



The National Policing Homicide Working Group

JOURNAL OF HOMICIDE AND MAJOR INCIDENT INVESTIGATION

Volume 11 Issue 1, May 2016

Contents

About the Journal

About the Homicide Working Group

Contact Details

About the Journal

The Journal of Homicide and Major Incident Investigation encourages practitioners and policy makers to share their professional knowledge and practice. The journal is published twice a year on behalf of the National Policing Homicide Working Group (HWG).

It contains papers on professional practice, procedure, legislation and developments which are relevant to those investigating homicide and major incidents.

All contributions have been approved by the Editorial Board of the HWG. Articles are based on the authors' operational experience or research. The views expressed are those of the authors and do not represent those of NPCC. Unless otherwise indicated they do not represent national policy. Readers should refer to relevant policies and practice advice before implementing any advice contained in this journal.

The Journal is edited by Peter Stelfox on behalf of the National Policing Homicide Working Group.

[Back to Cover](#)

Contact Details

For **individual articles**, enquiries should be sent to the contact details shown on each contents page.

For the **Journal**, enquiries should be sent to the Editor at peter.stelfox@gmail.com

For the **National Policing Homicide Working Group**, enquiries should be sent to the Secretary andy.brennan@nca.x.gsi.gov.uk

The address for all postal correspondence is:

The National Policing Homicide Working Group
Chief Constable's Office
South Yorkshire Police Headquarters,
Carbrook House,
Carbrook,
Sheffield,
S9 2EH

[Back to Cover](#)

About the National Policing Homicide Working Group

The National Policing Homicide Working Group (HWG) is part of the Violence Portfolio within National Policing Crime Business Area. It develops national policy and practice for the investigation of homicide, major incidents and other serious crimes.

The HWG also supports and promotes the training and professional development of practitioners and provides oversight of levels three and four of PIP. It encourages research into homicide and major incident investigation and fosters good working relations between practitioners, policy makers and academics in this field. Membership of the HWG is drawn widely from the Police Service and partner agencies. It comprises the following:

Chair	CC David Crompton, SYP
Deputy Chair	Commander Stuart Cundy, Metropolitan Police Service
Secretary	DCS Andy Brennan, WYP
Treasurer	DCS Ian Waterfield, Nottinghamshire Police
North Eastern Region	A/Det.Supt. Victoria Fuller, Durham Constabulary
Yorkshire and Humberside	DCS Chris Rowley, West Yorkshire Police
Eastern Region	D/Supt John Brocklebank, Suffolk Police
East Midlands Region	D/Supt Kate Maynell, Leicestershire
London Region	DCS Mick Duthie, Metropolitan Police Service
South East Region	DCS David Miller, Surrey/Sussex Police
South West Region	DCS Bernard Kinsella, Gloucestershire
Wales Region	D/Supt William Davies, Gwent
West Midlands Region	D/Supt Mark Payne, West Midlands
Northern Ireland Region	DCS Raymond Murray, PSNI
North West Region	DCS Russ Jackson, Greater Manchester Police
British Transport Police	D/Supt Gary Richardson
Police Scotland	DCS Gareth Blair, Police Scotland
NCA	Mr Sean Sutton, Head of Specialist Operational Support
HSE	Mr John Rowe
NABIS	C/Supt. Jo Chilton, West-Midlands Police
Forensic	Mr Chris Porter, Metropolitan Police Service
FCO	Mr Paul Davidson, FCO
PIP	Mr Steve Maher, PIP 3 Registrar
Service Police	Lt.Col John McAllister, RMP
NPCC UK DVI	D/Supt Jen Williams, GMP
HMIC	Paul Holewell
Major Incident Analysis	Samantha Robins, Surrey Police
Investigative Interviewing	Mr Gary Shaw, MBE, National Investigative Interview Advisor
Research Sub-Group	Dr Michelle Wright

Contents

Operation Novelist: The investigation into the murder of William and Patricia Wycherley	1
Robert Griffin	
Operation Henbane: the investigation into the murder of Alan Easton	14
Leigh Sanders	
SIO Decision Making: Lessons from the Public and Private Sector	31
Paul James	
Homicide Research Group Update	48
Michelle Wright and Ian Waterfield	
Joint Work Related Death Investigation: Operation Cullen A Successful Corporate Manslaughter Conviction	49
Carol Downes, Robert Hodgkinson and John Rowe	
Operation Pinene: the investigation into the murder of Miltiades Papadopoulos	67
Joanne Walker	
Index of the Journal of Homicide and Major Incident Investigation	79

Operation Novelist: The investigation into the murder of William and Patricia Wycherley.

Robert Griffin, Detective Superintendent, Nottinghamshire Police

Abstract

As the SIO, Operation Novelist presented me with a range of unique challenges. The murder had been committed fifteen years before it was reported and had been successfully covered up by the offenders for all of that time. When it came to light, they were living in France and, because we had no confirmation that a murder had taken place and no bodies, we were not in a position to obtain a European Arrest Warrant. The investigation involved proof of life enquiries, financial investigation and the excavation of the garden of the victims' last home, which located their bodies and provided the evidence needed to apply for a European Arrest Warrant. In the event this was not needed because the offenders returned to the UK of their own accord. They provided accounts of the incident that were entirely implausible and which minimised their roles in the deaths. By careful analysis of their accounts and by working closely with our team of forensic experts, we were able to demonstrate the true nature of the incident and both were convicted and sentenced to 25 year jail terms. This article highlights the main features of the investigation and the lessons I learned from it.

Contents

1. Introduction
2. Instigation and Initial Enquiries
3. Exhumation and Post Mortem Examination
4. Arrest and Interviews
5. Testing the Edwards' Account
6. Trial and Conviction
7. Lessons Learned

All correspondence should be addressed to:
robert.griffin@nottinghamshire.pnn.police.uk

1. Introduction

Operation Novelist was the investigation by Nottinghamshire Police into the murders of William and Patricia Wycherley by their daughter Susan and son in law Christopher Edwards. The investigation was unusual in many ways. It started when one of the offenders confessed fifteen years after the event to a relative, who immediately passed the information to the police. By then, the offenders were living abroad and, although they were believed to be in France, we had no way of contacting them other than through an email address.

We were quickly satisfied that the witness had accurately conveyed to us the information that they had been given, but establishing whether it was true or not was another matter. That involved enquiries with family and friends of the Wycherleys, most of whom assumed that they were still alive, together with proof of life, and financial enquiries.

The original information was that the Wycherleys' bodies had been buried in the back garden of their home, which had been sold several years ago to someone unconnected to the case. When all of the enquiries we made pointed to the Wycherleys having disappeared about fifteen years previously we moved on to negotiating access to the house and excavation of the garden. This resulted in the recovery of the two bodies and the finding that both had died from gunshot wounds.

Enquiries to obtain a European Arrest Warrant for Susan and Christopher Edwards were overtaken when they contacted me by email to say that they were travelling home to surrender to the police. This led to them giving accounts in interview which appeared to minimise their involvement in the murders and which our enquiries were able to demonstrate were false. They were ultimately convicted of the murders and sentenced to a minimum term of 25 years.

There were many uncertainties and challenges during this investigation: the absence, at least initially, of any concrete evidence to support the confession; the time that had elapsed since the Wycherleys were last seen; the fact that the

suspects were abroad and the need to negotiate access to premises that were now lived in by someone wholly unconnected to the events fifteen years earlier all presented novel challenges. I learned many lessons during this enquiry but perhaps the biggest was simply to go where the evidence takes you and push on with the obvious lines of enquiry.

2. Instigation and initial Enquiries

On 1st October 2013 Nottinghamshire Police were contacted by Elizabeth Edwards who reported that her step son, Christopher Edwards, had spoken to her from France asking her for money. He then related a story about how his wife had killed her parents, William and Patricia Wycherley, about 15 years ago and he had helped her to bury the bodies in the garden of their home. She had few other details, but the beat manager who took the call made some preliminary enquiries. These showed that the Wycherleys had lived at the address given but were no longer there, and there was no trace of where they now were. The report was escalated to the local Detective Inspector, whose enquiries also failed to show any evidence of where the Wycherleys might be. I was the on-call SIO for the East Midlands Special Operations Unit (EMSOU) and the DI consulted me about the case.

The enquiries already made were far from conclusive, but they did raise the question of where the Wycherleys were and so I sent officers to interview Elizabeth Edwards as a significant witness whilst further enquiries were made to trace them.

The beat manager had tried to contact Christopher Edwards via an email address without any success and I also sent him one, basically asking him to contact me. Neither of us got a reply.

I commenced a family tree, we didn't have a lot of detail but were able to carry out proof of life enquiries, which showed that although the deaths of the Wycherleys had not been registered, there was no evidence of current activity by either of them.

Due to the passage of time, those who would have been their neighbours had moved but we were able to trace some of them and they told us that they were a reclusive couple who did not mix. They seemed to have disappeared overnight sometime in 1998 and a man who the neighbours knew as Christopher appeared at the house and told people various stories about the Wycherleys moving away for their health or to travel. As late as 2011, in a Christmas card to a relative, Susan had mentioned them and said they were still travelling.

They had not visited their doctor or been registered for any medical treatment since 1998 and in 2005, their house had been sold. Enquiries with the estate agent and solicitor showed that the whole transaction had been carried out by letter and neither had met the Wycherleys.

Enquiries with the DWP showed that the Wycherleys' pensions had been claimed until 2012. As William Wycherley's 100th birthday approached, the DWP asked for a meeting with him to assess his needs and arrange a telegram from the Queen. No replies were received by the DWP and, as far as we knew, there was no follow up by them.

Financial enquiries showed that pensions, disability allowance and winter heating allowance had continued to be paid to the Wycherleys and that this, together with their savings and the proceeds from the sale of their house had been transferred to the account of Susan and Christopher Edwards over a period of time.

It was clear that the Wycherleys had disappeared suddenly at around the time indicated by Christopher Edwards to his step mother and that the house was maintained between then and 2005 by the Edwards. Furthermore, the DWP continued paying pensions to them at that address until 2012, even though the house had been sold to someone unconnected with them seven years earlier. Despite what the Edwards had told neighbours about the Wycherleys moving away, we could find no evidence that they were alive anywhere, on the other hand, there was no evidence that they had died.

Elizabeth Edwards had been able to provide us with a postal address in France as well as an email address for Christopher and Susan Edwards and enquiries had confirmed that they were living at that address. Our FIB and Interpol were able to gather communications data in relation to them but we were not in a position to obtain a European Arrest Warrant because we had nothing to charge them with at that stage of the enquiry. I therefore decided to do no more in relation to them until we had made more progress.

When we had exhausted all of the enquiries that were possible into the Wycherleys' background, we were left with the distinct possibility that the account given by Christopher Edwards to his step mother was true.

The next obvious step was to search the back garden of the Wycherleys' former home but this was not a step to be taken lightly given the scale of disruption and possible trauma that it would cause to the person currently living there. However, the weight of the evidence left me with no alternative but to search the garden and to excavate it if necessary and so I decided to move on to that phase of the enquiry as sensitively as I could.

Because of the implication of a search like this, the force declared the incident as critical and a Gold Group was formed.

3. Exhumation and Post Mortem Examination

The new owner of the house was unconnected with either the Wycherleys or the Edwards and he rented it out to a tenant who had lived there with her daughter for a number of years. We approached the new owner first. We explained that the Wycherleys had disappeared 15 years earlier in suspicious circumstances and that we needed access to the house and garden to move the enquiry forward. He was supportive and so the next step was to see the tenant. I went myself with another officer and we explained that we were conducting enquiries into the whereabouts of the previous occupants and we would like to search the house and gardens. She was extremely helpful and granted us as much access as we needed. We offered to accommodate her elsewhere whilst we searched

but she arranged to move in with a relative. Although I realised that we were causing a great deal of disruption to her and her daughter and that, if we found bodies in the garden, it was likely to be traumatic, I did not think a FLO was needed. However, I did ensure that all contact with her was through a DS who was also briefed to ensure that she was kept up to date and that her needs were considered whilst we carried out the operation.

