot be deterred in the way territorial actors can. This has created significant challenges which Western democracies have not yet learned to deal with.<sup>159</sup> With troubled and fractured independent states in extreme poverty and in some cases near anarchy, the loss by theft due to below standard security measures or black market exchange of nuclear weapons and fissile material to any group with the right amount of funding is certainly possible and in some cases has allegedly already occurred.<sup>160</sup> This would certainly add credibility to the argument that many of the non-proliferation initiatives such as nuclear reversal are falling short of their mark leaving Western democracies vulnerable to attack by determined terrorists with a nuclear agenda.

It is for this reason that the United States has taken the lead in many other non-proliferation projects. These include the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism. Both these projects are open to those states that share the same concerns as the US and are more action oriented than legislative or rule making.<sup>161</sup> Further insight is provided by international security expert, Renée De Nevers: “[t]he initiative seeks to set new standards for securing nuclear materials, engaging law enforcement, and prosecuting terrorist suspects and their

---

<sup>159</sup> *Ibid.*, 112.

<sup>160</sup> Allison, 71-72.

<sup>161</sup> Renée De Nevers, “NATO’s International Security Role in the Terrorist Era,” *International Security*, Vol 31, no. 4 (Spring 2007): 34-66, 48.

supporters.”<sup>162</sup> Though many European Union (EU) members, including some affiliated with NATO, share this concern, it has not translated into increased cooperation among various agencies, including NATO. This cooperation must encompass a greater sharing of intelligence and greater interaction between military, police and domestic intelligence agencies if the ring around terrorist groups is to be tightened.<sup>163</sup>

Despite various multilateral projects aimed at reducing nuclear material stockpiles, current progress is slow thus leaving the initiative to the terrorists. This provides terrorist groups with windows of opportunity. Brian Finlay, author and authoritative figure on international security challenges, states that: “[a]t current rates, Russia’s vulnerable nuclear weapons and materials may remain susceptible to terrorist theft until 2030 – opening a 24-year window for terrorists to obtain weapons of mass destruction.”<sup>164</sup> Western democracies, and particularly the United States, have a challenging task to reduce and hopefully stop the proliferation of nuclear materials before they get into the hands of terrorists. Though initiatives such as the Global Partnership, PSI and even pre-emption may bring some form of reduction in the availability of WMD, their respective report cards would currently reveal a failing grade. A more coherent approach is urgently needed. A much improved posture and response, including strong political will, sustained funding commitments, and most importantly, the ability to intelligently contain a radical ideology, is the way ahead. If this response is not fully endorsed and actually implemented by Western societies, terrorists will always have the

---

<sup>162</sup> *Ibid.*, 48.

<sup>163</sup> *Ibid.*, 44.

<sup>164</sup> Finlay, 420.

initiative and will be in a position to strike at the time of their choosing against exposed targets using WMD.

## **PART VIII – THE WAY AHEAD: SOLUTIONS TO NUCLEAR TERRORISM**

The realities and possibilities of nuclear terrorism paint a pessimistic picture. The proliferation of nuclear technology, including critical components parts, fissile material, and weapons, has made its way to fragile states that could potentially support terrorist activities. Other nuclear power states, including Russia, have vast quantities of highly enriched uranium and weapons-grade plutonium improperly secured throughout their storage facilities and are vulnerable to theft. Despite international efforts to reduce the spread of nuclear material, many initiatives have fallen short as a result of underfunding and lack of political will to see them through. Furthermore, terrorist groups such as Al-Qaeda have clearly demonstrated their capabilities as transnational terrorist organizations that have successfully managed to disseminate their ideology based a particularly radical interpretation of Islam.

As described previously, some theorists believe that Al-Qaeda is already in the possession of a tactical device, or sufficient material to create one. If this is the case, defending against this threat will prove extremely challenging. Short term measures to prevent a strike, such as detailed security checks at borders and complete verification of goods entering the US, would cause economic turmoil without any guarantee of prevention. If terrorists are already in the possession of a nuclear device, it may be too late. But if they are not, there is still sufficient opportunity for a determined terrorist to



obtain nuclear material. The longer Western nations take to reduce the possibility of nuclear terrorism, the greater the chance of it occurring. Therefore, coherent long-term strategies must be adopted.

First, the international community, led by the United States, must move forward and prioritize the securing of nuclear bomb-making material (HEU and weapons-grade plutonium). Instead of spending billions of dollars on questionable operations, such as the US invasion into Iraq, greater financial emphasis must be placed on addressing nuclear terrorism. Secondly, the US must make a fundamental shift in its foreign policy. It must reach out and positively interact with the Islamic world in order to increase cooperation, understanding, and reduce perceived prejudices. Lastly, Western democracies must strike at Al-Qaeda's centre of gravity. By supporting Islamic leaders' efforts to solve internal problems, such as the radicalization of their religion, Western states can significantly reduce Al-Qaeda's legitimacy. These steps will not only deter nuclear terrorism, but might also reduce the capabilities of modern day terrorist organizations.

