

International Terrorism and the Threat of a Dirty Bomb

by Maxim Worcester

The global terrorist threat – or at least the perceived threat- is not likely to abate in the medium term. Surveys conducted by Transatlantic Trends in 2006 recorded that concern about terrorism had risen from 58 % to 66 % among Europeans and by 7 % to 79 % amongst the US population. The main terrorist threat will continue to come from Al-Qaida which in the years to come will continue to grow its global networks and affiliates in spite of robust efforts to eradicate this movement.

Al-Qaida will continue to brand itself as a global terrorist network, even though most attacks will be locally inspired and led. The reference group for Al-Qaida is not a particular country, state or even ethnicity but rather the Muslim community as a whole. Al-Qaida rejects sovereignty as the attribute of any single Muslim state or as the organising principle of international relations. In the process it rejects the authority of states to recognise other states, especially when it comes to “Muslim lands”. It therefore follows that Al-Qaida is as much the enemy of the West as it is of Muslim states themselves making the conflict an open ended war that negates any early exit from the conflict by negotiations to resolve any specific Muslim grievances. This is in direct contrast to the conflict waged by the IRA in the UK which was narrowly focused on one geopolitical claim and one which could be fought and won on the streets and around the negotiating table.

However, al-Qaida has not enjoyed unbridled success to date. The number of attacks outside Iraq and South Asia has fallen since September 2001 and al-Qaida has not been able to topple Governments as it set out to do. Western forces have not left the Middle East and numerous plots have been nipped in the bud in Europe and the US. Its major success since the attacks in the US in September 2001 and subsequently in Europe has been to force the West to spend huge amounts of money on security measures creating disruption and uncertainty amongst the population.

Strategies to break up networks by removing key figures are unlikely to force real change. Bin Laden`s death through natural or other causes is unlikely to deter the jihadist movement on a functional level as the ideology of the movement has been disseminated and absorbed to the extent that there is little dependence on individuals to spearhead and focus it. There has been no significant degradation of the movement in the past due to death or arrest.

It would be wrong to conclude that al-Qaida is on the run. Through its global network al-Qaida will continue to launch conventional attacks and will also attempt to launch major set piece attacks. It would also be wrong to conclude that “more of the same” will satisfy the extremists that make up this organisation; we must expect al-Qaida to look for forms of escalation.

However, it is difficult to see how al-Qaida could realistically increase conventional operations given the major impact it is already having in Iraq; calls to open a new front in Somalia failed so far to have any major impact. At best it could inspire to an increased number of attacks in Asia, Africa and Europe, but the impact would not represent an escalation. Only an attack at least comparable to 11 September would be seen as an escalation. This is underlined by the reportedly aborted attack on the New York subway in 2003 based upon the view that it would not represent a significant follow up to the September 2001 attacks.

Consequently a CRBN attack is a credible option to pursue for a group that is well-attuned to the potential media impact of attacks and the need to make them spectacular and disturbing. Such an attack could even take the form of a hoax attack. Whilst the human collateral would be minimal its impact would be disproportionate.

It would seem unlikely that al-Qaida will be able to acquire nuclear weapons in the short to medium term. However the head of Britain's MI5 is quoted as stating the following: "We are faced with the realistic possibility of a form of unconventional attack that could include CRBN. It is only a matter of time before a version of CRBN is launched." Osama bin Laden has made no secret of his ambition to join the nuclear club – he has even proclaimed that it is a religious duty for Muslim states to acquire such weapons to attack the West.

Given this threat the international community is working to keep the lid on nuclear proliferation. Whilst the main focus is on Iran and North Korea, the increased concern that terrorist might be able to acquire either Weapons of Mass Destruction or nuclear material has led to the drafting of the Proliferation Security Initiative (PSI) in 2003 by more than 60 countries to serve as a framework for global co-operation to counter proliferation-related trafficking. Participants have agreed to pursue greater co-operation through military and intelligence services and law enforcement agencies to shut down proliferation facilitators and bring them to justice. The initiative is however voluntary and its impact on illegal trade thus partial. There is broad agreement that this situation is unsatisfactory and that the international community will need to take steps to strengthen it. Given cumbersome administration and "turf wars" between agencies compounded by national sensibilities, there is still a long way to go before the PSI's impact will be felt by those it is directed against.