We also considered the needs of the other residents on the estate where the house was. Some of them already knew that we were making enquiries about the Wycherleys because we had interviewed them. However, we knew that once we started to search and excavate the back garden the media would become involved and that this had the potential to cause a great deal of disruption and would need to be managed by us. We decided that our best strategy was to be open with the residents about what we were doing and so we carried out house to house enquiries to both gather any useful information but also to inform everyone that we would soon be searching the house and garden and that there would be a lot of police activity whilst we did this. The result of this was that when we did start, no one was surprised to see us and the media did not become aware of the operation until after the bodies had been recovered.

The search of the garden involved a large team, which included: a forensic archaeologist, a search co-ordinator, a pathologist, crime scene examiners and forensic scientists. Ground penetrating radar and cadaver dogs were also used in the initial phases and the whole team planned and agreed a coordinated approach, with the archaeologist overseeing the excavations in the event that we found the bodies.

The ground penetrating radar found nothing in the garden and this is a learning point because we eventually did locate bodies and so we had to conclude that the absence of a reading from the radar does not necessarily mean that there is nothing there. Cadaver dogs were more successful, they indicated an area where we carried out excavations and the bodies were subsequently found there. This confirmed my belief in the usefulness of cadaver dogs as I have had good results with them in the past.

When we were about six to eight inches down in the place indicated by the cadaver dog the archaeologist spotted an area that indicated a grave and the bodies were located further below wrapped in duvets.

The bodies were removed to the mortuary at Nottingham's Queen's Medical Centre. The post mortem examination was another team effort involving a forensic pathologist, forensic anthropologist, forensic radiographer and a ballistics expert. Another learning point which arose here was that we should have x-rayed the bodies before the PM to get an early indication of where the bullets were before they moved due to the process of unwrapping the bodies from the duvets. We didn't do this and in the event it made no difference but it could have done and I would do it in future

.

The forensic pathologist, Dr Stuart Hamilton, found that both the Wycherleys had been shot twice. The collective expertise of those present showed the trajectory of the bullets and the organs they must have travelled through and this provided us with causes of death, which I had not expected after all this time.

The bodies were also provisionally identified by the forensic anthropologist from their height and sex, and this was later confirmed by familial DNA. But from the outset, we had enough information to assume that the bodies were those of the Wycherleys.

Ballistics examination identified that the bullets were .38 calibre that had been fired from a revolver but no such weapon was found during the search of the garden or the house.

The search of the house and garden had led to the recovery of the Wycherleys' bodies and confirmation that they had been killed and buried in the way described by Christopher Edwards to his step mother. What we now needed to do was to arrange the arrest and extradition of Christopher and Susan Edwards.

4. Arrests and Interviews

We still had not heard anything from Christopher Edwards in reply to our emails. Following the discovery of the bodies and the PM findings, discussions were started with the CPS to arrange European Arrest Warrants (EAW) and extradition. In the event, these were not needed because on 30th October 2013, I got an email from him out of the blue. The subject line read 'Surrender' and the email said that he and Susan were catching a train home and he wanted to surrender to the police. He gave us details of the train he would be arriving on and I arranged to have them arrested at St Pancras International by the BTP.

Following their arrest they were brought to Nottinghamshire where they were interviewed. Susan Edwards said that she had visited her parents over the May Bank Holiday in 1998. She had been woken on the Sunday by a loud bang and went into the bedroom to find her father on the floor and her mother holding a revolver.

Her mother threw the gun on the bed and she picked it up. Her mother then told Susan Edwards that she knew that her father had abused her as a child. Edwards said that the abuse had taken place but she had always assumed that her mother did not know about it and she felt betrayed when she found out that she had known. They argued and her mother went on to tell her that she had had a sexual relationship with Christopher Edwards in 1992. Mrs Edwards then shot her mother more than once and left the house. She said that she took the gun in a bag into town and dumped it in a waste bin. The gun was never recovered.

She telephoned Christopher from a phone box but did not tell him about the shootings. She went back to the house and wrapped the bodies in blankets before hiding them under the bed. She returned to her own home on the following Tuesday.

She did not tell Christopher what had happened but went back to her parents' house that Friday with him. She told him that her mother and father were going

to Blackpool and had asked her to look after the house. When she got to the house she could smell the bodies, but when she asked Christopher he said he could smell nothing. She then told him what had happened and they decided to bury the bodies in the garden.

She admitted that they subsequently stole money from the Wycherleys' bank account and the sale of the house in 2005 and that they had continued to claim their pension until 2012. When the DWP had made enquiries, they panicked. Christopher Edwards stole £10,000 from his employer and they ran away to Lille in France. They couldn't access the Wycherleys' account from abroad, Christopher couldn't find work and their money ran out, which is when he had telephoned his step mother to try and borrow money from her.

She also said that in the 1970s she had been left some money by a relative and used the money as part payment for a house that her mother and father lived in. In 1986 her parents persuaded her to sign away her rights to the house, which they later sold for a £25,000 profit and she felt cheated.

Christopher Edwards claimed that he was only told of the deaths a week later and helped his wife to bury their bodies. He told police that when he went into the house on that Friday neither body smelt or showed signs of decay.

Both were charged with murder, concealing the bodies and theft.

5. Testing the Edwards' Account

When we analysed the accounts provided by the Edwards they appeared implausible. One explanation for this was that they had been designed to explain the circumstances in a way that minimised Christopher and Susan Edward's responsibility for the Wycherleys' deaths, whilst admitting the financial crimes, which they no doubt realised could be proved against them anyway. Even though we were sceptical, the accounts at least gave us something we could test against the material we had gathered and by speaking to the experts who had already worked on the case.

The ballistics expert thought it highly unlikely that Susan Edwards, who said that she had never handled a gun and was frightened of them, could have accurately shot her mother in the way described. There were also similarities in the way that the two bodies had been shot and this could be interpreted as meaning that they were shot by the same person, who had some familiarity with firearms. We knew that Christopher Edwards had been a member of a gun club and records showed that he had owned a .38 revolver. Although this weapon was never found, there was no record of him ever having disposed of it.

The pathologist considered that the account given by Christopher Edwards that there had been no smell of decay in the house and no sign of it on the bodies could not be true. According to the Edwards, the bodies would have been wrapped up in the house for nearly a week before they returned and in the pathologist's opinion, as well as all those police officers who had entered a house where a body had been found, there would have been immediate and obvious smells and signs of decay. Furthermore, entomologist Dr Martin Hall, from the Natural History Museum, found no evidence of blow flies on either body, which suggested that they had been buried soon after they were killed.

The view we took of the material we had gathered and the expert opinion was that the Edwards had killed the Wycherleys for financial gain and that they had buried the bodies in the garden soon after. They had then provided family and neighbours with plausible explanations of the Wycherleys travelling in order to carry on claiming their pensions and benefits. The request by the DWP to interview Mr Wycherley in 2012 had threatened to uncover their crimes and they fled to France. When they ran out of money, they tried to borrow it from Mrs Edwards and at that point the story came out and she rang us.

They were not re-interviewed in the light of these findings because they had already been charged and there was no substantially new evidence to put to them.

6. Trial and Conviction

The trial of Christopher and Susan Edwards took place at Nottingham Crown Court in June 2014. In many ways it was a classic jury trial. The prosecution laid out its case that the murder was pre-planned and had been carried out for financial gain and, perhaps in revenge for what Susan Edwards believed to be the loss of her inheritance.

The Edwards' presented their defence which was substantially the account provided by them during their police interview.

On 23rd June 2014 both were convicted of murder and sentenced to a minimum term of 25 years each, together with a concurrent nine year sentence for concealing the bodies and theft.

7. Lessons Learned

As I noted in the introduction, the main lesson I learned from this case was simply to go where the evidence takes you and push on to the next logical step. There was often a great deal of uncertainty as we worked our way through this case, but by consulting the team and our experts a way forward was always found.

The search and excavation strategy worked well and I think this was because all of those involved were included in the planning stage and signed up to the approach we took.

I thought the handling of the media during the search and excavation worked well. By letting everyone who would be affected know what we were doing we managed their expectations. By the time the media came to us for information we had found the bodies and had plenty of information that we could give them.

Although in the event it didn't matter because the Edwards returned home of their own accord, the limitations of the EAW is a learning point. The EAW is to facilitate prosecutions not investigations and had we been successful in getting one and securing the arrest of the Edwards in another country, they would have been charged with the murder and we would not have been able to interview them. I thought that we followed the right course of action in this case but this is probably a judgement call depending on the unique circumstances of each case. The bottom line is that once there is evidence to charge it is difficult to argue against obtaining a EAW, even if that makes the investigative phase a bit harder.

Operation Henbane: the investigation into the murder of Alan Easton.

Leigh Sanders, Detective Chief Inspector, Nottinghamshire Police.

Abstract

Operation Henbane was the investigation by the East Midlands Special Operations Unit into the murder of Alan Easton in February 2013. The murder was committed by a group who had very little criminal experience and who were quickly identified once the body had been discovered. There was a relatively large amount of material linking them to the scene and their attempts to explain away this material were unsophisticated and merely added to the weight of the case against them. Despite these seemingly promising circumstances, the case became mired in disclosure issues at court and the judge eventually discharged the jury and ordered a retrial. This provided an opportunity to address the problems and the second trial was relatively straightforward and led to convictions of those concerned. This article explores the issues that led a seemingly strong case to unravel during the first trial and the lessons learned by the SIO.

Contents

1. Instigation
2. The Post Mortem Examination
3. Identifying the Victim and Early Arrests
4. Interviews
5. The First Trial
6. Enquiries Prior to the Second Trial
7. The Second Trial
8. Lessons Learned
9. Conclusion

All correspondence should be addressed to
leigh.sanders@nottinghamshire.pnn.police.uk

1. Instigation

During the morning of Saturday 2nd February 2013 a woman reported to the Nottinghamshire Police that she had been walking her dog in Middle Cross Lane, Everton, Nottinghamshire, when she had noticed a grey coat on a hedge above what looked to her to be a large pool of blood. Nearby were scattered a document wallet, papers, a USB memory stick and some cards.

The first officers to attend the scene were sufficiently concerned to escalate the incident to the local Detective Inspector who attended the scene. At the point where the blood was found, Middle Cross Lane is a bridleway with a dirt surface running through secluded farmland about 400 meters from the boundary with South Yorkshire. The bridleway is bordered on both sides by fields that were normally ploughed and hedges separated the lane from the fields. Near to the coat and bloodstaining there is an entrance through the hedge to what is known as Narrow Field. As the photographs show, there is a lot of broken ground around the entrance and just inside the field which is caused by tractors and other vehicles. The field itself had a rough surface because of previous ploughing. Motor vehicles use the bridleway and tyre tracks were evident in many places.

The initial interpretation of the scene was that a crime may have been committed there, but other explanations were possible such as hunters or poachers cleaning animals before removing them.

I was the on call SIO for the East Midlands Special Operations Unit (EMSOU) and was contacted by the DI. We discussed the likely scenarios and prioritised the search for an injured or dead person in the immediate area whilst preserving the scene. This was done by closing the lane and diverting walkers through the opening in the hedge into Narrow Field. Resources, including the force helicopter, were deployed during that day and enquiries were made at hospitals and with missing person reports. The material within the immediate scene was recovered.

When nothing had been discovered within 24 hours we decided to release the scene. It was now the 3rd of February, and an officer was directed to clean the blood away before the scene was opened to the public. Although he did not have any water, he did have a spade in the boot of the car because snow was expected and it had been brought along in case cars needed to be dug out. He went into Narrow Field and took a spade full of soil from a mound of broken earth which he used to cover the blood. When he returned to get a second spade full he noticed a human hand in the mound and immediately alerted colleagues.

The scene was reinstated and enlarged. Unfortunately, the deposition site was amongst the broken ground just inside Narrow Field, through which walkers had been diverted and this, together with search and other police activity meant that there were a lot of footwear and tyre impressions in the immediate vicinity. These were recorded in addition to the recovery of material found in the enlarged scene area, which included a kitchen knife and a large bloodstained stone slab. Two disposable gloves and a 'Bizzybee' brand packet were also found nearby.



Arial view of the opening to Narrow Field, just left of centre, showing the heavy vehicle tracks and broken earth which disguised the deposition site.

