

A handprint is formed by bright orange and yellow flames against a black background. The fingers are spread out, and the palm is a large, glowing mass of fire. The overall effect is dramatic and intense.

Serial numbers

Serial arson in the Netherlands and the difficulties faced by fire investigators are outlined by **Yvette Schoenmakers, Jos Hoekendijk** and **Rob van der Kruk**

OVER A four-month period in 2007, the 900 inhabitants of 't Zandt, a small village in the north of the Netherlands, were startled by a series of 20 fires in unoccupied houses and sheds. It was concluded that the fires were set deliberately, most probably by the same perpetrator. During this period, the police, fire brigade and other local authorities, as well as members of the public, were on constant alert for the outbreak of further fires, while investigators worked to trace the arsonist, who became dubbed by the national news media as 'the pyromaniac of 't Zandt'.

The serial arsons of 't Zandt are not an isolated phenomenon in the Netherlands. Indeed, it appears that many other cases take place in the country. Not only are there risks to life and property, but serial arsons can cause much anxiety and concern

among local residents, particularly in smaller communities. There may even be an element of social unrest, with the incidents stirred up by the media. These issues can be exacerbated by the fact that there is often a significant period of time before a suspect is arrested, since these crimes are unusual in nature and can be difficult to investigate.

Indeed, when it comes to the criminal investigation of serial arson in the country, the 'policy triangle' of local public administration, police and the Department of Justice – the parties involved in investigations – often poses complex dilemmas in terms of decision-making. In addition, there is only limited experience of criminal investigation in cases of serial arson, and all too often the police investigate without specific prior knowledge.

“ Despite the apparently random nature of attacks, serial arsonists may select targets for a reason ”



Scale of the problem

In 2007, the Dutch police recorded more than 9,840 criminal reports of arson. During the same year, 2,760 people were registered for at least one case of suspected arson. However, not all deliberate fires are reported to the police, and small fires that may be arson are often reported as cases of vandalism. As a result, the actual number of arson offences in the country is probably higher.

There are similar problems regarding the annual fire brigade statistics. In 2007, a total of 47,000 fires were reported by brigades in the Netherlands, of which more than one-third concerned fire setting or arson. However, it is recognised that far more fires are set than are officially recorded. Furthermore, serial arsons are not recorded as a series in police records. It is therefore not possible to produce figures showing the extent of serial arson in the country.

The damage caused by serial arson varies, depending on the number of fires in the series and the nature of the incidents. Some cases may be attempted arsons if, for example, the owner of the affected property can act promptly to extinguish the fire. In other cases, residential or commercial properties can be destroyed. Social unrest can grow further due to the apparent arbitrariness of the attacks (although the arsonist may select targets for a reason). Serial arsonists are commonly described as ‘pyromaniacs’, but in truth only a small number actually suffer from the psychological disorder, pyromania.

Investigation dilemmas

In the event of a serial arson case, one public administration dilemma that can arise concerns the provision of information to the public. Citizens in the community who may be anxious about further arson attacks will naturally demand information.

However, public administration officials can get caught between serving the public interest by giving information, and protecting the confidentiality of the criminal investigation. On the one hand, withholding information about the attacks and the status of the investigation may stimulate speculation and social unrest. On the other hand, revealing the nature of the threats may jeopardise the success of the investigation.

There are also problems for the criminal investigation team to overcome – a key one being how to link arsons in the series and determine whether the fires were set by the same perpetrator. Different arsonists may be active in the area during the same timeframe, and some may be inactive for longer periods of time than others.

When linking cases, Dutch analysts generally focus on aspects such as location, point in time, *modus operandi* and choice of target. However, it is only after a number of attacks that investigators make a link and conclude that a serial arsonist is at work, and from that point onwards there will be more awareness and action to detect potential attacks and apprehend the perpetrator.

Another issue is that the motive of an offender is not always clear. Knowledge from behavioural sciences can shed more light on the arsonist’s actions, which can prove useful for analysing the series and tracing suspects.