With the existence of improperly secured nuclear material within the former Soviet Union, the problem is exacerbated by "American HEU at research reactors the United States had provided to forty-three countries under President Eisenhower's Atoms for Peace program."<sup>165</sup> Intending to improve the standard of living within the global community by providing an alternate method of power generation, the US has inadvertently provided nations with means to develop nuclear weapons. As discussed in the previous chapter, multilateral initiatives such as the Global Partnership, Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism were

---

<sup>165</sup> Allison, 154.

developed in order to reduce the amounts of HEU and weapons grade plutonium stockpiled around the world. However, as mentioned previously, many of these programs have either stalled or lack the political will to achieve their mandated goals. If the US and other Western nations want to truly stop the possibility of nuclear terrorism, they must re-energize these initiatives.

As the author of *Nuclear Terrorism: The Ultimate Preventable Catastrophe*, Graham Allison, rightly indicates, “[n]o fissile material, no nuclear explosion.”<sup>166</sup> Fortunately, the world’s vast stockpiles of nuclear weapons and weapons-grade material are finite. With sufficient will and resources, these materials can be properly secured, significantly reducing the risk of terrorists acquiring them. This will require leaders to step up and commit to their funding agreements, reduce existing bureaucracy, and impose a “specific plan of action [with a] sequence of performance-measurable milestones...on the fastest possible timetable.”<sup>167</sup> Central to these recommendations is the political will to see them through and the meticulousness in their application. This must be achieved through effective leadership and the ability to commit funds where they are needed. If a small percentage of the money committed to fight the war in Iraq had been used to reduce nuclear material throughout the world, opportunities for terrorists would have been significantly eroded. Furthermore, the price to secure nuclear material *now* will most likely pale in comparison to the funding that will be required after a nuclear strike. When examining the effects of 9/11, one can extrapolate that the US economy, and other Western nations, will have to absorb the costs of new security protocols, accept potential

---

<sup>166</sup> *Ibid.*, 140.

<sup>167</sup> *Ibid.*, 150.

losses in global markets, and quite possibly engage in conflict; the costs associated with homeland defence and an extended war in both Iraq and Afghanistan were the result of 9/11.

In addition to properly securing existing stockpiles, nuclear research facilities throughout the world must be modified to produce a low-enriched uranium (LEU) output, thus eliminating their capability to be used in nuclear weapons.<sup>168</sup> Those that cannot be converted must be closed. This will cause secondary and third order effects such as the loss of power generation within a given area or employment / financial loss resulting in increased friction between the affected society and those that directed the closures. This is especially applicable in a region that has sensitivities to Western influence. Proper allocation of funds and the creation of diverse employment opportunities can offset these initial effects of facility closures.

In order to solve the problem of nuclear hedging as described in the previous chapter, greater diplomacy must be directed at eliminating the loopholes within Article IV of the NPT.<sup>169</sup> Though amendments to the NPT are unlikely as a result of the difficulties in trying to build a consensus among the vast amount of signatories, nations must come to a common agreement to stop further enrichment or reprocessing programmes. Detailed inspections to confirm compliance must be initiated followed up with an escalatory level of response for those that breach collective international consensus agreements. These levels of response can include diplomacy, embargoes, and the use of force (if warranted). This proposal will undoubtedly be challenging.

---

<sup>168</sup> *Ibid.*, 154.

<sup>169</sup> Allison, 158. Contained within the NPT is "...an escape clause that allows nations to legally build the infrastructure for a nuclear weapons program before withdrawing from the NPT and going to the last mile to make nuclear bombs, test those bombs, and declare themselves nuclear weapons states."

Nevertheless, if a realistic hope of reducing the vast amounts of weapons-grade nuclear material is to be achieved, a direct and vigorous approach must be taken.

One such step is the formation of like-minded alliances that want to commit to a collective form of security. If one nation is attacked, the others respond in their defence. This concept could also be applied to nuclear deterrence. In order to prevent non-nuclear nations from developing a nuclear capability, they should join alliances with nuclear partners that will provide a response on their behalf. As an example, the US provides a nuclear deterrence for Japan in case of Chinese or North Korean nuclear attacks. In return, Japan guarantees not to develop nuclear weapons. This existing case can serve as a model to persuade other nations to establish similar security partnerships. Additional research should be initiated in this area including the possible use of force by unified coalition partners to deter nuclear proliferation.