The question was obviously raised as to whether the body could have been discovered earlier. The answer is that I don't think so. The deposition site did not differ substantially from the broken ground that surrounded it around the

entrance to Narrow Field. Many people had walked past it when they had been diverted from the scene and the area had been subject to a surface and air search without anyone noting anything suspicious. There was no indication that we may have been looking for a buried body. In any event, such an undertaking in that location would have been an enormous task and was not justified by anything we knew at the time. Having said all that, the finding of the body was a stroke of luck.

The body was found to be that of a male who had been buried in a shallow grave.

2. The Post Mortem Examination

The PM took place on 4th February and found sever fracturing of the face and base of the skull resulting from forceful blunt impact. There were in excess of 20 incised wounds to the neck, one of which caused significant injury to the jugular vein and it is thought that this caused most of the blood loss. There were stab wounds to different regions of the body from the head down to the calves and it was thought possible that more than one knife had been used. There were also numerous other injuries suggestive of a beating.

Although the injuries noted above could have accounted for the death, soil in the victim's respiratory tract suggested that he may have been breathing at the time he was buried and reduced oxygen could have been an additional contributory factor in his death.

3. Identifying the Victim and Early Arrests

On the same day, enquiries relating to the documents found at the scene identified a DSS number that led to enquiries being made at the Job Centre in Mexborough, South Yorkshire. This identified the victim as Alan Easton 50 years, who had just moved to the area from Scotland. Easton was not known to police

and did not feature on any systems. CCTV showed him attending the Job Centre with another male who was identified as a local man named Stephen Schofield. Addresses and telephone numbers for both men were on record at the Job Centre and fast action telephone analysis quickly placed Schofield's phone at the scene during the period when Alan Easton's death was thought to have occurred. Other phones were identified which implicated Angela Dowling as also being at the scene during the relevant times.

Later on Monday 4th February Angela Dowling's and Stephen Schofield were arrested on suspicion of murdering Alan Easton. On the way to the custody office Angela Dowling disclosed to officers that she had caught the victim looking at child abuse images, which had led to a row and to Stephen Schofield throwing him out of the house. Later disclosures also identified a further suspect Mathew Duffy (as below).

4. Interviews

Angela Dowling said that she and her late husband Derek had known Easton, who then lived in Scotland, for many years. Towards the end of 2012 her husband had been diagnosed with Leukaemia and had died shortly afterwards. She then spent some time with Easton in Scotland and developed a relationship with him. They had become engaged and he had moved from Scotland to live with her. A short time after this she found child abuse images on Easton's USB stick and there was an incident where he touched her 15 year old daughter in a sexual manner (her daughter subsequently denied this had happened) and this led her to call off the engagement.

She told Schofield and Duffy about this on 1st of February and they said that they would talk to Easton on her behalf. They all went out in the car to a remote location and the three men got out but only Schofield and Duffy returned. She asked them where Easton was, and they told her he was on the train to Scotland. She questioned how this could be true given the location and the time of night but they told her to 'shut the fuck up and drive'.

She was terrified of them, so she did as she was told. She said that her co-accused had later boasted to her about how they had killed Easton and provided details of his injuries which tied in perfectly with the injuries to the deceased, which had not been disclosed to her by the police. She later identified the knife recovered from the scene as being from her kitchen.

Stephen Schofield initially denied any knowledge of the murder. He confirmed that Dowling had told him she had argued with Easton, but said that she suggested that they all went out for a meal together to "clear the air". Initially he said that there was just him, Dowling and Easton in the car, but later said that Matthew Duffy was there too. He said everything was fine until they stopped the car for him and Easton to urinate and they got into an argument about football. Easton tried to punch him so Schofield pushed him away and told him to get the bus back to Scotland. Schofield got back in the car and Easton walked to the nearest bus stop. As they drove past him, Dowling pulled up alongside him and tried to persuade him to get back in the car, but he told her to 'fuck off' and that he was going back to Scotland, so they left him to it.

In a subsequent interview Schofield made a full admission to the murder claiming that the motive was revenge for the sexual assault on Dowling's daughter. He admitted kicking him and stabbing him, and said that Duffy had stabbed him too. He said they stabbed him in the gut and then slammed a large stone on his head to 'finish him off' before burying the body in a trench that had already been dug by the farmer. He confirmed that he had been wearing disposable 'Buzzybee' gloves and left them behind at the scene.

On 5th of February Matthew Duffy was arrested at his home address. At the time his girlfriend provided a statement in which she gave him a complete alibi for the previous Friday night. She said he had been out during the day but he came home for dinner and stayed in with her all night.

In interview, he denied any knowledge of or involvement in the murder and initially denied being in the car with the others on 1st February. He later admitted being in the car with them but provided several different accounts of what had

happened. In one interview he gave substantially the same account as Schofield's first interview, which was that Easton had returned to Scotland on a bus following an argument about football. He said that he had then fallen asleep in the car and had not seen Easton since he had been dropped off at a bus stop.

None of the three had much criminal experience and between them they were unable to maintain any version of events for very long. Schofield appeared to have made a full confession but the other two continued to improvise explanations for inconvenient evidence or inconsistencies that were found in previous statements. Despite this, what seemed certain after these interviews was that Easton had been taken to Middle Cross Lane by Dowling, Duffy and Schofield under false pretences. It was not clear whether they intended to kill him or seriously injure him, but they were armed with knives and equipped with gloves. Following the murder he was buried and they concocted the story about him returning to Scotland.

As a consequence of the telephone analysis placing them at the scene, Schofield's evidence and the inconsistencies in the accounts of Dowling and Duffy, all three were charged with murder on the 7th February 2013.

The case against all three was further strengthened by subsequent enquiries that produced the following:

- Footwear analysis linked shoes belonging to Duffy and Schofield with footwear impressions found close to the grave and on Easton's coat, which had been recovered from the scene.
- CCTV evidence from a Co-Op shop showing that at 17:35 on Friday 1st February Dowling, Duffy, Schofield and a man called Bingham, who was a prosecution witness, bought disposable gloves and other items that were recovered from the scene.
- Telephone analysis connected all three defendants to the scene and to each other at relevant times.
- PAS intelligence against Dowling (of which more below).
- Witness testimony highlighting inconsistencies and inaccuracies in the various accounts given by Dowling and Duffy.
- Forensic evidence linked Schofield's blood-stained boots (recovered from a

bin at the Dowling family home) to Easton.

- CCTV evidence that identified Angela Dowling selling Easton's belongings and her engagement ring at Cash Converters within 24 hours of the murder, the items were subsequently recovered. Later her and Schofield (with whom she was also in a sexual relationship) are seen purchasing new clothes (including boots from the till receipts) from the local Tesco.
- CCTV captured both Schofield and Duffy, hours after the murder, buying alcohol together in a local off-licence, laughing and joking together.
- Personal items belonging to Alan Easton (including various electrical items) were found in the Dowling family home.

Taking all of this material together, we felt that we had a strong case against all three.

5. The First Trial

Prior to the start of the first trial Schofield pleaded guilty and made an offer to give evidence against the other two defendants. A Queens Evidence statement was obtained and considered by the prosecution team. The offer was subsequently refused as Schofield sought to mitigate the input of his lover Dowling, whilst fully implicating Duffy. The statement was disclosed to all parties and interestingly Dowling's defence team also declined to call Schofield. Duffy and Dowling were tried together but their defence tactic was to blame each other. Many SIOs might feel, as we did, that this was not a bad start to a trial, but their 'cut throat' defences led to a series of issues that culminated in the collapse of the first trial.

In fairness, the first issue was our fault.

5.1 Computer Examination

A number of computers, hard-drives and other media devices (in total over 30 were seized) during the various searches and, as we had no definite motive for the murder, we were keen to examine them to establish if there was anything that could assist in understanding the circumstances better. This was particularly important as one of the reasons given for Dowling falling out with Easton was that she had caught him viewing child abuse images. The devices were triaged and those identified as associated with Dowling were examined and found devoid of such images. Other computers were similarly sent to the force HI-tec crime unit for examination. It seems that they missed some of the child abuse images yet recovered others from other drives not initially triaged for examination. Those images that were recovered were not clearly reported back to the investigation team, not initially disclosed and once identified, were seized on by defence teams to attack inadequate police disclosures.

5.2 PAS Intelligence

Authority was granted to monitor Dowling's telephone usage whilst she was in prison on remand. As a consequence, material had been obtained that tended to contradict her defence statement, and the prosecution wanted to use this in evidence. The material only became available near to the trial and, under the PAS protocol, I had to obtain approval before it could be used. This took time and resulted in it only being served on the defence on the first day of the trial.

The judge accepted that the late disclosure was unavoidable, but Duffy's defence team again raised the spectre of yet further inadequate disclosures. They questioned whether there was any PAS intelligence in relation to him which had not been disclosed. Under the PAS protocol, we were not in a position to confirm or deny whether any PAS intelligence had been gathered in relation to him. The judge ruled that they should be told and we sought PAS authority to do this but it was refused. Finally, it was agreed that a broad statement would be provided which gave no details of content, only the number of calls and dates for monitoring would be declared. The defence argument was that whilst there may

be no useful material for the police within the PAS intelligence relevant to Duffy, this itself was evidence of a good character that could not equally be concluded from Dowling's monitoring. A fact they wanted to adduce within the cut-throat nature of the trial.

5.3 Reprehensible behaviour

The Criminal Justice Act 2003 makes provision for courts to hear evidence of a defendant's bad character or reprehensible behaviour. Although Angela Dowling had no previous convictions and Matthew Duffy had only a caution recorded against him for a minor offence in 2010, we were aware of a previous allegation made against Dowling. This surrounded her relationship with a man called Whittle. Dowling had lured Whittle to an address where she attacked him. The intention was to incapacitate him and then drive to a secluded location with the intention of killing him. The plan had not been carried out and did not result in a prosecution. But her initial attack on Whittle had been witnessed by others. We felt that the circumstances were so similar to those of the present case that it provided evidence of reprehensible behaviour on her part. The prosecutor applied to have it included as evidence but the judge rejected the application. However, he did say that Duffy's defence team could use it provided they called the two witnesses from that case so that they could be cross examined by the other parties. Duffy's defence subsequently pursued this line of defence with vigour throughout the trial and prepared to call both of these witnesses during their case.

Following the judge's ruling, Dowling's defence employed a firm of private investigators to research these two witnesses' backgrounds. This resulted in a number of disclosure requests, some of which related to third party material that was not in police possession.

We had carried out the normal disclosure enquiries in relation to these witnesses on the assumption that they might give evidence for the prosecution and this material had been served on both defence teams at the time. However, because we were no longer in a position to interview them we were constrained as to the

further disclosure enquiries we could carry out directly with them. Nonetheless, as a result of the requests from Dowling's defence team we did carry out such enquiries as we could. These led to two main discoveries. First, we found that the date of a caution against one of the witnesses had been wrongly recorded and that Dowling had been involved in that case too, which we had not previously known. Second, we carried out PND enquiries on both witnesses which would not normally be done as part of routine witness enquiries. These revealed an intelligence report from another force that suggested that one of the two witnesses from the Whittle case might have made a false allegation of sexual assault. There was sufficient detail in the PND report to confirm that the allegation had been made and was found to be false, but whilst many of the details of the person making that allegation matched one of the witnesses, this could not be confirmed from the PND report itself. This information became known to me late one evening and I immediately actioned someone to contact the force concerned and get more information. I also recognised the potential importance of this as a disclosure issue on the legal ruling provided, even though the witness had as yet not given their evidence. Consequently I immediately made it known to the prosecutor that evening. Enquiries were still ongoing the following morning because the only person who could assist us was the officer in the original case, who was not immediately available. Because the individual was no longer our witness, we were unable to take the obvious course of action, which would have been to discuss it with them directly to confirm or refute it. But such were the similarities between the person making the false allegation and the witness in our case that the prosecutor felt compelled to disclose the information to Duffy's defence team.

They argued that this new material undermined the credibility of the two witnesses and had they known about it at the time, they would not have called them in support of their case. Furthermore, because it was the prosecution who had first served their statements when we applied to use them as our witnesses, it was our responsibility to comply with the disclosure requirements. Our position was that we had followed up the disclosure requests from Dowling's defence as best we could and had served any new material that came to light in a timely manner.

The judge ruled in favour of the defence and, although he specifically stated that the prosecution had acted in good faith throughout, he felt that, together with the previous disclosure issues, Duffy's defence had been damaged and in the fourth week of the trial he dismissed the jury and ordered a retrial.

