No. 79, Summer 2008/09, pages 8-22. Web site: www.nationalobserver.net

Australia's nightmare: bushfire jihad and pyroterrorism

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Victoria's tragic Black Saturday bushfires persisted through most of February 2009 in the face of courageous, sustained, and selfless efforts by thousands of firefighters and other personnel to bring them under control. A Royal Commission has been established by the Victorian Brumby Government and has been given wideranging powers and terms of reference, and it is to be hoped that it will identify the causes of the fires and recommend measures to prevent such a catastrophe from occurring again.

Pyroterrorism defined

On the other hand, the fires must alert us to the extreme danger posed by pyroterrorism, especially as global terrorist organisations continue to modify their strategies in the face of the increasingly effective counter-terrorism measures that are being employed against them.¹ Pyroterrorism can do great harm to valuable natural resources and infrastructure; destabilise and degrade regional economies; kill, maim, terrorise, and radically reduce the quality of life of large populations of people; and even destabilise social and political systems.

Pyroterrorism may be defined as the use by non-state organisations of large-scale fires to attack, intimidate or coerce a government, the civilian population, or any segment thereof, in order to advance political, social or religious objectives. In pursuit of its objectives it exhibits the four central elements of terrorism: the targeting of non-combatants, a political motivation, extreme violence with an intended psychological impact, and organised and totally committed perpetrators.²

Pyroterrorism is inherently low-tech in nature and requires only primi-

- 1. Mervyn F. Bendle, "Global jihad and the evolution of terrorist-training doctrines", *National Observer*, No. 78, Spring 2008.
- 2. See Robert A. Baird, "Pyro-terrorism the threat of arson-induced forest fires as a future terrorist weapon of mass destruction", *Studies in Conflict & Terrorism* Vol. 29, Issue 5, July-August 2006, p. 415.

tive technical materials to carry out attacks. It is inexpensive and, logistically, is comparatively uncomplicated. It takes advantage of a variety of very vulnerable, permeable, and easily accessible forest targets with multiple entry-points and escape-routes. It can be carried out by relatively untrained personnel using improvised devices. It allows the perpetrators considerable room for manoeuvre and capitalises on their familiarity with the geography of the areas targeted. It promises a good chance that they will evade capture or even identification, and success isn't premised on their death, as it would be in a suicide mission.

Accidental or deliberate?

The Victorian fires, however it is eventually determined they were caused, illustrate the potentially vast damage that could be achieved by such attacks. They began in the mountainous forest areas north-east of Melbourne, and in Gippsland, Bendigo and other parts of the state, on Saturday, 7 February 2009, and continued for several weeks. The fires broke out on a day of extraordinarily high temperatures (up to 47°C) and gale-force winds (exceeding 100km/h), after an extended heat wave and a protracted drought. In a ghastly conflagration, they caused the largest ever bushfire death toll in Australian history, leaving at least 210 people dead, some 500 injured, and over 30 missing. Some towns were virtually wiped out, including Kinglake, Marysville, St Andrews, Steels Creek, Flowerdale, Strathewen, and Narbethong. The fires destroyed more than 2,000 homes and 1,500 other buildings or structures,

and damaged thousands more, leaving an estimated 7,500 people homeless. An area of approximately 4,500km² (450,000ha) was burned out and millions of animals were destroyed. At one point, fires came close to the main electricity transmission lines supplying Melbourne from the Latrobe Valley, and also threatened the Hazelwood Power Station. Insurance payouts could reach several billion dollars.

The principal fire was the Kinglake-Murrindindi fire complex that was formed by the merger of two originally separate fires following a wind change on 7-8 February. This became a firestorm that burnt out over 2,100km² (210,000ha) and killed at least 196 people across a wide area. Other major fires were in the vicinity of Churchill, Beechworth, Bendigo, Redesdale, the Bunyip State Forest, Horsham, Coleraine, Heidelberg, Wilson's Promontory and the Dandenong Ranges. It appears certain that some of the fires were deliberately lit, prompting Prime Minister Kevin Rudd to describe such actions as "mass murder".

Various investigations began into the fires, and the police declared that the sites of all fires would be treated as crime scenes. Several people were arrested, although they were later released, but on 12 February a Churchill resident was arrested, first in connection with the Churchill fires, and then charged with arson causing death, and intentionally lighting a bushfire, as well as possession of child pornography. Victorian Premier John Brumby subsequently announced a Royal Commission into the fires, and that began preliminary work in March.