The next logical step in closing these loopholes and preventing nuclear hedging is the complete cessation of nuclear proliferation. There are currently nine nations that possess a nuclear capability (China, France, Great Britain, India, Israel, North Korea, Pakistan, Russia and the United States). With an increasing number of states that have nuclear weapons, the risks of a nuclear incident are amplified. The original five relied heavily on détente during the Cold War to keep every nuclear state in check. However, global security will become increasingly challenging as additional states reach nuclear weapons status. Therefore, global state leaders must take the initiative through aggressive diplomacy, shared cooperation and the political will to ensure that the current number of nuclear states does not increase. By making the prevention of nuclear terrorism an international priority, the risks of a catastrophic attack can be greatly

reduced. As recommended above, a nuclear deterrence alliance could be created to provide a collective defence and stop further nuclear proliferation. Though previous efforts of nuclear deterrence have mixed results, no attempt is certainly worse. Further research in this area is also recommended.

Perhaps the greatest impact the United States can have on solving the nuclear terrorism threat is undertaking a fundamental shift in its foreign policy. This can be accomplished through a variety of methods. Firstly, the use of force and pre-emption policy (Iraq as latest example) has arguably harmed an already marred US image within the eyes of a perceived threatened Islamic world. As Jason Burke opines:

[w]e need to remember that every time force is used it provides more evidence of a ‘clash of civilizations’ and ‘cosmic struggle’ and thus aids the militants in their effort to radicalize and mobilize.<sup>170</sup>

Military power should be applied sparingly if and when it is absolutely necessary in order to achieve a critical strategic goal. It would appear that use of force is the current default setting within US foreign policy, and as Jason Burke confirms, “...the frequent double standards of the big players ...have legitimized the use of violence,”<sup>171</sup> though this might change within the current President Obama’s administration.

Secondly, US foreign policy should shift towards a more supporting role (vice primary) in reducing the radicalization of Islam. Authors Jason Burke and Rohan Gunaratna both maintain that only a Muslim solution can end Islamic extremism and associated terrorist rings: “[I]t is the Muslim elite who must stand up and fight the threat

---

<sup>170</sup> Burke, 290.

<sup>171</sup> *Ibid.*, 315.

it [extremists] represents.”<sup>172</sup> The US and other Western states should assist Muslim nations to eradicate Islamic extremist behaviour. This assistance can include but should not be limited to: financial aid to improve quality of life, providing employment opportunities that avoid extremist lifestyles, technical support (surveillance platforms, computers, etc), intelligence sharing, and mentoring of special operations capabilities. However, this assistance must be supporting in nature in order to strengthen the legitimacy and image of moderate Muslim leaders and to deny the same to terrorist organisations such as Al-Qaeda. As Burke professes, “...the greatest weapon available in the war on terrorism is the courage, decency, humour and integrity of the vast proportion of the world’s 1.3 billion Muslims.”<sup>173</sup> It is up to the US to support them to a much greater degree than previous efforts.

Third, a more multilateral approach must be taken do solve complex problems such as fighting terrorism and reducing nuclear material stockpiles. The American approach of “[y]ou are either with us, or with the terrorists,”<sup>174</sup> uttered by President Bush shortly after 9/11, did not assist in the building of collations to battle a considerable threat. Moreover, it perpetuated the notion of a ‘clash of civilizations,’ particularly when Bush’s phrase “waging a crusade against terrorism” was misinterpreted and linked to historical violent clashes between Christians and Muslims.<sup>175</sup> By closely working with existing credible organizations (United Nations, NATO, the EU) to form multilateral

---

<sup>172</sup> Gunaratna, 318.

<sup>173</sup> Burke, 291.

<sup>174</sup> Gunaratna, 317.

<sup>175</sup> *Ibid.*

collations, the US can increase its legitimacy and achieve greater transparency while accomplishing its goals.

Lastly, the United States, and Western nations in general, must take a concerted effort to understand Islamic culture. A writer for the Meria Journal, *The Middle East Review of International Affairs*, Reuven Paz affirms: “[t]he nature of Islamist anti-Americanism is cultural rather than military or political. It is based on the sense of an ongoing and eternal global conspiracy against Islam and the Muslims.”<sup>176</sup> By understanding Islamic history, meaning and depth of devotion, the US can successfully adjust its foreign policy in order to strengthen relations with the Muslim world and foster a more cooperative environment. These steps can move away from the conspiracy theories of crusades and ‘clash of civilizations’ based on perceived religious ideological differences. Simply listening and acknowledging that there are important challenges, such as Palestine and Kashmir,<sup>177</sup> and actively working towards solutions will greatly assist diplomacy and improve relations. A sincere commitment to solving these complex challenges through a greater understanding of Islamic culture will strengthen US / Muslim relations.

These recommended shifts in US foreign policy, which can apply generally to most Western nations, will certainly not be easy to accomplish. Breaking down biases, fostering an atmosphere of learning, and being willing to change is difficult. This change will require sustained political will, a flexible and understanding approach, combined with a desire to change one’s image. The new administration led by President Obama

---

<sup>176</sup> Reuven Paz, “Islamists and Anti-Americanism,” *Meria Journal*, Vol 7, no. 4 (December 2003); <http://meria.idc.ac.il/journal/2003/issue4/jv7n4a5.html>; Internet; accessed 2 January 2009, 8.