Although he made no criticism of the police, it was soul destroying to see what appeared to be a straightforward case go so badly at court for reasons that, we felt, were largely beyond our control.

6. Enquiries Prior to the Second Trial

In granting the retrial the judge provided a list of enquiries that were to be carried out before the new one commenced. In addition, we sat down with the prosecution team and went through all of the issues to ensure that we had covered everything prior to the next trial. The following were the main points:

- The PAS material was to be further reviewed to determine whether anything more should be disclosed. This involved fully transcribing the tapes rather than simply listening to them and noting those things that appeared to be relevant within monitoring books. The review was to look for material that was relevant to the case and also anything that was relevant to the character of the two accused.
- Computers and USB sticks were to be fully examined with a view to establishing if any child abuse images had been present, had been deleted or had been viewed at relevant times.
- Potential bad character enquiries relating to witnesses were to be carried out to an enhanced level to forestall any of the problems that had arisen in the first trial. The results of these checks were to be communicated to the defence in a letter from the CPS.
- To review the material disclosed to the defence to ensure it was up to date for the second trial.
- To adopt improved management processes for dealing with in trial disclosure requests to ensure that defence teams signed off on all requests and the material we subsequently provided to them.

The examination of the seized hard drives led to child abuse images being found on a hard drive recovered from the Dowling address. From other material thereon, it was clear that this hard drive had belonged to Alan Easton.

From another computer, we also discovered MSGs between Dowling and the witness Bingham from within the 24 hours prior to the murder which made reference to going out and killing Easton. We already knew of his close association with the defendants and that he had been present at the Co-op shop when the rubber gloves had been purchased. The content of the MSG's also inferred a sexual relation between him and Angela Dowling. But we also knew that he had not been present during the murder (from alibi and cell site) and he had been treated as a significant witness in the first trial. The discovery of the MSGs suggested that he had prior knowledge of the offence and this led to a review of the accounts given by him and the material gathered in relation to him. As a consequence, he was subsequently charged as a fourth offender.

7. The Second Trial

The second trial was considerably smoother than the first. No reprehensible behaviour evidence was used by either defendant, both of whom provided different versions of events than had been given during the first trial, which only served to undermine their credibility further.

The most significant problem from our point of view related to the evidence in relation to Mark Bingham. The initial interview with him and the enquiries that followed from it were heavily criticised and in particular, the skills and experience of the officers conducting his initial witness interview. The situation had arisen because Nottinghamshire Police share major crime resources regionally with Leicestershire, Northants, Lincolnshire and Derbyshire in the East Midlands Special Operations Unit (EMSOU), which comprises a range of skills and resources for the investigation of serious crime. At the time of this murder, there was a high demand on these resources. Having arrested multiple suspects at an early stage, there were a large number of actions that had to be carried out against a ticking PACE clock. To accomplish this, EMSOU staff were drafted in

from across the region. Whilst all of them were committed and tried their utmost, many were not known to each other or to those managing them within the MIR. Furthermore, whilst all held the title of detective and worked on the EMSOU, their range of skills and experience were very varied. This meant that at this early stage some of the High Priority actions to interview Bingham were allocated to officers whose expertise was in areas such as surveillance rather than interviewing. The problem naturally became less acute as we got to know the strengths and weaknesses of staff and as it became clearer which witnesses were important to the case and which were less so. But by that time some damage had already been done and this ultimately led to the competence of some witness interviews and statement taking to be questioned in court. This led to the headline of "Cop slammed" (The Star 06/03/2014).

At the conclusion of the second trial, Bingham was found not guilty and a majority verdict convicted Dowling and Duffy of murder.

Both Matthew Duffy and Angela Dowling were sentenced to life imprisonment at Nottingham crown Court with a minimum tariff of 26 years imprisonment. For his guilty plea at an earlier PCMH, Stephen Schofield was sentenced to life imprisonment with a minimum tariff of 22 years.

8. Lessons Learned

Large teams of officers who can be deployed to homicide investigations, whether at the regional level or within large forces, are always likely to throw up problems for SIOs. As in this case, staff often have to hit the ground running and knowing them and their capabilities before they are deployed is not always possible. In theory, the MIR should quality assure all work, but there is no guarantee that the SIOs will know any more about the staff deployed to the MIR than they do about the outside enquiry teams. In addition, in the early stages, MIR staff are often focussed on the difficulty of establishing an MIR at a remote location as well as managing actions. The only realistic safety net that an SIO has is to ensure that work done at this early stage is checked and checked

again and if necessary, to hold an early review to identify if anything needs to be put right whilst there is still an opportunity to do so.

Related to the above, are the difficulties associated with having a remote intelligence cell that does not work daily with homicide enquiry teams. In our case, the intelligence cell works within the MIR during the early stages, but post charge they migrate back to their regions and become divorced from the detail of the investigation. As a result, they then lacked the detailed knowledge of the case when new developments occurred. Everyone involved is aware of the difficulty this causes and works hard to overcome it. In my view, communication is the key and I used video conferencing, regular updates on progress to the intelligence cell and inviting them back to the MIR for key briefing sessions as a way of trying to keep them in the loop.

The problems we experienced with the IT investigations was definitely a management issue. Submissions are made on an electronic form which naturally requires quite a lot of information to ensure that the IT investigators understand the context of the case and the work that is required of them. What appears to have happened in this case is that when new submissions were made people sometimes cut and pasted detail from previous ones to save time. This meant that changes to what we knew and what we wanted from the examinations were not always communicated as effectively as they could have been. What this taught me was that there is a fine line between working more efficiently, which we were encouraging staff to do because there are less of them, and cutting essential corners, which we were most definitely not encouraging them to do.

One of the questions that arose during the first trial was 'What is a reasonable line of enquiry?' The requests from the defence, partly driven by the work of the private detectives, were often concerned with material held by third parties who had not been interviewed by us because we did not think they had material that was relevant to the case. Because of the defendants' knowledge of each other, they were aware of the potential for third parties such as Social Services Departments to hold information about co-defendant that could be used to undermine their character. Our decisions not to interview these third parties

were often presented by the defence as breaches of our duty under CPIA and examples of further disclosure problems. In hindsight, there is not much an SIO can do about this, particularly if they have had scant information about the nature of the defence beforehand, other than be prepared to robustly defend the original decisions, which we did.

Once the first trial began, managing the disclosure requests from the defence teams was one of the most difficult tasks we had. For the second trial, we introduced a book for all disclosure requests. They were entered into the book as they were received and they, together with our responses were signed off by the defence teams. This ensured that there was a more accurate record of exactly what had been asked for, when, by whom and what our response to it had been.

9. Conclusion

Perhaps the biggest lesson to come out of Operation Henbane is simply that you cannot take anything for granted during a homicide investigation. From the initial scene through to the first trial, the unexpected and unforeseen caused us problems. None of these problems were individually serious or even unusual and many SIOs will have experienced similar ones themselves. But taken together and subjected to relentless exploitation by the various defence teams, they made a very straightforward case into a difficult one. This was not, by the way, any fault of the defence teams, who were merely performing their appointed roles. But it does illustrate that we have to be on the top of our game all of the time and even when we are, we sometimes need a bit of luck.

SIO Decision Making: Lessons from the Public and Private Sector.

Paul James, Director, Arquebus Solutions Ltd.

Abstract

This article examines the importance of using effective prioritisation strategies in SIO decision-making and how risk can be evaluated and minimised against a background of increasing budgetary pressures. I have included practical examples from the field of ballistics intelligence gathering and gun crime investigation in order to highlight the potential to develop policies that can assist in the prioritisation of investigative activities. I also give my personal view on the value of increased interaction between the police service and private industry.

Contents

1. Introduction
2. SIO Decision Making and Risk Analysis
3. The Development of Ballistics Intelligence
4. Good Practice in Rational Risk Management – NABIS in the UK
5. Evidence Based Prioritisation – The Western Balkans
6. Tracing the Converter
7. Implications for SIO Decision Making
8. From Public to Private
9. References

All correspondence should be sent to: pauljames@arquebus-solutions.co.uk

1. Introduction

I retired from Avon and Somerset Police with the rank of Detective Chief Superintendent in October 2012. During my police career I gained considerable experience as an SIO in the investigation of gun related crime, culminating in my authoring the ACPO Gun Crime Investigation Manual in 2005.

Between 2006 and 2012 I was at the forefront of the establishment and operational management of the UK National Ballistics Intelligence Service (NABIS) performing the roles of Programme Manager and Unit Head. I also chaired the ACPO Criminal Use of Firearms Practitioner Group for six years and served as a member of the Homicide Working Group.

In October 2012, following my retirement from the police service and in partnership with Matt Lewis, the previous Head of Knowledge and Communications within NABIS, I established Arquebus Solutions Ltd. Based at the Coventry University Technology Park, Arquebus works internationally to provide consultancy, training and managed forensic services across all aspects of the criminal and legal use of firearms.

This article draws on the experience of Matt and I in developing evidence based prioritisation models in relation to ballistics forensic services and the lessons that can be drawn from this for SIO decision making more generally. In writing it, we have been conscious that there is a great deal of national and local policy and guidance that supports SIO decision making, such as, the National Decision Making Model. Naturally, SIOs will want to refer to up to date versions of these when making their decisions, but we hope to show how they can also be informed by lessons from other jurisdictions and the private sector.

2. SIO Decision Making and Risk Analysis

The policing environment in the UK is currently facing unprecedented challenges, particularly in respect to budgetary constraint. The investigation of major crime

and homicide is one of the most important functions carried out by the police service, however, even this critical function is not immune to the financial pressures being experienced across the whole public sector.

SIOs increasingly have to prioritise their limited resources and make difficult investigative policy decisions on which they will be held to account. No longer is it possible to err on the side of safety and do everything. Compromises have to be made, and this means that some desirable (and previously routine) activities during the course of an investigation can no longer be carried out, whether it entails constraining the size of a search area, limiting house-to-house enquiries or foregoing some forensic activity.

This comes against the background of a changing workforce, with many police forces having lost a lot of their most experienced investigators over recent times due to retirement and natural wastage.

There is a new generation of SIOs emerging, and even the potential for direct entrants to the service at senior level to oversee major investigations. There is no doubt that the training and career development for SIOs in the UK is world class, and that the Professional Development and PIP accreditation programme underpinning the SIO environment is of a truly excellent standard.

No matter how good the training and development activity that is provided, there is no substitute for experience. This is particularly true in terms of homicide and major crime investigation. The potential complexity of such investigations that are often conducted in the full glare of media attention present many challenges to even the most experienced of investigators.

In such an environment it is tempting for an SIO to become risk averse and attempt to cover all options, but this is no longer possible and something has to give. The decision whether or not to pursue any potential investigative line of enquiry needs to be based upon informed analysis and understanding of the implications of so doing. In making these decisions the SIO needs the best possible advice available based upon knowledge and experience.

This type of 'Risk – Benefit' analysis is not isolated to individual decisions within an investigation but can also be applied to wider decision making, and the resultant introduction of evidence based policies and processes within the field of homicide and major crime investigation.

In order to illustrate the potential value of adopting a structured approach to evidence based risk analysis and prioritisation of activities within an investigative format I will provide examples of how this has been applied in tackling the criminal use of firearms, both in the UK and internationally.