When a suspect has been identified, investigative attention shifts to furnishing of proof. Producing evidence brings its difficulties, too. For example:

- the fires are usually set during night-time, so there are rarely any witnesses
- for reasons of safety, a forensic investigation team, as a rule, only enters the crime scene six to eight hours after the fire has been extinguished – by which time the crime scene may have been disturbed
- possible evidence is often burnt or destroyed in the process of fire extinguishing

There can be significant pressure on the criminal investigation team, due to social unrest and the perceived risk from further arson attacks. This can resonate in the objectives of the team. The main focus will be to stop the fires and identify the perpetrator.

When a suspect comes to light, the investigation team frequently faces a dilemma: arrest the suspect without conclusive evidence to hand, or monitor the suspect in order to build up a solid case? Criminal investigation benefits from monitoring the suspect and obtaining more evidence which can be used to mount a prosecution, although there are clearly risks involved. A premature arrest, on the other hand, places too much emphasis on questioning the suspect. In stressful circumstances, the objective of stopping the fires can lead to an unfounded arrest.

Knowledge is key

Knowledge of serial arson is essential in overcoming such dilemmas. Serial arsonists rarely confess their crimes or engage in any conversation when questioned. They are aware that it can often be difficult to prove that a fire was set deliberately and their role in setting it. It is therefore advisable to establish conclusive evidence as far as possible, before arresting a suspect. During subsequent questioning, the suspect should be asked about their social life and not confronted immediately with the accusations at hand. Person-orientated questioning (as opposed to case-orientated questioning) may also shed light on a possible motive, and establish a link between the suspect's routines and the times of the arson attacks.

As discussed, the administrative and criminal investigative policy in cases of serial arson can become strained, with decision-makers often having to overcome dilemmas and difficulties. Many serial arsonists are seemingly random crimes without apparent motive; it can be hard to link together the individual arsons, and conclusive evidence of a connection can be scarce; criminal investigation and prosecution concentrate on building a solid case against a suspect, whereas the affected community demands a quick arrest; the public administration wants to issue information to the public, but must not compromise the criminal investigation; delaying an arrest may result in uncontrollable risks, whereas a premature arrest can harm onus of proof. Strikingly, professional experience and/or knowledge about serial arson are often absent from investigation teams at decisive moments.

However, improving the knowledge and experience of investigators can result in more appropriate and decisive decision-making, and enhance the effectiveness of serial arson investigations at a time when public anxiety and media attention is high.

The concerns and issues relating to criminal investigations of serial arson – and how investigative knowledge can be improved – is the subject of a current research project being undertaken by the Police Academy of the Netherlands. A research report setting out the complete findings is due to be published by the end of 2009 ■

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6th International Seminar on Fire and Explosion Hazards

Sunday 11 – Friday 16 April 2010, University of Leeds, UK

International Organising Committee:

F. Tamanini (Chair) USA, V. Molkov (Vice-Chair) UK, D. Bradley UK, G. Cox UK,
D. Drysdale UK, T. Hirano Japan, G. Makhviladze UK, J. Quintiere USA, J. Woodcock UK

ADVANCED NOTICE AND CALL FOR PAPERS

All those with an interest in such hazards are invited to attend and submit presentations to the FEH6 Seminar. It will be held at Weetwood Hall on the outskirts of Leeds. The Seminar will present the latest developments and findings from experiments, theory, modelling and case studies on many aspects of fire and explosion safety, including: compartment fires, toxicity, flammability, structural safety, forest fires, radiation, deflagrations and detonations, large scale explosions, dust explosions, hydrogen safety and sustainability.

Plenary Lecturers include:

- The Rt. Hon. Lord Newton of Braintree, 'The Buncefield Major Incident Investigation'
The Investigation covered the explosions and subsequent fires at the Buncefield Oil Depot on 11 December 2005
- David Purser, 'Fire Toxicity'
- Domingos Viegas, 'Forest Fires'
- Elaine Oran, 'Large Scale Transitions to Detonation'
- Sergey Surzhikov, 'Dynamics and Radiation of Burning Hydrogen Clouds'
- Lou Gritz, 'The Influence of Risk Factors on Sustainability'

For further details, including how to submit a paper and key dates, please visit the designated Seminar webpage below.

For further information and enquiries please contact:

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