Brumby promised breathlessly that the commission would be "the most open inquiry that is possible. No stone unturned. Every bit of information on the table. And if that means calling ministers or premiers, or whoever it is, we will be happy to assist."³

Muslim extremists celebrate

Messages of sympathy and support were sent by dozens of countries to the people of Victoria and Australia. Regrettably, other parties appear to have taken a different perspective on the tragedy and welcomed the destruction and large-scale loss of life. For example, a *CBS News* report quoted celebratory messages posted on Internet forums supportive of al Qaeda:⁴

In a message entitled "Al Qaeda behind Australia's bushfires", a member of one forum who uses the name "Osama1" talked about the terrible devastation and loss of lives caused by the fires, which he hoped were the work of al Qaeda. "Imagine if all this was the work of an al Qaeda raid against Australia who is taking part in the wars on Iraq and Afghanistan ... how awesome would that be?" He also urged Islamist militants around the world to "fight the enemy" through this new form of jihad. "O' mujahideen

everywhere, why don't you fight the enemy with bushfires such as those ones? Fires which could kill hundreds of them, destroy thousands of their homes, and cause damage worth millions."

Similarly, FOX News revealed that "terrorism experts suspect Muslim extremists are watching closely" the impact of the bushfires devastating Australia because "the large death toll, the huge swath of destruction and the massive financial blow to the country are proving to Islamic terrorists that arson can be a highly effective — and simple — tool of holy war". ⁵ The report quoted counter-terrorism expert Dr Jarret Brachman as observing: ⁶

Forest fires track well with the latest discussion trends seen in Al Qaeda forums — easy to do, big impact, low security risk, high media coverage....

We've seen these kinds of appeals for action, be it setting fire to forests in Australia, to creating oil slicks on mountain roads in Europe, to poisoning water supplies and driving buses off bridges in the United States.

Brachman is a former Fellow in the Central Intelligence Agency's Counterterrorist Center and the author of *Glo-bal Jihadism: Theory and Practice*, which explores the central ideologies, doctrines, and strategies of the global

- "Wide-ranging powers for bushfire inquiry: Brumby", ABC News (Australian Broadcasting Corporation), 16 February 2009.
- 4. "Al Qaeda supporters suspect al Qaeda behind Australia fires", CBS News: Internet Terror Monitor, 13 February 2009. (Emphasis added).
- 5. Joshua Rhett Miller, "Australian wildfires could fuel 'forest jihad' terrorists, experts say", FOX News, 9 February 2009.
- Ibid.
- 7. Jarret Brachman, Global Jihadism: Theory and Practice (London: Routledge, 2008).

jihadist movement and the al Qaeda propaganda machine, and provides various case studies. He has given expression to the emerging awareness that jihadi strategy has shifted from hitech, logistically demanding attacks to low-tech terrorist tactics such as arson and pyroterrorism.

Another report described how "jihadists are celebrating the worst tragedy in Victoria's history. Terror watchdogs said fundamentalists had blogged on websites across the globe, applauding the lives lost and destruction in the Victoria fires.... One iihadist wrote: 'It would be an act of revenge for Australian's participation in the wars in Afghanistan and Iraq'."8 In response to such reports, the vice-president of the Regional Islamic Council, Dr Ameer Ali, was reported as deploring such comments, claiming they did not represent the wider Muslim community: "They have no idea what they are talking about", he said.9

Such statements welcoming the destruction wrought by the Victorian fires might appear to be little more than spontaneous outbursts of a misplaced sense of vengeance by marginal elements within the Muslim world. However, they also caused many commentators to recall the apparently prophetic article about "forest jihad" published in the Melbourne *Age* newspaper in September 2008. This report, which generated interest and comment

around the world at the time and after, described how an Islamist group was advocating pyroterrorism in Australia and other countries:¹⁰

Australia has been singled out as a target for "forest jihad" by a group of Islamic extremists urging Muslims to deliberately light bushfires as a weapon of terror.

US intelligence channels earlier this year identified a website calling on Muslims in Australia, the US, Europe and Russia to "start forest fires", claiming "scholars have justified chopping down and burning the infidels' forests when they do the same to our lands". The website, posted by a group called the Al-Ikhlas Islamic Network, argues in Arabic that lighting fires is an effective form of terrorism justified in Islamic law under the "eye for an eye" doctrine.

The posting — which instructs jihadis to remember "forest jihad" in summer months — says fires cause economic damage and pollution, tie up security agencies and can take months to extinguish so that "this terror will haunt them for an extended period of time". "Imagine if, after all the losses caused by such an event, a jihadist organisation were to claim responsibility for the forest fires", the website says. "You can hardly begin to imagine the level of fear that would take hold of people in the United States, in Europe, in Russia, and in Australia".