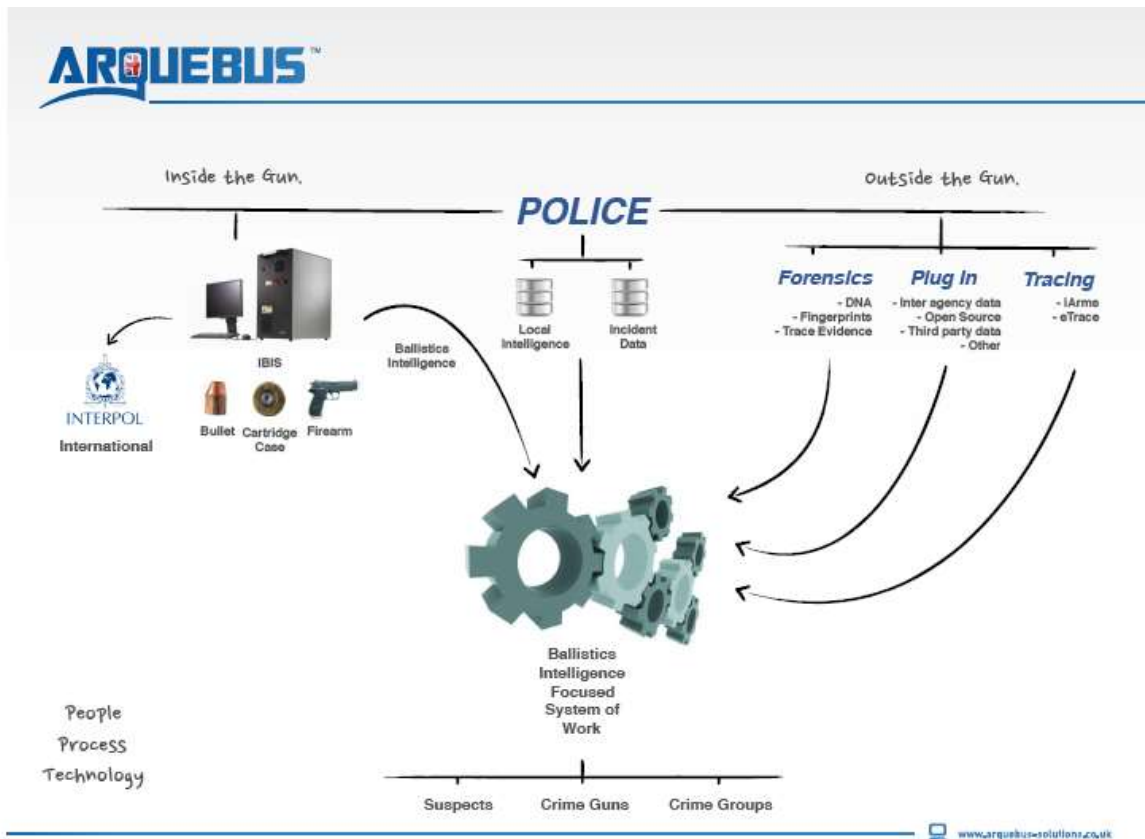
3. The Development of Ballistics Intelligence

On a global basis, the threat posed by illegally held firearms has never been more evident. Since the horrific attacks in Mumbai in 2008 firearms have commonly replaced explosives as the weapon of choice for terrorists, something that became only too apparent in the horrific attacks in Paris, and on the beaches of Tunisia last year.

In order to effectively tackle the criminal use and supply of illegal firearms on a local, national and international basis it is essential to develop and share fast time 'Ballistic Intelligence'. This is a terminology that lies at the heart of the work of NABIS in the UK and is the basis for much of the work that Arquebus has been involved in on the international stage during the past three years. 'Ballistic Intelligence' can be defined as:

'The result of the integration and analysis of forensic information derived from inside and outside the gun with all other relevant intelligence sourced and collated on a multi agency basis '

It is essentially a system of work that draws in all of the available information from the ballistic and forensic analysis of a firearm and ammunition together with intelligence and information from police and intelligence agencies as well as third party data sources.



In developing an effective ballistic intelligence capability there are three key elements that will always be present, namely: People, Processes and Technology. Many of the strategies and techniques for tackling gun crime can be applied to the investigation of any homicide or major crime, particularly the influence of these three elements. One further important element that can be added is prioritisation; particularly the need to make decisions on what activities need to be conducted at that moment in time, as well as those that can be placed on hold or not carried out at all.

Much of the work we have done internationally has been assisting countries to review their existing working practices in relation to gun-enabled crime and to identify good practice and areas for improvement. In many cases there has been significant investment in expensive ballistics identification technology that is being under utilised because the processes surrounding its use are lacking.

In order to adopt a consistent approach to developing and utilising ballistic intelligence based upon our experience both within the UK and internationally we

have developed a checklist of eight essential stages which should always be present in delivering a clearly defined process, namely:

- A consistent approach to the searching of crime scenes and the recovery of ballistic material and firearms,
- A clear criteria and policy for the submission of items to the firearms laboratory,
- A policy and procedure concerning the recovery of trace evidence such as DNA and fingerprints from submitted items,
- Prioritisation on the entry of ballistic material onto a Ballistics Identification System and for microscopic examination,
- Fast Time Intelligence capability to provide investigators with all available intelligence,
- The phased development of evidential products only when necessary,
- The integration of ALL intelligence; normally through the development of a central intelligence capability,
- Effective intelligence sharing, tasking and coordination.

In particular we identified the need to apply evaluated risk management within each stage of the process and to avoid being unnecessarily risk averse when involved in operational decision making.

4. Good Practice in Rationalised Risk Management - NABIS in the UK

In the UK, levels of recorded gun crime continue to fall, however, there is no room for complacency. The threat of a terrorist attack using firearms is high, whilst we still continue to see firearms being used to reinforce serious crime and in lower level disputes between street gangs.

NABIS (www.nabis.police.uk) retains its reputation as one of the most effective ballistics intelligence organisations in the world. One of the key factors in its success is the way that it focuses on providing 'fast time intelligence' to investigators in the early days of an investigation.

In order to deliver this type of intelligence NABIS has adopted a 'risk-benefit' analysis in prioritising the work that it carries out. This has significantly decreased the amount of low-level ballistic material being submitted for forensic analysis and released laboratory staff to concentrate on material that is more likely to be connected to crime. Before NABIS existed there was little clarification as to what firearms or ballistic items should be submitted for forensic analysis. This resulted in backlogs of urgent crime work being created whilst evidential work was carried out on low-level items such as air weapons.

In 2008 it was decided to introduce a transparent policy on the items that should be submitted for forensic analysis. A decision was made at the outset that full-length shotguns and air weapons should not be routinely examined unless there was evidence or intelligence linking them to crime. The decision was made on a scientific evaluation of the value of examining these items, taking into account the number of crimes these types of firearms were involved in and the likely value of any forensic analysis to investigators: in other words consider the risks of not examining them against the benefits to be derived.

This substantially reduced submissions of these types of weapons for analysis and is an example of evidence based risk taking. In recent times the NABIS team have made the decision that so called 'grandad' guns should also not be submitted for analysis based on the same criteria. This decision is supported by several years of operational experience that provides evidence that very little operational value has been obtained by examining these types of firearms, that are often heirlooms and surrenders from family members following the bereavement of an elderly relative.

5. Evidence Based Prioritisation - The Western Balkans

One of the greatest challenges for law enforcement agencies in all countries is how to get maximum benefit from their ballistic laboratories. In the UK the level of illegal firearms in circulation is limited due to our strict legislation and proactive enforcement activity.

This is in stark contrast to South East and Eastern Europe where all of the Balkan countries face the problem of the availability of large numbers of unregistered firearms in civilian hands. This is a legacy of conflict in the region (Small Arms Survey: 2014) with recent estimates suggesting that between 1.46m and 3.86 million firearms are in circulation in the Western Balkans.

The availability and potential recovery of such a large number of illegal firearms means that the laboratory would be completely overwhelmed should all recovered illegal firearms be submitted for examination. It therefore becomes more important than ever to develop a clear criteria for the submission and examination of items, and in so doing there will be an element of risk that some intelligence and evidence will not be found.

For this reason it is essential that the eight stages discussed earlier are adopted to provide a step by step process for the development of ballistic intelligence, from the crime scene to the courtroom and that effective prioritisation is implemented at each stage.

We have seen from the NABIS example how it is possible to manage the type and number of firearms being submitted to the laboratory, but there is another area where risk management needs to be adopted on a regular basis, namely: the decision on which items need to be entered onto ballistic comparison technology and subsequently subjected to a full microscopic analysis by scientists within the laboratories.

There is the potential for all discharged projectiles and cartridge casings to be acquired into the Integrated Ballistics Intelligence System (IBIS). This automated system compares the markings and striations found on the projectiles and cartridge casings against other outstanding ballistic material within the system. The system then reports the best possible matches that have been found to the operator, thereby supporting the identification of potential incidents where the same firearm has been used.

A trained scientist will then independently examine any such matches to confirm whether or not any of them are a confirmed 'hit'.

There is then a further decision to be made; is a microscopic check to be made by scientists in the laboratory against the Outstanding Crime File (OCF) for ballistic items that have not been put forward as a potential match by IBIS. If no such check is made then you are relying on the IBIS technology alone, and in the case of gun crime if the technology fails then the serious implications of failing to identify a link between two homicides are apparent.

It is vital that decisions as important as this are made from a position of maximum knowledge. IBIS is the most commonly used ballistics identification technology in use worldwide and is manufactured by the British company Ultra Electronics Forensic Technology. IBIS is constantly being upgraded with consequent improvements being achieved in the correlation performance for cartridge cases by combining 2D images with 3D topography in the latest IBIS HD3D system. In preliminary testing by the manufacturers research team the IBIS system delivered a 94% correlation reliability in identifying known matches within the first 10 correlation score positions, commonly referred to as the "top 10".

If this 94% correlation reliability can be proven to be resilient in field studies it allows a risk analysis to be applied that in only 6% of cases will IBIS not make an accurate correlation in the top 10 of listed potential 'hits'. This then needs to be put into context by considering the extra amount of work that will be placed on the laboratory by carrying out a further manual microscopic check of all the ballistic submissions, which will be considerable. In other words is a 6% risk of missing a correlation considered an acceptable risk level in all the circumstances?

A potential compromise situation would be to utilise the IBIS system as a filtration rather than a prioritisation system as a matter of policy but to provide a safeguard in terrorism or homicide cases by carrying out the second level manual check on an 'exceptional case' basis.

Informed risk taking such as this needs stakeholder participation and in practice we have been involved in helping countries develop policies of this nature where key groups of police officers, prosecutors and border officials have been consulted before a final decision is made. It is vital that key stakeholders are made aware of such decisions and are aware of any contingent risks before the introduction of policy in such areas.

6. Tracing the Converter

Despite the large number of post conflict weapons that remain in circulation in the Western Balkans one of the major firearms threats facing all countries in the region is the supply and use of converted blank firing weapons that are capable of discharging live ammunition.

While the conversion of blank firing and replica weapons is a global practice, it is more frequently reported in Europe. Blank-firing handguns are the most commonly converted replicas with certain models being more appealing for conversion because of the materials used in their construction and the ease with which it is possible to overcome barriers that prevent them from firing real ammunition.

One of the countries in the Western Balkans was seeing a huge increase in the use of converted handguns and had identified the urgent need to try and identify the individuals or organisations that were carrying out the conversion process. During the previous 12 months their ballistics laboratory had received in excess of 1,000 converted blank firing guns but were struggling to prioritise the examination of these weapons against the backdrop of limited resources and competing demands.

The very nature of converting a blank firing handgun necessitates the gun to be disassembled and reassembled by the person carrying out the conversion. This means that there is a high chance of their DNA being present on the internal components of the firearm. It would not have been feasible for the laboratory to carry out an internal examination of all of the firearms in their possession due to

the sheer level of work involved so we needed to identify a means of prioritising which guns should be forensically examined that would give the best chance of identifying who was carrying out the illegal conversion exercise.

A number of the recovered guns had been falsely stamped with the 'Beretta' manufacturing mark to give the impression that they were genuine Beretta handguns rather than the cheap imitations they really were. It was clear from the characteristics of the stamp impression that the same stamping bunts were used on a number of the guns indicating they had come from the same source.

Additionally it was discovered that all of the converted pistols' original barrels had been replaced with a length of drilled steel tube. The majority of them had some form of attempted rifling on them but the quality and extent varied. On closer examination clear similarities, consisting of very narrow grooves were identified in seven of the guns, meaning that there was a strong possibility that the rifling on each one was made with the same tool.

This made it possible to focus in from the 1,000 originally submitted guns to a much smaller sample that other forensic analysis had identified were potentially from a single source. It therefore followed that the same person may have carried out the conversion, and that if that persons DNA profile could be found on the internal components of the gun then the converter could be identified.

Based upon this analysis this limited sample of guns alone is currently being subjected to a full internal examination and DNA profiling. On a practical point it also meant that officers searching premises could be advised to look for the false 'Beretta' stamp and the rifling tool.