<sup>177</sup> Gunaratna, 310.

looks promising, but it is still too early to tell if it can accomplish the critical goal. This mind-shift requires constant attention; however, once achieved, it can greatly assist the United States and its allies in reducing the risk of nuclear terrorism by defeating would-be nuclear terrorists.

The final recommendation on combating the potential threat of nuclear terrorism is to focus efforts and significant resources on defeating terrorism in general, particularly Al-Qaeda, because of its strategic capability and intent. Current policies and actions taken against terrorism appear to be tactical in nature as opposed to the required strategic response aimed at its ideology.<sup>178</sup> From a strategic perspective, the US must focus on striking Al-Qaeda's centre of gravity – its legitimacy. Current policies are not addressing this issue sufficiently. American pre-emption policies, particularly US attempts to solve potential threats of WMD, seem to be attritionist in application, while leaving little opportunity for the Muslim world to rectify its own problem. Hidden agendas aside, invasions of Muslim countries certainly do not help defeat the radicalization of Islam and are tactical level attempts to solve strategic problems. Bruce Hoffman reinforces this premise:

[T]he predominantly tactical 'kill or capture' approach and metric that currently guides [US] counterterrorist and counterinsurgent efforts is too narrow and does not sufficiently address the complexities of these unique operational environments.<sup>179</sup>

The director of terrorism studies at the United States Military Academy, James Forest, attests: "[a] central component of al-Qa'ida's propaganda requires gaining and maintaining legitimacy within the Muslim World. Failure to gain legitimacy will

---

<sup>178</sup> Burke, 123.

<sup>179</sup> Hoffman, "Combating Al Qaeda and the Militant Threat", 13.



undoubtedly doom their cause and the future of the movement.”<sup>180</sup> Without support from the Islamic community, Al-Qaeda will eventually become irrelevant and its offensive capability will decrease. It is the strategic attack of radical ideologies that will erode support to terrorism and reduce the risk of a nuclear strike.

Muslim clerics have already started to erode Al-Qaeda’s legitimacy by denouncing the radicalization of Islam. Saudi Arabia’s top cleric, Mufti Shaykh Abdul Aziz al-Ashaykh, warned Saudis not to participate in unauthorized jihadist activities. Similarly, Sayyid Imam al-Sharif, former top leader of Islamic Jihad (an Egyptian movement), published a book that rejects violent jihad on legal and religious grounds.<sup>181</sup> A sustained strategic campaign will weaken Al-Qaeda’s ability to recruit and retain followers and ultimately reduce the threat of nuclear terrorism.

Secondly, defeating a decentralized organization will require a decentralized approach. There are numerous advantages in a decentralized command structure including added security, difficulty in infiltrating, the constant spreading of a common set of beliefs, and the ability to act without direction from a higher commander. Demonstrating its resilience, Al-Qaeda has adapted to a strong US counter-terrorist campaign by moving to a decentralized organization that shares a universal ideology. Conversely, attacking this belief in a command-driven hierarchical approach has significant drawbacks. Current US campaigns against terrorism have demonstrated their inability to adapt to an evolving terrorist threat.

---

<sup>180</sup> James Forest, “Exploiting the Fears of Al-Qa’ida’s Leadership,” *CTC Sentinel*, 2, Issue 2 (February 2009), 7.

<sup>181</sup> *Ibid.*, 8.

Authors Ori Brafman and Rod Beckstrom provide an example that uses decentralized units throughout Muslim nations made of mostly indigenous police officers and former military experts that hunt Al-Qaeda cells locally within their region.<sup>182</sup> Since these units know their ‘backyards’ and can influence their surroundings, they make the perfect tool to weed out Al-Qaeda cells and consequently provide strengthened security. Similar to their enemy, they must work independently though with a common purpose. This significantly improves effectiveness since they have the ability to sense, act and adapt much faster than hierarchical structures.

Lastly, close cooperation between civilian police forces, domestic intelligence organizations and military forces is required in order to achieve a high level of mutual support. These three recommendations alone, if applied with rigour, will certainly reduce Al-Qaeda’s capacity to conduct terrorist acts and facilitate its defeat on the moral plane. Regardless of the valid concerns of information sharing, little mutual support can be achieved if everyone participating does not possess the requisite intelligence.

Furthermore, as Bruce Hoffman states, a significant reduction in the bureaucracy currently within important organizations (such as police forces and the intelligence community) can greatly enhance efforts to defeat terrorism. This will

ultimately depend on how effectively the U.S. can build bridges and untangle lines of authority, de-conflict overlapping responsibilities and improve the ability to prioritize and synchronize interagency operations in a timely and efficient manner.<sup>183</sup>

Through increased cooperation, these diverse organizations that share a common goal can work through bureaucratic red tape together. These important but often overlooked facts

---

<sup>182</sup> Brafman and Beckstrom, 155-157.