The report observed that "with the nation heading into another hot, dry

- 8. Eleni Hale, "Jihadists celebrating Victoria fires; taking joy in the scenes", *Herald Sun* (Melbourne), 15 February 2009.
- Ibid.
- 10. Josh Gordon, "Islam group urges forest fire jihad", The Age (Melbourne), 7 September 2008.

summer, Australian intelligence agencies are treating the possibility that bushfires could be used as a weapon of terrorism as a serious concern", and it quoted the response to the report provided by federal Attorney-General Robert McClelland, who said that the Federal Government remained "vigilant against such threats", warning that anyone caught lighting a fire as a weapon of terror would feel the wrath of anti-terror laws. "Any information that suggests a threat to Australia's interests is investigated by relevant agencies as appropriate," Mr McClelland said."

Commenting on the theory that the Victorian bushfires were part of a jihadi campaign, Steve Emerson, executive director of the Washington-based Investigative Project on Terrorism (IPT) and a leading authority on the global jihad movement, responded: "Could [militants] do this? Yes ... It wouldn't be difficult, in the same way that terrorists could poison stored food supplies." If jihadis were responsible for some of the fires, it would be "very disturbing", Emerson said: 12

It would indicate a new area of jihadist attacks, that is, attacking natural resources.... And given the devastation of these fires, it certainly could instil new terror ideas in other areas like the food-supply chain or in the environmental realm.

Moreover, there is little that authorities could do to prevent such actions: "It would be absolutely impossible to protect against," Emerson said. "Airport perimeters are hard enough to protect. Imagine trying to protect something [e.g., a forest] 100,000 times as big."¹³

The Victorian fires were noticed in Israel, which has itself been the target of pyroterrorist attacks, as we will discuss below. It was reported that, "as more than 31 major fires continued to rage in the Australian state of Victoria and the death toll approached 200, there was speculation ... that some of the blazes may have been set by Islamists waging a 'holy war', or jihad".14 Such concerns are not new as the FBI had alerted American law-enforcement agencies in 2003 that an al-Qaeda terrorist held in detention had spoken of masterminding a plot involving setting a series of devastating forest fires around the western United States. It was reported that the detainee claimed the plan involved three or four people setting fires in Colorado, Montana, Utah and Wyoming using timing devices that would detonate after the terrorists had left the country.15 This apparent plan was supported by claims made in a 2003 Bulletin article that the devastating impact of the Canberra bushfires "has tempted al Oaeda to plan for forest fires

- 11. Ibid.
- 12. Cited in J.R. Miller, op. cit.
- 13. Ibid.
- 14. Gil Ronen, "Suspicion: some Australian fires were set by jihadis", *Arutz Sheva: Israel National News*, 11 February 2009.
- 15. "FBI: al-Qaeda detainee spoke of fire plot", USA Today, 7 November 2003.

in Western countries, which will form a part of its global terror campaign".¹⁶

Predictably, there was extreme sensitivity demonstrated to any speculation that there may have been Muslim involvement in the Victorian fires. And this arose despite the fact that such speculation had originated with statements made by jihadis themselves about the terrorist potential of deliberately-lit forest fires and pyroterrorism.

Media reaction

Mysteriously, the decisive article from The Age about Australia being made a target for "forest jihad" disappeared from The Age website on the night of 9-10 February, before re-appearing a day later after very considerable online discussion occurred about its removal. The ABC Unleashed website then published an online article by the Muslim spokesman, Irfan Yusuf, condemning "inflammatory (sic) remarks" and ridiculing those who raised the possibility of a terrorist connection to the bushfires.¹⁷ Even the police became involved, and as the fires raged a week after they had broken out, the Victorian Police issued a media release dismissing any suggestions of Muslim involvement and scolding those responsible:18

[While] the cause of many of the blazes remains unclear ... there is no evidence

to support speculation that some of the deliberately lit fires may have been started by some members of the Islamic community. Victoria Police is disappointed that such accusations are being made without foundation in a time when Victoria and indeed the nation have banded together during this horrific disaster.

The Islamic community have made a concerted effort to support bushfire survivors, many of whom have donated blood to the Red Cross and only yesterday members of the Preston Mosque personally drove a collection of donated items to the tent city in Whittlesea. Members of the Islamic community will also be involved in a telethon on SBS tomorrow to raise further funds for the Bushfire Appeal.

This statement by the police was issued while many of the fires were still out of control. Some of the fires hadn't yet broken out (among them several that were deliberately lit). Access to many of the fire crime scenes was not possible, well before the final death toll had been estimated, and certainly well before any significant investigations could have been undertaken to actually determine the causes of the fires and the identities of any arsonists involved.