This focused prioritisation was not without risk as in the ideal world all of the 1,000 recovered guns would be internally examined as there is clearly the risk that evidence identifying offenders would be missed, but it made the task manageable rather than impossible and could be justified based on a clear and evident strategy embedded in policy and agreed by all relevant stakeholders

7. Implications for SIO Decision Making

All of the above examples of prioritisation involve an element of risk, but to a large extent remove some of the pressure on the decision maker by introducing a policy that outlines how prioritisation will be applied in the normal run of events.

This removes the need for a separate risk analysis to be applied in each individual case, but does not mean that it alleviates the need for decisions to be made on a case by case basis dependent upon their individual merits. Where there are exceptional circumstances, perhaps because of the nature or type of offence under investigation it should always be possible for an investigator to step outside of the normal guidelines and make a policy decision as to why this has been done.

In the current climate of financial austerity there is an argument that UK law enforcement should be looking again at the way in which homicide and major crime is investigated with a view to examining which processes within a major investigation can be exposed to a risk analysis to see whether there are ways of prioritising activities based upon a scientific and evidence based analysis of the level of risk and benefit inherent within.

It is impossible to encompass all of the decisions that have to be made during the course of a major investigation into some sort of policy. The complexity and the unique and ever changing nature of each investigation will always require the SIO to make decisions on the way that the enquiry is progressed, and to record these decisions in a policy log. It is asking a lot of SIO's to make decisions that contain a significant element of risk, even if it is the right decision.

The focus on the personal accountability of the SIO has never been higher and in some cases the SIO may lack the experience of dealing with such circumstances. There is already an excellent training, personal development and mentoring process in place for SIO's and the establishment of a cadre of PIP3 and PIP4 accredited investigators who can provide hands on support and advice to SIO's.

Although these experienced investigators clearly provide excellent support in supporting investigations on an individual basis it is worth considering the value of carrying out a review of which activities within a major investigation would benefit from a risk benefit analysis to outline the factors that may make the SIO decide one way or another whether to carry out that activity within their specific investigation. This could lead to the development of policies of the type described earlier concerning the prioritisation of which firearms should be submitted for analysis and which ballistic material to check manually in the laboratory.

Clearly it would be essential to gain the views and expert opinion of a wide range of professionals who have recent and relevant experience in the areas under consideration. In my view this should involve not only serving law enforcement professionals but also any elements of the private sector that may be best positioned to contribute.

As a fairly new addition to the private sector I could be accused of having a personal interest in this respect. Having served for 30 years as a police officer I like to think that I can see things from both sides of the fence and would like to conclude this article by giving you a brief perspective of my experience over the past three years and explain why I believe that that working in the private sector has complemented my previous experience and developed my knowledge in a manner that I did not anticipate.

8. From Public to Private

It is fair to say that after working in the public sector for three decades the change to operating in the private sector has been a bit of a steep learning curve, but largely a very positive one.

At the end of my time with NABIS the work of the unit started to get a lot of attention due to the innovative approach to tackling gun crime that had been adopted which had played a role in achieving a reduction of over 50% in levels of recorded crime in this category. A lot of the requests for information and

support came from other countries, and although NABIS was, and still is, able to provide excellent support where necessary, it became apparent that there were opportunities to provide more intensive and long term support that was outside of the remit of NABIS, who needed to maintain a primary focus on reducing the threat posed by illegal firearms in the UK.

At this time my business partner Matt Lewis was performing a role as Head of Knowledge and Communication with NABIS. We made a joint decision to leave NABIS and establish a private company called Arquebus Solutions, which commenced trading in October 2012.

The primary purpose of the business is to provide consultancy, training and managed forensic services to help organisations and countries tackle all aspects of the criminal use of firearms. (www.arquebus-solutions.co.uk)

The response we have received from the law enforcement community both within the UK and internationally has been almost wholly positive. We have maintained professional contact with a large number of UK law enforcement agencies and what is particularly pleasing is that we enjoy a good working relationship with the current NABIS team, who I am pleased to say are taking the service forward in a very positive manner.

The potential benefits of increased public and private sector co-operation can never have been more evident or relevant than they are at this moment in time but there are still those in the service who seem to view any private sector company with a degree of caution, or even suspicion.

It is of paramount importance that the relationship between the police service and private industry is open, transparent and that caution needs to be displayed in ensuring that no improper preferential commercial treatment is shown to any individual company. However, I do believe that undue caution is sometimes an inhibitor to effective partnership working.

The service needs to become more comfortable in the way that it interacts with private industry or it risks missing out on valuable contributions, not only in respect to evidence based prioritisation models but in many other areas.

What has become apparent to me is that right across the private sector there are a large number of individuals who have moved from a career in law enforcement and whose experience is hugely valued and being put to work very effectively in a wide variety of circumstances.

The knowledge and experience that is gained during police service and the unique specialist skills that we develop are hugely saleable assets in the commercial world. You quite simply cannot buy the type of experience that a 30 year police career delivers, and this is never more evident than in the world of major crime investigation.

However, I have learnt there is a big wide world outside of the police family and this has provided me with the opportunity to get a different insight into matters, learn new skills and undergo new experiences that would not have been possible if I had remained in the service.

Since establishing Arquebus I have worked in a wide variety of locations and environments in many countries. It has been fascinating seeing how different countries and organisations tackle the criminal use of firearms and very rewarding to have been able to assist them in the provision of consultancy, training and managed forensic services. We have fulfilled contracts on behalf of the European Union and the United Nations and sit on several international expert working groups.

Perhaps the main benefit of this wide exposure though, has been the many lessons that we have learnt from others. There are numerous examples of innovative and creative working practices that we have encountered that have been genuinely ground breaking. We have shamelessly stolen the things that have been proven to work and incorporated them into the ongoing support and

delivery that we provide to others. In effect we have been able to act as a conduit for sharing good practice to a very wide audience of stakeholders.

I can honestly say that since leaving UK policing, I now have a whole range of knowledge and experience that I could not have attained whilst working in the UK.

There are many others like me in the private sector who I know are extremely keen to share their extended knowledge with serving officers, and particularly the SIO community whilst at the same time continuing to learn from the exceptional work that is being carried out on a daily basis across UK policing in these most challenging of times.

9. References

The Small Arms Survey, 2014, *Briefing Paper on Armed Violence*
<http://www.smallarmssurvey.org/fileadmin/docs/G-Issue-briefs/SAS-AV-IB4-Western-Balkans.pdf>

Homicide Research Group Update

Dr Michelle Wright, Manchester Metropolitan University

Ian Waterfield, Nottinghamshire Police

The Homicide Research Group aims to develop, implement and coordinate a national homicide research strategy that is driven by the Homicide Working Group (HWG) annual work plan and identified practitioner needs to deliver practically oriented UK research on homicide.

Details of published, ongoing and proposed UK-based homicide research is being collated to provide a central resource which is of use to SIO's and academics to assist in identifying areas where research has and is being carried out and to identify priority areas for future research.

If you are currently carrying out homicide-related research, or plan to in the near future please let us know so that your research can be included within the work of the Homicide Research Group.

We are also keen to hear from SIO's who have ideas for areas in which research needs to be carried out which would assist their day-to-day work.

All correspondence should be addressed to:

m.wright@mmu.ac.uk

ian.waterfield@nottinghamshire.pnn.police.uk

Joint Work Related Death Investigation: Operation Cullen A Successful Corporate Manslaughter Conviction.

Carol Downes, Robert Hodgkinson & John Rowe, Health and Safety Executive

Abstract

Well managed joint investigations of work related deaths are resource efficient and have a better chance of delivering justice for bereaved families. Until corporate or gross negligence manslaughter can be discounted, the *Work Related Death Protocol* directs that the police have primacy in a joint investigation. The *Practical Guide to the Work Related Death Protocol* provides guidance for the police, enforcing authorities and prosecutors and sets out suggested stages of a joint investigation. This article describes how the protocol was applied to an investigation leading to a successful conviction for corporate manslaughter. We draw out the learning points and contrast with situations that can arise when the *Protocol* is not followed.

Contents

1. Introduction
2. Operation Cullen
3. When things don't go so well
4. Summary

All correspondence should be addressed to: John.Rowe@hse.gov.uk

1. Introduction

Every year in England and Wales there are a significant number of work related deaths. In 2012/13 there were 220 such deaths, which involved 150 workers and 70 members of the public (source HSE). This compares to 551 homicides recorded during the same year (ONS).

Each of these fatal work related incidents involved some police involvement as a first responder and investigator alongside a joint investigating authority (often this is the HSE but it could be the local authority, Care Quality Commission or the Office of Road and Rail, hereafter HSE is used for convenience). Many also involved other agencies, such as, the Fire and Rescue Service, Ambulance Service, HM Coastguard and the CPS as prosecutor.

The resources each agency commits to investigate these incidents vary tremendously from case to case. Many investigations are straightforward because what happened, when, where and why are evident from the outset. For example, far too many farm workers fall to their death when engaged in poorly organised roof repairs. In such cases, quick decisions by the police and CPS about the potential for a manslaughter conviction results in appropriate and proportionate outcomes; usually the transfer of primacy to HSE or other enforcing authority to progress the investigation of potential criminal breaches of health and safety law.

A significant minority of cases are not straightforward and soak up vast resources. An example is the 2015 explosion at Bosley Mill in which four workers were killed. This ongoing investigation required significant HSE specialist input from the outset to assay the scene, consider ongoing structural safety and determine likely causes of the explosion. Considered alongside the needs of the bereaved families, requirements of HM Coroner and political and media attention, it had to be a well-managed joint investigation.

To ensure that such well managed joint investigations are the norm, the *Work Related Death Protocol* (hereafter referred to as the *Protocol*) provides a

strategic framework for joint investigations and liaison between all of the agencies which may become involved in the investigation and prosecution of a work related death. The document can be viewed at:

<http://www.hse.gov.uk/pubns/wrdp1.pdf>

The *Practical Guide to the Work Related Death Protocol* (hereafter referred to as the *Guide*) provides operational staff with the information they need to implement the *Protocol* in individual cases and can be viewed at:

<http://www.hse.gov.uk/pubns/wrdp2.pdf>

The *Guide* is not mandatory but gives practical guidance on the principles of liaison and joint investigation advocated by the *Protocol*. It provides a straightforward approach to the joint investigation of deaths within the workplace. The *Guide*, and the *Protocol*, promote liaison with colleagues from other enforcing authorities and advocate that such liaison is not left to chance or to the discretion of the individuals involved.

They provide for police primacy in those cases that may involve corporate or gross negligence manslaughter. HSE's role is initially as co-investigator with specialist knowledge. If manslaughter is discounted, HSE assumes the role of primary investigator and prosecutor.

The *Guide* also provides an event-driven timetable with liaison issues pertinent to each event. The Appendices contain checklists of actions to be taken by the first officer at the scene, the supervisory officer and the Senior Investigating Officer (SIO).

As any investigation progresses, the similarity of evidence required to prove an offence of Corporate Manslaughter and breach of duty under the Health and Safety at Work Act, etc. will become apparent. Common aspects include:

- Investigation of corporate activity
- Comparison of real circumstances to expected standards
- Measuring how far short of a standard the corporation fell
- Defining relevant duty of care and grossness of any breach

This means that there is substantial overlap between the objectives of the police, the CPS and the HSE. We can help each other within our own specialisms to make investigations more efficient, save precious resource and deliver speedier justice.

2. Operation Cullen: a case study provided by Carol Downes

2.1 The Call

At 16.30 hrs on Tuesday 11th January 2011 a call was received at the HSE office in Sheffield from South Yorkshire Police, informing us that there had been an explosion at a waste recycling site on the main road into Rotherham. The information was that two employees were seriously injured and one had been airlifted to St James Hospital in Leeds with life threatening injuries which later proved fatal.

Two inspectors were sent to the scene and arrangements were made to deploy a Mechanical Engineering Specialist.

2.2 The Company

Sterecycle (Rotherham) Ltd were a waste recycling company who processed unsorted household waste by utilising heat and pressure in two large autoclaves on site to 'cook' the waste. The company processed household waste from three local councils and had to pay penalty payments if waste could not be processed and had to go to landfill. It was therefore vital from the company's point of view to keep the autoclaves running.