<sup>183</sup> Hoffman, “Combating Al Qaeda and the Militant Threat”, 14.

can make the difference in meeting counterterrorist goals. Since 9/11, progress in reducing the radicalization of Islam, defeating terrorism, and preventing the possibility of nuclear terrorism has been slow. In fact, because of United States foreign policy, including its emphasis on pre-emption, any would-be progress has largely stalled. The US, among other Western democracies, should be attacking terrorism, specifically Al-Qaeda, at the strategic level. If the US and its allies want to reduce the risk of nuclear terrorism, they will have to prioritize their efforts, adjust foreign policy objectives and defeat Al-Qaeda by striking its legitimacy.

## **PART VIII – CONCLUSION**

Contemporary history has demonstrated that terrorist groups such as Al-Qaeda possess the desire and capability to conduct unprecedented levels of violence against their perceived eternal enemy, the United States. Their ideology is based on the Salafi strand of Islam which is associated with Wahhabism, an ultra-conservative form of Islamic faith that has been shaped over time by radical Islamic theologians. The radicalization of Islam is not a new phenomenon, as violent-natured interpretations date back to the 7<sup>th</sup> century CE. However, recent political and religious Islamists such as Syed Qutb and Abdallah Azzam have begun to direct a previously internal Islamic struggle outwards aimed at the ‘non-believers.’

Osama bin Laden, Al-Qaeda’s ideological leader, has taken jihad, a previously Muslim internal struggle, against the ‘far enemy’ – the United States and its Western allies. Islamic extremists believe its strategic goals all focus on one overarching aim – to

unite the Muslim world into a single entity. Motivating Al-Qaeda members and other radical Islamists around the world are two key grievances: First, US presence in the Middle East is considered by radical Islamic extremists as insulting and unacceptable. This presence dates back to the late 18<sup>th</sup> century and has been increasing ever since, including the latest US operations in Afghanistan and Iraq. Secondly, members of Al-Qaeda are motivated to attack the US because of its continuous support of Israel. These two grievances are often used as a rallying cry throughout the Muslim world, unifying extremists to retaliate against the United States.

Since 9/11, counter-terrorism initiatives conducted by most Western democracies have resulted in a significant change to Al-Qaeda's command and control systems. A previously hierarchical organization vulnerable to direct attack has adapted by becoming more decentralized. This has produced numerous benefits, the most alarming of which is the massive spreading of its ideology. Current tactical level counter-terrorism campaigns are directed at fighting a threat instead of defeating an ideology at the strategic level. As a result, Al-Qaeda, has become more difficult to eradicate, giving it ample time to methodically plan the next-level strategic strike.

Al-Qaeda has become particularly dangerous because of the readily available amounts of nuclear-grade material throughout many regions of the world. Highly enriched uranium (HEU) and weapons grade plutonium are the critical components of a nuclear bomb and their acquisition by Al-Qaeda would give this non-state actor a nuclear capability. Its use would be a logical progression in a historical pattern of escalating violence in order to achieve the organization's strategic goals.

Multilateral initiatives, such as the Global Partnership and the Proliferation Security Initiative (PSI), aimed at reducing the amounts of nuclear material throughout the world, have stalled. A combination of underfunding and lack of political will have given Al-Qaeda ample opportunity to acquire nuclear material through black market purchase or theft. Furthermore, the proliferation of nuclear technology to countries such as Pakistan and North Korea has significantly increased the risk of nuclear components falling into the hands of terrorists.

According to retired four-star general Eugene Habiger, who has overseen both US strategic nuclear weapons and nuclear anti-terror programs, nuclear terrorism “is not a matter of if; it’s a matter of *when*”<sup>184</sup> (emphasis in original text). However, despite this assumption, Western nations have the ability to prevent a nuclear strike.

Firstly, a greater emphasis must be placed on the securing of stockpiled nuclear material (HEU and weapons-grade plutonium). With increased funding, sustained political will and rigid standards, initiatives such as Global Partnership can reduce significantly nuclear-grade materials. Furthermore, enhanced security at stockpile sites will ensure would-be nuclear terrorists are no longer able to acquire the requisite materials to construct a nuclear device. Parallel to this effort, the current nuclear states, supported by a collective of international nations, must work together in order to stop the further proliferation of nuclear technology. The aggressive pursuit of these endeavours combined with the commitment of essential resources will decrease the availability of nuclear materials, thus reducing the possibility of nuclear terrorism.

Secondly, in order to reduce the rising levels in the radicalization of Islam, the United States must make a fundamental shift in its foreign policy. The US should

---

<sup>184</sup> Allison, 6.

actively support a *Muslim* solution to the radicalization of Islam and equally as important, it must re-examine its use of force policies. Force, and specifically pre-emption, should be used only when necessary to achieve specific goals and when other means including, but limited to, diplomacy, embargoes and even financial stimulus have failed. By gaining a better understanding of Islamic culture, the US and Western nations can be better suited to support them in their fight against Islamic extremists.