It was also not clear that the statement didn't do more harm than good, as it was noticed by some commentators that this special exoneration and praise

- 16. Bob Beale, "Flames of jihad: Australia's bushfires tempt al Qaeda's men of hate", *The Bulletin with Newsweek* (Sydney), 1 July 2003.
- 17. Irfan Yusuf, "Inflammatory remarks", ABC Unleashed, 13 February 2009.
- 18. Victoria Police media release, "Islamic community supports bushfire survivors", 13 February 2009.
- 19. 'Cassandra', "Vic. Police rush to Islam's defence", Australian Islamist Monitor, 27 February 2009.

for a particular section of the community by the police failed to take into account the vastly greater contributions made by other groups, who were left unmentioned, and whose sustained efforts obviously involved a lot more than a drive out to Whittlesea with a collection of donated items.¹⁹

Other defenders of the Muslim community expressed outrage at suggestions that jihadis may have implemented their well-publicised threat to start bushfires in Australia, complaining that "Muslims have come to expect that they will be stigamised (sic) for any crime committed (sic) by any Muslim anywhere. But this week's speculation by some media and internet 'commentators' about 'forest jihad' has reached a new low".20 Further unqualified support by the Victorian Police was cited: "Police Superintendent Ross McNeill was categorical in dismissing the [likelihood of the] 'forest jihad' theory ... 'None whatsoever, absolutely nothing, zero. We usually rank possibilities on a scale of zero to ten — this would be on a negative scale".21

Once again, one wonders about the wisdom of such a statement, particularly with its extreme hyperbole, and especially given the very low level of knowledge possessed by the police at the time. Irrespective of the sensitivities involved, it seems remarkable that a senior police officer would make such a categorical statement about the commission of a major offence that had not yet been investigated, particularly when there were various "inflammatory" statements that needed to be evaluated, and especially when the offence involved acts of arson that may prove to be responsible for the deaths of hundreds of people.

Such certitude about who was or wasn't involved in starting the fires is also made surprising by the fact that Australia's fire services attend between 45,000 and 60,000 vegetation fires every year and that only 6 per cent are naturally occurring fires, meaning that over 90 per cent are the result of human action, usually involving the deliberate ignition of fires by people. Moreover, as the Australian Institute of Criminology has reported, "incendiary (maliciously-lit fires) and suspicious fires account for one-half of known fire causes in Australia, and are the largest single cause of vegetation fires".22 Statistically there is at least a nine-to-one chance that vegetation fires are caused by human action (and probably deliberate human action), so any unconditional statement about the involvement or non-involvement of any individuals

- 20. Shakira Hussein, "Forest jihad is just another 'us and them' angle", *Crikey.com*, 13 February 2009.
- 21. Ibid.
- 22. Colleen Bryant, "Deliberately lit vegetation fires in Australia", *Trends and Issues in Crime and Criminal Justice*, (Canberra: Australian Institute of Criminology), No. 350, February 2008.

This is the case even though 40 per cent of all fires attended across Australia do not have a cause assigned to them by the responding fire service. These can still be statistically distributed to the categories of human/natural causes in the same 90:6 ratio as fires overall.

or groups from any community in the setting of these fires seems to have little or no foundation. And this is true irrespective of any understandable desire by the police to protect particular communities from any such suspicion, even though in this case the suspicion arose as a result of statements made by extremist elements within the relevant community itself.

On the other hand, it may be government policy to deny terrorist involvement in any such disaster whenever possible. As Dr Adam Dolnik, director of research at the University of Wollongong's Centre for Transnational Crime Prevention, has observed, while there has been "an increase in traffic on jihadi websites calling for a simplification of terrorist attacks because the more complex operations had been failing ... starting bushfires was still often regarded as less effective than other operations because governments could easily deny terrorism as the cause".23 Various reasons can be supplied for such a government policy of denial, including a desire to minimise public outrage or even violence, but also a desire to meet the political constraints arising from demands of community groups and other stakeholders.

Muslim community thinking

Of course, the Muslim community had a great deal on its mind in the first weeks of 2009. Internationally, the Israel-Gaza conflict had broken out on 27 December 2008 when Israel launched a military campaign in the Gaza Strip to combat missile attacks, and this lasted until 21 January, when Israel completed its withdrawal. This conflict had generated very high levels of agitation throughout the Muslim world, including Australia, where the conflict was described hyperbolically as the Gaza "massacre" and "holocaust" (which, of course, means "sacrifice by fire" or "burnt offering"), large demonstrations were held, and high levels of resentment against the Israeli and Australian governments were expressed.