One autoclave – shown for scale

The autoclaves process waste in batches. Saturated steam is pumped into the autoclave at temperatures around 150°C. The pressure in the vessel is maintained at 4 bar for a period of up to 45 minutes to allow the process to fully 'cook' the waste. When up to temperature, the vessel is inclined to 10° and the 'cooking' process causes plastics to soften and flatten, paper and other fibrous material to disintegrate into a fibrous mass, bottles and metal objects to be cleaned, and labels etc. to be removed. This takes approximately 70 minutes to complete. Rotational speed is at 4 rpm. Each autoclave holds approximately 24 tonnes of waste.

2.3 The incident site

The two autoclaves on site were situated in a large building, there was no electricity as all power had been shut off and the scene was lit by emergency lighting. The two operators had been working in the operating position on a platform near to the door of the autoclave. There had been an 'explosion' – actually an unintended release of pressure which blew the door open.



Damage on platform looking out onto Sheffield Road

This produced widespread structural damage to the building, and a large gaping hole in the wall onto the road. The photograph does not in any way convey the indescribable smell!

The effects of the 'explosion' were visible from CCTV in the yard on the opposite side of the road and the footage had many views on YouTube.

A joint investigation was mounted between the South Yorkshire Police and the HSE, and I led for the HSE.

I was quickly able to advise the SIO of the type of documents that should be taken as possible evidence of corporate manslaughter. These included risk assessments, training records, safe working procedures, maintenance records, engineering drawings and plans. These were seized and logged by South Yorkshire Police's Evidence Officer. A team from South Yorkshire Police were also on site taking initial accounts from witnesses.

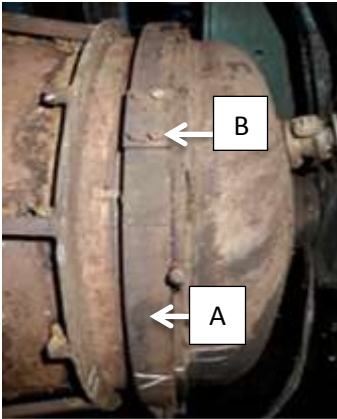
2.4 The Initial Investigation (Site)

I returned to site with an HSE Engineering Specialist Inspector the following day. The full extent of the damage could be seen and with it the realisation that it was only by fluke that members of the public on the outside road had not been killed.



The exterior of the scene

We examined both autoclaves and found that an important component was missing from the incident autoclave. This was the four feet diameter locking ring that secured the door to the body of the autoclave.



(A) The locking ring, in two halves held together by

(B) Two fishplates each held with four bolts.

The area immediately in front of the autoclave was covered in part cooked household waste. South Yorkshire Police agreed that Task Force officers would be brought in to carry out a search to locate the missing locking ring which would be vital in finding out why pressure was released.

This was an unpleasant task, and during the search I was concerned about the stability of the structures the team were working on. During a check of the walkway underneath the area the team were searching I found that there was no floor. It had been blown out in the initial blast and the team were standing on compacted waste necessitating the use of fall arrest equipment whilst searching.

After two days the missing ring was located and transported to the local police evidence store. It was misshapen (it should have been a perfect circle), one bolt

was missing from one of the connecting fishplates and a second bolt appeared to have sheared in situ.



Distorted Locking Ring

2.5 Scientific Examination

The Health and Safety Laboratories (HSL) collected the locking ring from the police evidence store and it was transported to the laboratories in Buxton to undergo scientific examination. This involved destructive and non-destructive testing, laser scanning and mapping, together with metallurgical examination to try to analyse the method of failure.

HSL Video Unit came to the site and shot footage of the non-incident autoclave in operation. As a result of this, and advice from HM Specialist Inspector of Health and Safety (Mechanical Engineering), the locking ring from this autoclave was also seized and transported to HSL for comparison with the failed ring.

Sterecycle had employed their own independent engineers and we were advised by HSE's legal department that if destructive testing was being carried out we

must allow them access to witness the test or at least see the results of those tests.

2.6 Management of the Investigation

Throughout this process there was close contact between the HSE team and the South Yorkshire team working on this investigation. Regular meetings were held to look at progress and next steps. It became evident early on that this could possibly be a Corporate Manslaughter case and there was early contact with the Crown Prosecution Service (CPS). Joint meetings were held with them and involved a senior HSE Lawyer.

This does not mean that there was always agreement, for example, there was confusion when CPS discussed carrying out an interview with the Company under caution, I think it is accurate to say that the first Police reaction was 'but who do we arrest?' whereas HSE regularly interview Companies under caution. However, good communication between Police and HSE ironed out these difficulties, together with an appreciation of the skills and expertise of each side meant that the investigation progressed.

The South Yorkshire Police Officers involved in the case and I felt that there was further documentation that the Company had not provided to us and this led to the Police seizing the computer servers of the company. There were over 300,000 pieces of electronic information held on the servers including personal e-mails. South Yorkshire Police IT department wrote a programme to enable key words relevant to the investigation to be searched.

Large numbers of documents were identified as being of interest during this electronic sifting. These documents were printed off and sifted by the HSE team who almost took up residence in the incident room at the Police Station. The most pertinent documents were given further consideration.

2.7 Interviews

It was important that the investigation progressed so 'health and safety' questions were provided to the police for them to use in the interviews, some interviews resulted in 'No comment' answers.

The HSE team had now grown to include a lead investigator with support from a visiting officer, five engineers and a pressure valve specialist as well as an external bolt expert.

The autoclave had been made by a company in Carlisle and I travelled with officers from SYP to take statements. The door assembly made up of three parts had been manufactured by a German company and it was important that the assembly, and in particular the locking ring, were authenticated by them. This involved protracted negotiations with the company before they agreed to travel to Buxton to view the parts and provide a statement that set out how the door assembly should be used and maintained.

Evidence of the specialists and engineers at HSL combined with the witness statements of employees indicated systematic failings in relation to maintenance of the equipment and that the locking ring mechanism was routinely being struck by a lump hammer to open and close it.

At HSL early comparisons of the locking ring from the incident and non-incident autoclave showed that the non-incident autoclave was also being struck regularly with a lump hammer to make it close securely and struck again to make the ring open, and showed 'hammer rash' and in the opinion of HSE's specialists the second autoclave was at high risk of catastrophic failure.

This was of great concern as we knew that the company were eager to re-start processing of waste at the Rotherham site for financial reasons. The information from the engineers at HSL was that the bolts on the non-incident autoclave could fail at any time.

On 3rd February 2011 I had served two Prohibition Notices on Sterecycle which prohibited the use of each autoclave (the incident autoclave was under repair) until a number of safeguards were put in place to reduce the risk of the unintended release of pressure causing the door to be 'blown' open as in the incident on 11th January 2011. This is a key aspect of a HSE investigation because we have a duty to consider ongoing risk to workers and the public.

2.8 Decision Making

At the time of the incident there had been few Corporate Manslaughter prosecutions and the evidence needed to prove this offence was under constant discussion between the Operation Cullen Team, CPS, and the HSE team.

I identified a number of possible Health and Safety Offences in relation to this fatal accident that overlapped with corporate manslaughter:

- Health and Safety at Work etc. Act 1974 (HSWA),
- Pressure Systems Regulations 2000,
- Provision and Use of Work Equipment Regulations 1998 and the Management of Health and Safety at Work Regulations 1999.

CPS needed Counsel's opinion before they were persuaded that a realistic prospect of conviction existed for a Corporate Manslaughter case.

Counsel advised that the company be prosecuted for Corporate Manslaughter and three individuals be prosecuted for breach of duty under Section 7 HSWA; with one individual also being prosecuted for perverting the course of justice.

Looking back I feel that I should have put forward a stronger argument for a prosecution of the company for breach of duty under Section 3 HSWA, as Corporate Manslaughter is only concerned with employees and does not address the matter of risk to others; in this case, members of the public who were driving or walking along the road outside the Company's premises when the autoclave had the unintended release of pressure.

HSE's Legal Advisor and CPS worked together in drafting Informations and Summons and a plea and case management hearing was set for January 2014. During this time, HSE and South Yorkshire Police worked very closely together ensuring continuity statements from HSE staff were completed..

Sterecycle (Rotherham) Ltd pleaded not guilty. The plea and case management hearing was set for April with a proposed trial date of October 2014; the trial was set for six weeks. After the start of the prosecution, Sterecycle (Rotherham) Ltd went into administration. It was decided that prosecution of the company was still in the public interest and in May 2014 the three individual defendants entered not guilty pleas to the Section 7 HSWA charges, with one of the individuals also pleading not guilty to perverting the course of justice.

During the trial charges against the three individuals for Section 7 HSWA were withdrawn and the individual charged with perverting the course of justice was found not guilty.

However, in November 2014 Sterecycle (Rotherham) Ltd were found guilty of Corporate Manslaughter and fined £500,000 for the explosion that resulted in the death of one employee and another receiving life changing injuries.

2.9 Comment

An investigation involving two enforcing authorities is always going to be challenging and, as ever, communication is the most important thing. During Operation Cullen there were times when the both teams disagreed, these disagreements were resolved by discussion, holding meetings, and getting CPS and HSE's Legal Advisors involved early on.

It was evident from day one that HSE had the necessary expertise to carry out the examination and testing on the equipment involved and were able to serve Notices to stop the company operating until the other equipment was made safe.

The majority of evidence management was done by the Police, HSE took responsibility for our own evidence, when CPIA schedules had to be completed I worked with South Yorkshire Police to ensure that the Schedules and disclosure for HSE evidence was complete and detailed.

A successful joint investigation is possible where both sides are prepared to accept the knowledge and expertise of the other as different but equal and important to a successful outcome.

3. When things don't go so well

Carol Downes' description of Operation Cullen illustrates the benefits of working in partnership in the investigation of Work Related Deaths. But it would be wrong to conclude from this one operation that things always go as smoothly as could be hoped. Joint investigations undoubtedly bring many opportunities but they often also present many difficulties. These vary from the relatively minor to those that impede the investigation. The purpose of the *Guide* is to help investigators navigate their way through any difficulties that do occur. By way of illustration, the following is a list of some of the issues that can arise when joint investigations don't go as well as they did in Operation Cullen.

3.1 Interpreting the scene and the nature of the incident.

By their very nature, work related deaths often present themselves as accidents. Furthermore, the main concern of first attenders in such cases is naturally the preservation of life and the safety of others and so it is often some time before the actual circumstances of the incident are explained. It is at this point that the expertise of the HSE can be useful in determining the exact nature of the incident.

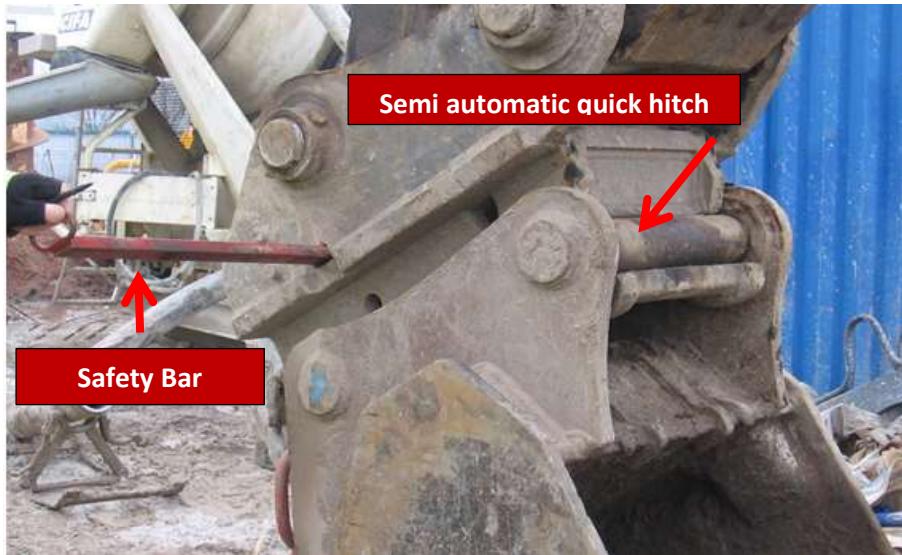
For example, in one case a construction worker was killed when a bucket fell from the arm of an excavator and struck him whilst he was working inside a trench. Photograph 1 shows the accident scene. The excavator was fitted with a semi-automatic quick hitch, a device which enables the driver to change buckets

used by the excavator from his position in the cab. The quick hitch can be seen in photograph 2. Due to the risk of buckets inadvertently detaching from this type of hitch, a safety bar must be manually engaged by the driver after the bucket is picked up by the excavator arm. Photograph 2 shows the excavator bucket in position attached to the arm of the excavator via the semi-automatic quick hitch. The safety bar is also shown in a partially applied position. The bar would normally be pushed fully into position and retained by a clip.