Lastly, the 'global war on terror' must be more strategically focused, aimed at defeating Al-Qaeda on both the moral and physical planes. Currently, counter-terrorism initiatives have been tactical in nature focused at attacking the threat. By striking its centre of gravity – Al-Qaeda's legitimacy – the US can significantly reduce the threat of nuclear terrorism. By continually attacking Al-Qaeda's ideology with the assistance of moderate Islamic clerics and Muslim political figures, sustainment networks, recruitment and general support will eventually cease.

Al-Qaeda is a highly capable and evolving transnational terrorist organization that has the wherewithal to commit violent acts of increasing scale. The next logical step is nuclear terrorism and the means to achieve this possibility is clear. Though the United States and Western democracies have the resources to reduce this threat, the time to adopt preventative measures is now. Further complacency or the lack of political resolve increases the risk of a terrorist nuclear strike. A cataclysmic event of this magnitude would certainly dwarf 9/11, fundamentally altering the Western way of life forever.

## BIBLIOGRAPHY

- Abedin, Mahan. "New Security Realities and al-Qaeda's Changing Tactics: An Interview with Saad al-Faqih." *Spotlight on Terror*. Vol III, Issue 12 (December 2005); <http://www.jamestown.org/programs/gta/archivesgta/gta2005/>; Internet; accessed 20 January 2009.
- Allison, Graham. *Nuclear Terrorism: The Ultimate Preventable Catastrophe*. New York: Henry Holt and Company, 2004.
- Allison Graham and Douglas Dillon. "Nuclear Terrorism: How Serious a Threat to Russia?" *Belfer Center for Science and International Affairs*. (Sep / Oct 2004); [http://belfercenter.ksg.harvard.edu/publication/660/nuclear\\_terrorism.html#\\_ftn23](http://belfercenter.ksg.harvard.edu/publication/660/nuclear_terrorism.html#_ftn23) Internet; accessed 29 March 2009.
- Boniface, Pascal. "What Justifies a Regime Change." *The Washington Quarterly* 26, no. 3 (Summer, 2003): 61-72.
- Barnaby, Frank. *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction*. London: Granta Publications, 2003.
- Bender Bryan and Farah Stockman. "Extremist Influence Growing in Pakistan, U.S. Officials Fear." *Boston Globe*, 11 January 2004.
- Brafman, Ori and Rod Beckstrom. *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations*. New York: Penguin Books, 2006.
- Burke, Jason. *Al-Qaeda: The True Story of Radical Islam*. New York: I.B. Tauris & Co Ltd, 2004.
- Canada, Department of National Defence, "The Future Security Environment 2007-2030." Part One (Draft) 8 November 2007, Chief of Force Development.
- Canada, Department of National Defence – Webpage (CJIRU / SOFCOM / DND); <http://www.cansofcom.forces.gc.ca/cji-iii/index-eng.asp>; Internet; accessed 17 March 2009.
- Canada, Department of Foreign Affairs and International Trade, *Global Partnership Program: A Tangible Canadian Contribution to Reducing the Threat of Weapons of Mass Destruction*. Ottawa: Canada Communications Group, 2007; [http://www.international.gc.ca/gpp-ppm/assets/pdfs/GPX\\_AnnualReport\\_07-en.pdf](http://www.international.gc.ca/gpp-ppm/assets/pdfs/GPX_AnnualReport_07-en.pdf); Internet; accessed 15 February 2009.

- Coll, Steve. *Ghost Wars: The Secret History of the CIA, Afghanistan, and Bin Laden, from the Soviet Invasion to September 10, 2001*. New York: Penguin Books, 2004.
- Cozzens, Jeffery. "Victory From the Prism of Jihadi Culture." *JFQ*. Issue 52, First Quarter, (2009); [http://www.ndu.edu/inss/Press/jfq\\_pages/editions/i52/18.pdf](http://www.ndu.edu/inss/Press/jfq_pages/editions/i52/18.pdf); Internet; accessed 10 January 2009.
- Cragin, Kim. "Understanding Terrorist Ideology." RAND Publication, (June 2007), RAND Corp; [http://www.rand.org/pubs/testimonies/2007/RAND\\_CT283.pdf](http://www.rand.org/pubs/testimonies/2007/RAND_CT283.pdf). Internet; accessed 14 January 2009.
- Davis, Tony. "The Afghan Files: Al Qaeda Documents from Kabul." *Jane's Intelligence Reviews*, Vol 14, no. 2 (February 2001): 9-31; <http://www.janes.com/articles/Janes-Intelligence-Review-2002/The-Afghan-files-Al-Qaeda-documents-from-Kabul.html>; Internet; accessed 18 October 2008.
- Dyer, Gwynne. *The Mess They Made: The Middle East After Iraq*. Toronto: McClelland & Stewart Ltd, 2007.
- De Nevers, Renée. "NATO's International Security Role in the Terrorist Era." *International Security*, 31, no. 4 (Spring 2007): 34-66.
- Finlay, Brian D. "Russian Roulette: Canada's Role in the Race to Secure Nuclear, Biological, and Chemical Weapons." *International Journal* 61, no. 2 (2006): 411-432.
- Forest, James. "Exploiting the Fears of Al-Qa'ida's Leadership." *CTC Sentinel* 2, (February 2009).
- Gannon, Kathy. *I is for Infidel*. New York: Public Affairs, 2005.
- Gerges, Fawaz. A. *The Far Enemy: Why Jihad Went Global*. New York: Cambridge University Press, 2005.
- Gunaratna, Rohan. *Inside Al Qaeda: Global Network of Terror*. New York: Berkley Publishing Group, 2003.
- Hoffman, Bruce. *Inside Terrorism*. New York: Columbia University Press, 1998.
- Hoffman, Bruce. "Al Qaeda, Trends in Terrorism and Future Potentialities: An Assessment." *Studies in Conflict and Terrorism*, Vol 26, Iss 6 (Nov/Dec 2003); <http://proquest.umi.com/pqdweb?did=734310711&sid=1&Fmt=2&clientId=1711&RQT=309&VName=PQD>. Internet; accessed 13 January 2009.