Domestically, the trial of the Muslim Abdul Nacer Benbrika and his followers on terrorist charges involving plans for mass murder in Melbourne had concluded in September 2008. Most of the defendants were found guilty and given substantial jail terms, with Benbrika being sentenced to 15 years jail on 3 February 2009, only days before the fires broke out. Their plans

23. Josh Gordon, "Islam group urges forest fire jihad", *The Age*, 7 September 2008. (Emphasis added).

See also: Adam Dolnik, *Understanding Terrorist Innovation: Technology, Tactics and Global Trends* (London: Routledge, 2007), in which the author describes how the "new terrorism" is being waged by groups eager to go well beyond the comparatively small-scale type of violence characteristic of earlier waves of terrorism to carry out large-scale, mass-casualty attacks using innovative methods and weapons. Such groups are represented by the Japanese terrorist cult, Aum Shinrikyo (Supreme Truth), which sought to implement a literally apocalyptic vision of mass death, and even tried to obtain nuclear weapons before unleashing sarin gas in the Tokyo subway system.

24. Norrie Ross, "Terror plot to kill 1000, court told", Herald Sun, 13 February 2008.

included using huge bombs to carry out "an attack that would kill 1,000 people" at railway stations, Crown Casino and football matches, including the 2005 AFL Grand Final.24 In another case, it was revealed that an advisor to Benbrika undertook paramilitary training in Afghanistan, had "pledged personally to ... Osama bin Laden to pursue violent jihad", and had returned to Australia with a "large library" of al Qaeda material.25 Similarly, in yet another case, a Sydney man was also convicted of terrorism offences in September 2008, over the preparation of a training manual, The Provision on the Rules of Jihad, which "concentrated on religious teachings and rulings about jihad [and] canvassed reasons, benefits and methods of assassinations. Among the countries on the hit list were Australia and the US".26 And, in a further trial in November 2008, the following evidence was heard:27

Five Sydney men accused of plotting to carry out a terrorist attack in Australia allegedly collected large amounts of extremist material that glorified violent jihad, indiscriminate mass murder and ritual beheadings [including] step-bystep instructional material to show untrained or potential terrorists how to

make bombs capable of causing largescale death and destruction.

One aim of this training material was to desensitise the alleged terrorist trainees and dehumanise their potential victims: "One document talked about an operation in the Saudi Arabian town of Kobar in which an infidel was tied by one leg behind a car and dragged through the streets until he was torn to shreds".28 This ideological indoctrination was allegedly guided by publications like *The Terrorist* Handbook, and was accompanied by paramilitary training at "jihadi camps' in western NSW".29 Such reports echo earlier revelations that members of an Australian terrorist cell had undergone instruction "to instill paramilitary training into some of the Melbourne clan on several hunting properties north of Melbourne, including one in Kinglake".30

Given such events in the months and weeks leading up to the outbreak of the Victorian fires, it is not surprising that defenders of the Muslim community were particularly sensitive and responsive to any indication that they were being unfairly targeted, especially when a catastrophic firestorm broke out in the

- 25. Gary Hughes, "Bailed Muslim accused 'swore allegiance to Osama'", *The Australian*, 24 October 2008, p. 2.
- 26. Natalie O'Brien, "Belal Saadallah Khazaal convicted for 'terror manual'", *The Australian*, 11 September 2008, p. 1.
- 27. Natalie O'Brien, "Terror suspects 'planned bombings", *The Australian*, 12 November 2008, p. 3.
- 28. Natalie O'Brien, "Seized books on 'terror rewards", The Australian, 13 November 2008, p. 3.
- 29. Natalie O'Brien, "Accused 'trained at jihadi camps", The Australian, 14 November 2008, p. 3.
- 30. Martin Chulov, Australian Jihad (Sydney: Macmillan, 2006), p. 284.

Kinglake area on 7 February, only days after Benbrika was sentenced.

History of pyroterrorism

Nevertheless, despite the controversy that must inevitably surround even the slightest suggestion that hundreds of Victorians may have been victims of a deliberately planned and executed "bushfire jihad", it is important to note that the concept of pyroterrorism is not an alarmist, eccentric or "Islamophobic" notion. It is a technical concept that can be applied to various extremist groups with widely differing ideologies, religious or secular, and its significance has become even clearer now that the enormous destructive power of fire-storms in populated forest areas has been once again been so tragically demonstrated.