Given the difficulties faced in acquiring a nuclear device by an organisation such as al-Qaida or the technical problems associated in building and delivering either a chemical or bacteriological weapon it would seem likely that terrorist would revert to the use of a dirty bomb in order to achieve escalation. Such a bomb could be a crude and small device using conventional explosives and radioactive material such as Caesium-137, Strontium-90, Cobalt-60, or even Plutonium. Whilst difficult to purchase on the open market such isotopes can be found in any major hospital or laboratory. Currie-level Isotopes are used for Radiotherapy and blood transfusion centres carry significant stocks of Caesium-137 for irradiating transferred blood to prevent transfusion related diseases. The Nuclear Regulatory Commission furthermore reports that at least 1.6 million devices containing radioisotopes which could be used in a dirty bomb have been licensed in the US.

Should such a device go off in a major down town area and expose 100.000 people it would have a major impact. The area would have to be rapidly evacuated and closed off for decontamination which could take months, depending upon the degree of contamination. Fatalities would not compare with the attacks in September 2001; however the economic damage and disruption caused would be out of all proportion. The psychological impact of

such an outrage, mass hysteria and uncertainty amongst the population of the longer term effects of exposure to radiation, could outweigh the impact of the September 2001 attacks. Offices in affected areas would have to be evacuated and employees would refuse to return to work because of fears of radioactive contamination meaning some key offices could not remain open. Whilst the IRA attacks on the City of London in 1992 (Baltic Exchange), 1993 (Bishopsgate) and 1996 (Canary Wharf) were conventional attacks resulting in relatively few casualties, the economic cost of these attacks came to an estimated 2000 million Pounds Sterling. The financial and psychological impact of a dirty bomb attack on any one of the three locations would by far exceed the damage done by the IRA.

An accident in Goiania, Brazil in 1987 illustrates the impact of a radiological attack. In this case workers dismantling a laboratory unknowingly exposed 100 g. of Caesium-137. As a result, 112,000 persons had to be examined for signs of exposure, a process which took months to conduct. Exposure to radiation resulted in 4 deaths and 260 persons showed signs of exposure, of which 49 required hospital treatment. Furthermore, even non affected persons showed signs of stress induced symptoms of radiation poisoning including vomiting and blistering. Goiania is an agricultural centre and all deliveries of produce to other regions were suspended until the clean up was concluded resulting in economic hardship and closure of factories. The international sign for radioactive hazard is today integrated in the flag of the province, a clear indication of the impact this accident had on the region.

The United States has conducted a number of exercises related to terrorist attacks since 2001, the latest, Topoff 4 (Top Officials Exercise), in October 2007. This exercise, involving 15,000 participants, was conducted in Arizona, Oregon and Guam and focused on a low yield dirty bomb scenario. The main conclusion of the exercise was that the psychological impacts rival physical damage. At the same time it became evident, that there was a clear lack of defined lines of command and information policy. A further finding was that the time it took to respond to the incident was too long, resulting in uncertainty and inappropriate steps. In short, the incident was poorly managed. This is also in line with the response analysis following hurricane Katrina. The findings conclude with the statement that there had been no significant improvement from the previous exercise, Topoff 3, which took place in April 2005. A further finding, according to a report prepared for the House Committee on Science and Technology in October 2007, concluded that most US laboratories can only test for 6 of the 13 radiological isotopes that would most likely be used in a dirty bomb attack.

If one shares the view that al-Qaida is following a strategy of escalation and seeking for ways to acquire radioactive materials in order to construct a dirty bomb then it follows that there is a need to prevent such materials falling into the hands of terrorist groups and also to prepare for the eventuality of such an event occurring. Besides ensuring that security is improved surrounding locations where such materials are stored or in use, it would also make sense to seek for alternative methods of sterilisation and smoke detection, as radioactive isotopes are widely used in food and blood sterilisation and in smoke detectors. Such steps would significantly reduce the potential supply of bomb material. Similar steps were taken by the British authorities in Northern Ireland when timers were removed from streetlamps as these were being used by the IRA for the production of IED's.

One has to work under the assumption that a dirty bomb will be used by terrorists in the future. The Topoff exercises have shown that in spite of massive financial investment in homeland security there are still organisational deficits in the response to such an attack. In the event of an attack using a dirty bomb the speed at which authorities respond to the incident will be vital in order to prevent mass hysteria. For this purpose professional crisis communication and a rapid and robust response by suitably equipped specialists will be key in containing the

event and returning to normality in as quick a time as possible, thus reducing the psychological and economic impact.

The worst time to work out a response strategy is during an emergency, this has to be developed and exercised well in advance. We should be aware that such a weapon is not a weapon of mass destruction, rather a weapon of mass disruption and plan our strategy accordingly. The better the population and authorities are prepared, the lower the impact will be, thus helping to ensure that the terrorists do not achieve their aim to intimidate the population and create lasting economic damage.

Remarks:

Opinions expressed in this contribution are those of the author.



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