- Hoffman, Bruce. "Combating Al Qaeda and the Militant Islamic Threat." RAND Publication (February 2006), RAND Corporation; [http://www.au.af.mil/au/awc/awcgate/congress/hoffman\\_testimony16feb06.pdf](http://www.au.af.mil/au/awc/awcgate/congress/hoffman_testimony16feb06.pdf); Internet; accessed 22 October 2008.
- Irwin, Robert. "Is this the man who inspired Bin Laden?" *The Guardian Webpage – News/World News/Afghanistan*, 1 Nov 2001; <http://www.guardian.co.uk/world/2001/nov/01/afghanistan.terrorism3>; Internet; accessed 15 Nov 2008.
- Jenkins, Brian M. "Nuclear Terror: How Real?" *The Washington Times*, 13 May 2007; <http://www.rand.org/commentary/2007/05/13/WT.html>; Internet; accessed 14 March 2009.
- Kitfield, James. "The age of superterrorism." *Government Executive*, (July 1995); <http://proquest.umi.com/pqdweb?index=1&did=7719920&SrchMode=1&sid=3&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1237939955&clientId=1711>; Internet; accessed 23 February 2009.
- Kroft, Steve. "The Perfect Terrorist Weapon." *60 Minutes*, 7 September 1997; [http://www.drudgereportarchives.com/dsp/specialReports\\_pc\\_carden\\_detail.htm?reportID=%7B7DF19E68-C62C-4D6D-8124-86599A099AAA%7D](http://www.drudgereportarchives.com/dsp/specialReports_pc_carden_detail.htm?reportID=%7B7DF19E68-C62C-4D6D-8124-86599A099AAA%7D); Internet; accessed 29 March 2009.
- Kull, Steven. "Americans on the Conflict with Iraq." *The American Public on International Issues*. Program on International Policy Attitudes; 2 October 2002.
- Laqueur, Walter. *No End to War: Terrorism in the Twenty-First Century*. New York: Continuum International Publishing Group Inc, 2003.
- Laqueur, Walter. *The New Terrorism: Fanaticism and the Arms of Mass Destruction*. New York: Oxford University Press, 1999.
- Leffler, Melvyn P. "9/11 and the Past and Future of American Foreign Policy." *International Affairs*, Vol 79, no. 5 (2003): 1045-1063.
- Levite, Ariel E. "Never Say Never Again: Nuclear Reversal Revisited." *International Security*, Vol 27, no. 3 (Winter 2002/3): 59-88; [http://iis-db.stanford.edu/evnts/3863/LeviteAriel\\_2004-0513.pdf](http://iis-db.stanford.edu/evnts/3863/LeviteAriel_2004-0513.pdf); Internet; accessed 26 October 2008.
- Malashenko, Alexei, Stephen R. Bowers and Valeria Ciobanu. "Encyclopedia of Jihad: Islamic Jihad." *Center for Security and Science*, Liberty University (2001); [http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1023&context=gov\\_fac\\_pubs](http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1023&context=gov_fac_pubs); Internet; accessed 8 January 2009.