A non-Muslim terrorist organisation to which the concept of pyroterrorism has been applied is the Earth Liberation Front (ELF). In the late 1990s, the ELF set fire to various forests and commercial and industrial buildings, including the United States Forest Industries headquarters in Oregon.³¹ Consequently, the FBI identified ecoterrorism as a primary domestic terrorism threat, and specifically identified

arson as a preferred tactic used by such organisations against forests, related services and other targets.³² The ELF also demonstrated that it was prepared to use pyroterrorist tactics against housing developments and infrastructure, and it has even been claimed that they would consider using wildfires "to create mass destruction in America's forests and the dwellings surrounding them".³³

Pyroterrorist involvement in forest fires has been suspected or established in various countries, including Greece, Israel, Spain, and Estonia. Greece suffered a concerted series of pyroterrorist attacks directed at its forests in the summer of 2007. Literally hundreds of fires were lit, threatening a large proportion of the population, and forcing the government to declare a state of emergency in August 2007. Ultimately, almost 70 people died and the fires caused more than \$7 billion in damage.34 The fires revealed the absence of an adequate forest fire-containment strategy and inevitably the catastrophe became a political issue. Significantly, the government decided to treat the fires as a terrorist attack, mobilising 6,000 troops, deploying counter-terrorist forces, and offering rewards for

^{31. &}quot;Group says it set Oregon fire," *Counterterrorism & Security Reports*, Vol. 8, No. 1, January/February 1999.

^{32. &}quot;FBI: Eco-terrorism remains no. 1 domestic terror threat," *FOX News*, 31 March 2008.

John Lewis, "Oversight on eco-terrorism specifically examining the Earth Liberation Front and the Animal Liberation Front", US Senate Committee on Environment & Public Works, 18 May 2005.

^{33.} Baird, "Pyro-terrorism", op. cit., p. 417.

^{34. &}quot;A combustible mixture", *The Economist*, 22 September 2007, p. 47.

relevant information, which subsequently led to several arrests.³⁵

Israel has been a victim of pyroterrorism for three decades, with research indicating that the majority of forest fires in the 1980s and 1990s were caused by arson³⁶ and were directly linked to the first Intifada.³⁷ Consequently, after several deliberately-lit fires destroyed areas of forest near Jerusalem in 2004. a senior Israeli official warned of "arson terrorism", while the Fire and Rescue Services Commissioner described the actions as a return to the "arson Intifada" of the 1980s.38 Israel's forests were once again endangered during the war with Hezbollah in mid-2006 when Katvusha rockets, fired from Lebanon, badly damaged a large area of the Mount Naftali Forest. As only 3.7 per cent of Israel is forested, such attacks have a major effect.

Over three consecutive summers, Spain had to contend with so many major, deliberately-lit fires that these were officially labelled in 2006 as "forest terrorism" that was "strategic and planned".³⁹ Thousands were driven from their homes and some 20 people

were killed, including 11 firefighters. The Spanish government came under significant public pressure from demonstrations and other protests calling for action against those who had lit the fires, many of which were close to urban areas. A special police unit was set up to hunt for the arsonists, with several arrests eventually being made. While the motivations of the arsonists remain unclear, the fires made it obvious that Spain was unable to implement a comprehensive strategy to prevent such campaigns and was vulnerable to large-scale pyroterrorism.

The Baltic state of Estonia was subjected to an explicit pyroterrorist attack in the summer of 2006 when an extremist group called "the Forest Incinerators" threatened to set fire to the country's forests and "let the whole [of] Estonia burn down" if the government did not remove a Soviet monument in Estonia's capital Tallinn.⁴⁰

Terrorist strategy

A recent review of the historical data reveals that pyroterrorism has been

- 35. "Greek fires blamed on 'culture of arson", The Telegraph, (UK) 1 August 2007.
- Nurit Kliot, "Forests and forest fires in Israel," International Fire Forest News (Geneva), No.15, September 1996.
- 37. Josh Schollmeyer, "A fiery proposition," *Bulletin of the Atomic Scientists*, Vol. 62, No. 6, November/December 2006, p. 11.
- 38. Yaakov Katz, "Fire chief warns of 'arson intifada", Jerusalem Post, 22 April 2004.
- 39. Harold Heckle, "Spain fights 'forest terrorism' fires", *Globe and Mail* (Toronto), 9 August
 - Lisa Abend and Geoff Pingree, "Spain's forest fires raise environmental worries, suspicions," *Christian Science Monitor*, 17 August 2006.
- 40. "Estonian extremists threaten government with forest fires, demand removal of Soviet monument," *MosNews.com*, 31 July 2006.

on the rise as a terrorist strategy. Globally, between 1968 and 2005, some 56 terrorist groups employed arson as their principal form of attack, while between 1994 and 2004 the total number of terrorist incidents involving arson increased significantly, with a major jump in deaths and injuries occurring between 2003 and 2004. Robert A. Baird observes: "Not only has the number of injuries increased from 3 to 37, more significantly, the number of fatalities has leaped from 7 to 254. [This] thirty-six-fold increase in fatalities in one year may indicate that terrorists have both the capability and intent to use arson as a terror tactic in the future".41 This shift in preferred tactics follows the realisation amongst terrorist groups that technically elaborate and logistically complex terrorist attacks have become increasingly untenable following the broad range of effective counter-terrorism measures introduced globally since 9/11.