- Martin, Gus. *Understanding Terrorism: Challenges, Perspectives, and Issues*. California: Sage Publications Inc, Second Edition, 2006.
- Mansur, Salim. "Osama's godfathers." *National Post*, 24 August 2005: 1-3;  
<http://proquest.umi.com/pqdweb?index=0&did=888072611&SrchMode=1&sid=1&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1233524347&clientId=1711>; Internet; accessed 15 Oct 2008.
- Milelli, Kepel. *Al Qaeda in its Own Words*. Cambridge: Belknap Press of Harvard University Press, 2008.
- Oren, Michael. *Power, Faith, and Fantasy; America in the Middle East 1776 to the Present*. New York: Norton & Company Ltd, 2008.
- Patchen, Kenneth. "The Nuclear Suitcase Bomb and Nuclear Terrorism: the Lebed Claims." *National Observer*, no. 41 (Winter 1999);  
[http://www.nationalobserver.net/1999\\_winter\\_patchen.htm](http://www.nationalobserver.net/1999_winter_patchen.htm); Internet; accessed 29 March 2009.
- Patrick, Stewart. "Weak States and Global Threats: Fact or Fiction?" *The Washington Quarterly*, Vol 29, no. 2 (Spring 2006): 27-53;  
[http://www.twq.com/06spring/docs/06spring\\_patrick.pdf](http://www.twq.com/06spring/docs/06spring_patrick.pdf); Internet; accessed 13 November 2008.
- Paz, Reuven. "Islamists and Anti-Americanism." *Middle East Review of International Affairs Journal*, Vol 7, no. 4 (December 2003);  
<http://meria.idc.ac.il/journal/2003/issue4/jv7n4a5.html>; Internet; accessed 2 January 2009.
- Perl, Raphael. "Trends in Terrorism: 2006." *CRS Report for Congress*, 12 March 2007.
- Perlez, Jane. "Pakistan in Crisis: Friend or Foe in the War on Terror?" *New York Times*, 23 August 2008; ISRANET Daily Briefing. Volume VIII, no. 1,927;  
[http://www.isranet.org/isranetbriefings/Permanent-2008/Permanent\\_September\\_2008.htm#1927](http://www.isranet.org/isranetbriefings/Permanent-2008/Permanent_September_2008.htm#1927); Internet; accessed 4 February 2009.
- Poland, James. *Understanding Terrorism: Groups, Strategies, and Responses*. New Jersey: Pearson Education Inc, 2005.
- Post, Jerold M. *Superterrorism: Biological, Chemical and Nuclear*. New York: Penguin Books, 2004.
- Priest, Dana and Susan Schmidt. "Al Qaeda's Top Primed To Collapse, U.S. Says." *The Washington Post*, 16 March 2003.

- Qutb, Syed. *Milestones*. <http://www.kalamullah.com/Books/MILESTONES.pdf>;  
Internet; accessed 31 January 2009.
- Richardson, Louise. *Understanding the Enemy, Containing the Threat: What Terrorists Want*. New York: Random House Trade Paperbacks, 2006.
- Samore, Gary. "North Korea's Weapons Programme: A Net Assessment." *International Institute for Strategic Studies*, 21 January 2004;  
<http://www.iiss.org/conferences/korea-forum/>; Internet; accessed 29 March 2009.
- Schmid, Alex P. "Terrorism and the use of weapons of mass destruction: from where the risk?" *Terrorism and Political Violence*, Vol 11, no. 4 (Winter 1999).
- Siegel, Robert. "Sayyid Qutb's America." *NPR News Webpage*, 6 May 2003,  
<http://www.npr.org/templates/story/story.php?storyId=1253796>;  
Internet; accessed 15 November 2007.
- Stiglitz, Joseph, E. *Globalization and its Discontents*. New York; W.W. Norton & Company, 2003.
- Swazo, Norman K. "'My Brother is My King': Evaluating the Moral Duty of Global Jihad." *International Journal on World Peace*, 25, no. 4 (1 Dec 2008): 7-47;  
<http://proquest.umi.com/pqdweb?index=1&did=1648436031&SrchMode=1&sid=4&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1237940233&clientId=1711>; Internet; accessed February 23, 2009.
- Walker, Paul F. "Looking Back: Kananaskis at Five: Assessing the Global Partnership." *Arms Control Today*, Vol 37, no. 7 (September 2007): 47-52;  
[http://www.armscontrol.org/act/2007\\_09/Lookingback](http://www.armscontrol.org/act/2007_09/Lookingback); Internet; accessed 21 February 2009.
- Ward, Olivia. "Chechens Buying Arms – from Russian Troops." *Toronto Star*, 21 April 1995, A2; <http://micromedia.pagesofthepast.ca/PageView.asp>; Internet; accessed 29 March 2009.
- Whittaker, David J. *The Terrorism Reader*. New York, Routledge, 2001.
- Whittaker, David J. *Terrorists and Terrorism in the Contemporary World*. New York: Routledge, 2004.
- Wiktorowicz, Quitan, and Karl Kaltenthaler. "The Rationality of Radical Islam," *Political Science Quarterly*, (Summer 2006).
- Zakaria, Fareed. "Terrorists Don't Need States." *Newsweek*, Vol 143, Iss 1437 (New York; 5 Apr 2004); <http://proquest.umi.com>; Internet; accessed 31 Oct 2008.