Given the advantages that pyroterrorism has over more highly technical forms of terrorism it is regrettable that it has not received the analytical attention it demands. In fact, what is required is a theoretical and methodological paradigm shift from an emergency-services perspective to a counter-terrorism perspective that gives proper recognition to the proposition that wild fires can be used as a central component of a terrorist cam-

paign. Such a shift would reflect that already underway in the global jihad movement:⁴²

While [Western societies focus] on the readily apparent scenarios of smuggled nuclear weapons and radiological bombs, al Qaeda is adapting to avoid security and screening systems and is seeking new operational tactics and destructive technologies. Instead of using expensive, complex, and readily detectable nuclear or radiological bombs, future terrorists can easily ignite several massive wildfires to severely damage regional economies, impact military forces, and terrorise the ... population.

A complementary shift in perspective in response to this shift by the global jihadi movement can provide illuminating insights into the nature of the threat we face. For example, "studies of wildfire conflagrations have shown that they can rival the destructive force of nuclear weapons, giving the terrorist a weapon with the same effect with a great deal less effort and risk".43 Indeed, the accumulated biomass in the type of forest environment both promoted and protected in Victoria by government policies and by very active and influential conservationist organisations, contains a truly vast amount of latent energy. Consequently, as has recently been observed in connection with the American situation: "The potential destructive energy [that] already exists in the nation's forests [is] waiting for

^{41.} Baird, "Pyro-terrorism", op. cit., p. 416.

^{42.} Ibid, p. 415.

^{43.} Ibid.

^{44.} Ibid, p. 416.

an opportunistic terrorist to unleash a wildfire and create a conflagration potentially equal to a multi-megaton nuclear weapon".⁴⁴

Viewed from a counter-terrorism perspective, such heavily-forested areas, with their enormous fuel loads located in and around significant population centres, constitute, in effect, gigantic improvised explosive devices (IEDs), albeit in a latent form, whose potential destructive power just awaits release by pyroterrorists prepared to unleash the type of hell on earth witnessed in Victoria.

Previous examples of this type of highly destructive potential were provided by the Canberra fires and the San Diego conflagration of 2003, both of which caught the attention of terrorist organisations and prefigured the Victorian fires:⁴⁵

The San Diego Fire Storms of 2003 provide a contemporary example of how certain regions of the country are vulnerable to wildfire terrorism and provide a model to examine the effect of a future pyroterrorist attack on the local population, regionally based US military forces, and the communities that support them. Three arson-induced wildfires called the Cedar, Paradise, and

Otay fires, converged in the San Diego area in late October 2003, overwhelming area fire resources. The fires, fuelled by the dry vegetation and fed by the Santa Ana winds, raged across southern California and killed 16 people, burned an estimated 750,000 acres, destroyed an estimated 2,500 homes, and threatened 70,000 other structures.

Fortunately, some recent studies in the terrorism, counter-terrorism and related fields have recognised the need for a shift in perspective and have analysed the ways in which a society's forests and related environmental systems can be made both the object and means of large-scale pyroterrorist attacks.⁴⁶

Consequently, as one of these articles observes:⁴⁷

Pyroterrorism has the potential to become a tactic of choice for terrorists.... By harnessing the environment as an operational platform, terrorists can avoid traditional security mechanisms designed to detect sophisticated bombs and biological or chemical agents. A reliance on existing vegetation ensures that both the cost and the inherent risk of a terrorist operation are mitigated. It takes little more than fuel and a combustible tool or a crude incendiary device to start a forest fire given the right environmental conditions.

- 45. Ibid, p. 421.
- 46. Baird, "Pyro-terrorism", op. cit.

Michael C. Clarke, "Terrorism, engineering and the environment: their interrelations," *Terrorism and Political Violence*, Vol. 16, No. 2, 2004.

Robert Kuhlken, "Settin' the woods on fire: rural incendiarism as protest," *The Geographical Review*, Vol. 89, No. 3, 1999.

Nick Deshpande, "Pyro-terrorism: recent cases and the potential for proliferation", *Studies in Conflict & Terrorism*, Vol. 32, Issue 1, January 2009.

47. Deshpande, "Pyro-terrorism", op. cit., p. 37.

Tragically, such conditions were eminently present and on display in Melbourne on 7 February 2009 — indeed they were even advertised throughout Victoria in connection with the continual warnings in the media about total fire-ban days, and Premier John Brumby himself issued a virtually apocalyptic warning on Friday, 6 February. It is indicative of the shift in perspective required to fully understand the nature of pyroterrorism that such warnings can be seen as serving perversely to further alert and mobilise those groups already planning arson or pyroterrorist attacks, and awaiting the right stimulus and the optimum conditions.48

Therefore, as a hypothetical example, on that dreadful Saturday in Victoria, amid furnace-like heat, and searing, gale-force winds, all that any arsonists or pyroterrorists needed to do was load their incendiary devices, along with their timing or remote-control ignition mechanisms, into a nondescript van or utility, perhaps with one or two trail bikes to facilitate easy access and escape while setting the fires. They could wait until about 10:00am to ensure the weather was indeed as bad as predicted. Then they could head out along the road to places like Whittlesea, Murrindindi or some other ignition points, before turning into any one of the many side-roads that provide access to the mountainous forest areas where the fires can be set to take best advantage of the forest fuel-load, winds, and other conditions. And, of course, this type of activity would be facilitated if the pyroterrorists were familiar with such areas through their previous participation in paramilitary and related forms of training.

As the fires tragically revealed, it is a feature of this type of strategy that pyroterrorists can capitalise on the high probability that the responsible authorities (e.g., fire brigade, emergency services, police, health, etc.) will display a low level of coordination and preparedness when faced with such a massive outbreak. In Victoria, this problem expressed itself in various ways, including a failure to implement an early-warning system,49 claims that communities were forgotten or abandoned by the authorities,50 and accusations that the state's two fire-fighting bodies refused to work together, including claims that the Country Fire Authority refused to allow firefighters from the Metropolitan Fire Brigade to join the fight against the devastating bushfires 51

It is vital, in comprehending the nature of this type of threat, to realise that

^{48. &}quot;Bushfires early warning did not go unheeded", editorial, *The Age*, 11 March 2009.

^{49.} Lenore Taylor, "Cash found for national alert system", *The Weekend Australian*, 21-22 March 2009, p. 7.

^{50.} Gary Hughes, Julie-Anne Davies, "We were abandoned: fire survivors", *The Weekend Australian*, 21-22 March 2009, p. 7.

^{51.} Greg Roberts, "CFA, MFB deny battling over bushfires", *Sydney Morning Herald*, 20 February 2009.

pyroterrorists can also rely on the assumption that such government agencies will be unable quickly to identify the true nature of the fire threat as a deliberate *terrorist* attack, as opposed to the more random bushfire outbreaks with which they are familiar, and for which they are trained and prepared.

Consequently, they may be unable to respond effectively to what transpires to be a carefully planned campaign of destruction, perhaps one that even anticipates their reactions and even targets them. Consequently, authorities might, for example, inadvertently allow a series of fires to build quickly into an all-consuming fire-storm of the sort that ravaged Victoria on the night of 7-8 February, before they realise that the situation has been planned and coordinated to have this effect. This degraded response can be virtually guaranteed if sufficient pressure is also applied to prohibit consideration of such possibilities or to insulate any particular groups or communities from surveillance or suspicion of involvement in such activities.

Of course, such an attack would not only be extremely destructive in terms of human life, physical destruction and economic costs, as we have seen. In fact, a successful pyroterrorist attack executed on a sufficiently large scale could also significantly destabilise the political and social systems of the target society, as has been observed in the American case:⁵²

If terrorist organisations use pyroterrorism — publicly assuming responsibility for massive arson-induced firestorms — the devastation would overwhelm suppression resources, weaken regional economies, destroy critical infrastructure, affect readiness in military forces, erode the perception of Homeland Security among the population, and potentially exert political pressure on national leadership for policy change.

Governments would be even more seriously compromised if responsibility could be traced back to extremist members of a specific group or community, particularly if that group or community had received, or was perceived as receiving, special treatment or protection by the government, its agencies and the media. Indeed, such action, however apparently well-intentioned it may be, could radically escalate tensions and accelerate the processes of de-legitimisation that could cause major and longterm damage to the society concerned, endangering its most fundamental values and institutions — precisely, in fact, as the pyroterrorists planned.

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