So the questions in this case focused on the procedure for securing the bucket, the training the driver had undergone and the company's responsibility for ensuring safe working practices. These are all issues where the HSE has a wealth of experience and so can help SIOs at an early stage to identify critical lines of enquiry. In this case, the clip was found in the driver's cab.



Photograph 1: The scene



Photograph 2: Semi-automatic quick hitch of excavator. The safety bar can be seen in its partially applied position.

3.2 Primacy

The interpretation of primacy can sometimes cause problems. Some SIOs have understood primacy under the WRDP to mean that they should assume full control rather than 'leading a joint investigation'. This means that, from the very start, HSE are not equal partners in the investigation or the decision making process. Experience shows that police investigations often focus on the actions of individuals, and not on wider 'management' issues such as health and safety management, training, instruction, supervision and monitoring by competent individuals. This is understandable, given that the main object of most criminal law is the actions of individuals, but in work related deaths it is often the bigger picture which matters and the HSE can help SIOs to see that bigger picture.

3.3 Joint Investigations

The purpose of a joint investigation is to ensure that all parties obtain the material they need to perform their roles effectively. This often requires joint decisions about how to coordinate the approach to scenes, witnesses, suspects and the seizure of documents. Failure to do this can mean that opportunities to gather material are lost or that individuals are discouraged from providing

assistance. Where the focus is on the actions of the individuals it can result in deferment of the investigation of the wider issues that are of interest to the HSE. This can make it harder to identify and obtain records and other material that would enable employers to be held to account for their acts and omissions.

There have also been cases where the police decided that all witnesses were treated as suspects and interviewed under caution. When eventually the HSE was permitted to interview them to take voluntary statements they proved to be uncooperative. A more coordinated approach could have addressed this problem before it arose.

These situations may in some cases be unavoidable, but good joint working and decision making will ensure that they occur as infrequently as possible and that their impact is managed better.

3.4 Charging decisions

It is important that HSE are consulted before bringing charges in relation to the incident. Where this is not done, it is possible that the CPS could decide to charge an individual with Gross Negligence Manslaughter (GNM) before charges have been considered against other potential defendants. This leaves open the possibility that later charges against other defendants, most likely employers, could undermine the original charge or provide an opportunity for defence teams to mount cut throat defences by blaming other parties. An example of the type of problem this can give rise to is provided by the case quoted above. In that case, the employer had not been prosecuted and the driver's defence team made a great deal of the failings of his employers to provide him with sufficient information, instruction, training and supervision. They used this to argue that the degree of recklessness required to prove GNM had not been demonstrated because, for example, he had not been told explicitly how dangerous it was to fail to insert the safety pin, he had never been reprimanded when his employer knew that this was something he did repeatedly and it was "common practice" in the industry. He was acquitted and in the end no one was successfully prosecuted for that tragic incident.

4. Summary

Better joint investigations are more efficient for police, the CPS, the HSE and other agencies. More importantly, they also lead to better outcomes for the families of the victims of work related deaths and others who may have been injured or otherwise affected by them.

By pooling our different areas of expertise we can save resources and by agreeing lines of enquiry at an early stage we can ensure that all of the material that is relevant to the case is gathered as effectively and efficiently as possible.

The *Practical Guide to the Work Related Death Protocol* provides investigators in all agencies with the route map to achieve good joint investigations. SIOs won't need it every day, but it is one of those documents that they should have a working knowledge of because, as the statistics quoted at the start of this article show, there is a good chance that all SIOs will become involved in the investigation of a work related death at some point in their careers.

Operation Pinene: the investigation into the murder of Miltiades Papadopoulos.

Joanne Walker, DCI Bedfordshire, Cambridgeshire and Hertfordshire Major Crime Unit.

Abstract

Operation Pinene was the investigation into the murder of Miltiades Papadopoulos in 2014. Although I was an experienced detective, this was my first time as SIO. In addition to the normal challenges that stepping into the lead role brings, Operation Pinene threw in quite a few more for good measure. The scene was extremely difficult to interpret and the result of the post mortem examination was initially inconclusive. This meant that, for a time, there was a school of thought that this was not a murder at all. I followed the old maxim that, 'if in doubt, treat it as a murder', and we quickly identified the involvement of a van on stolen registration plates which gave us the impetus to go forward. Some fantastic CCTV and telephone analysis led us to a group of criminals who had moved to the UK from Poland. Gathering intelligence from Poland and tracking them down proved the next major challenge but by hard work and sticking to the task we managed to locate them and gather the evidence needed to charge and convict them of the murder. Few things in this case were straightforward, and although it felt like a baptism of fire on occasions, I learned some valuable lessons from my first case as SIO.

Contents

1. Instigation and Initial Response
2. Post Mortem Examination
3. Investigation
4. Trial
5. Lessons Learned

All correspondence should be addressed to: joanne.walker@herts.pnn.police.uk

1. Instigation and initial response

On 22nd October 2014 Hertfordshire Constabulary received a report that Miltiades Papadopoulos, 41 years old, of 6 Parkfield View, Potters Bar had been found dead with numerous injuries at that address by his sister and her husband.

Fist attenders found Mr Papadopoulos naked on his back in the front room, which appeared to have been ransacked. His sister told the officers that she had been alerted by her brother's business partner who had been trying to contact him at the address for several days without success. He thought something may be wrong so had telephoned her and she had gone to the house with her husband and let herself in with a spare key.

Mr Papadopoulos's body had numerous injuries and there were marks on his wrists that may have been indicative of him being tied up. There were no signs of a forced entry to the house but there was evidence of a search in the living room, bedroom and loft area. In these rooms, items had been strewn around and armchairs had been upturned to cut through the bottom covers. There were a number of keys on one of the armchairs and one interpretation was that the search might have been carried out to locate the key to a safe in the bedroom. All of our subsequent enquiries failed to locate the key. There was a strong smell of cleaning fluid, particularly in the hallway and cleaning fluid had been sprayed up walls and over furniture.

The scene was secured and the on call SIO oversaw enquiries during the night. I was appointed SIO the following morning and visited the scene where I was briefed on the above.

Initial enquires had established that Mr Papadopoulos, who was also known as Milton, lived on his own at the house. He was a wealthy man who owned numerous rental properties as well as other businesses interests. He was a drugs user who lately had taken to on-line gambling during the night and sleeping during the day. His family were concerned about his drug use and had recently

tried to forcibly remove him to a rehabilitation hospital but he had resisted and had become increasingly difficult to contact. The house was expensively furnished and decorated with many antiques, computers and electronics as well as a collection of Rolex watches. These were normally kept in a display cabinet, which was empty, but were eventually found in his safe once we had broken into it. There was also a quantity of white powder and cannabis, as well as hundreds of packets of cigarettes, on open display in the house.

House to house enquiries that day revealed that a next door neighbour had heard a row at Mr Papadopoulos's house during the early morning of 20th October. She heard him shouting "you're not allowed in, don't come in" and a door slam shut, followed by screaming. She looked outside and saw a white van parked at the end of her neighbour's driveway. Although she was concerned, she was aware of Mr Papadopoulos's recent erratic behaviour and of his family's attempts to remove him to hospital. She consulted a relative and decided that this was probably a similar incident but did take a picture on her mobile phone of a van which was parked in his driveway. The family confirmed that they were not involved in the incident and enquiries were immediately put in hand to trace the van.

2. Post Mortem Investigation

At this stage, the scene was difficult to interpret. The body had clearly been there for at least a few days and although there were numerous marks that appeared to be injuries, including those round the wrist, there was no sign of injuries that would obviously lead to death. There was no forced entry and there was a great deal of valuable property lying around, which could easily have been taken by an offender. Mr Papadopoulos's lifestyle included the use of drugs and prostitutes and we still did not know the full extent of his business interests and associates. It was not therefore obvious how he had died, under what circumstances and what third party involvement there had been.

I thought it would be useful for the pathologist to visit the scene to see the body in situ prior to its removal to provide a better understanding of the context in

which Mr Papadopoulos had been found. In the event, this was not possible and so we recorded the scene and removed the body for a post mortem examination.

The post mortem examination found that none of the apparent injuries was the cause of death and the pathologist was unable to provide an explanation of how they originated, although none were thought to be the result of major trauma and many were described as insignificant. No cause of death was found and samples were sent for toxicological analysis. When they came back, they were difficult to interpret. It was clear that Mr Papadopoulos had taken drugs, but the amount was difficult to calculate due to chemical changes in his body and it was therefore difficult to determine the role that they had played in his death.

It was thought probable that death had occurred a few days before the body was discovered, and this would coincide with the date on which the neighbour had seen the white van outside the victim's house.

All in all, the post mortem examination did not help in interpreting what had happened at the scene and had raised as many questions as it had answered.

3. Investigation

The ambiguity of the scene and the lack of any clear cause of death led to questions being asked at command level and within the investigation team about the viability of further investigation. One interpretation of the circumstances was that Mr Papadopoulos had been in a drug induced state and had searched the house himself for something, injuring himself as he did so before eventually dying from the effects of the drug. Thankfully, the sighting of the van by the neighbour provided a hook for me to hang my argument on and I was able to convince everyone that we would not truly know what had happened until we had traced the van and spoken to the occupants. As a result, resources remained committed to the investigation and I proceeded on the basis of 'if in doubt, treat it as homicide'.

In addition to scene examination and forensic analysis, my main lines of enquiry at this time were:

- Mr Papadopoulos's lifestyle and associates,
- establishing if anything had been stolen from the house.
- establishing a cause of death,
- tracing the white van,
- cell site analysis,

The main results of these are summarised below:

Lifestyle

Mr Papadopoulos had become increasingly distant from his family and work colleagues and those closest to him were concerned for his mental health. His purchase of drugs and his use of prostitutes brought him into contact with organised criminal networks, but there was no evidence that these were connected to his death.

Missing property

Work with Mr Papadopoulos's family and his cleaner had established that the only thing in the house that was unaccounted for was a Rolex watch valued at £25,000. It was possible that this was the motive for the attack and that the search of the house had been carried out to find it. There was not a great deal of media interest in this investigation, but I decided not to release the details of the Rolex to the press so that we had something unknown to anyone but the offender.

Cause of death

A main line of enquiry was to get improved information on the possible cause of death. This drew on the forensic examination of the scene and enquiries with the National Injuries Database to try and interpret the injuries on Mr Papadopoulos's body. Both of these lines of enquiry proved very fruitful and we were able to match fibres from the scene to those found on tape lifts of the mouth area taken at the post mortem examination. These suggested that he had probably been suffocated. A more conclusive determination of this might have been possible

had we examined the respiratory tract for fibres at the post mortem using what is known as a tracheobronchial lavage. Following the advice of our forensic provider, we did do this some time later, but the passage of time and the cleaning of Mr Papadopoulos's body meant that the opportunity to gather useful material had been lost.

The white van

The white van enquiry quickly showed that the number plate on the mobile phone photograph had been stolen from a vehicle in Dorset on the 14th October. As can be imagined, this removed any doubt that we were dealing with a crime and gave the whole enquiry added impetus. The van had been picked up once on ANPR and this enabled us to focus on CCTV in that area.

There were a number of CCTV images of what was believed to be the white van travelling in and around Potters Bar on the morning of the 20th October, which was when the attack was most likely to have taken place. These were put into a compilation album. None of the footage showed the full registration plates of the vehicle, however, there were ladders on the roof of the van over the driver's side and no tax disc which led to the presumption that the images were of the same van.

Some fantastic work by the CCTV team worked backwards over time to provide images of a van that looked very similar with its real registration plates displayed. Expert analysis of the images was not conclusive, but the general belief was that it was the same van. The owner was identified and arrested on the 12th December. He had no known links to Mr Papadopoulos and gave an account that he had lent the vehicle to Arkadiusz Szarkowski at the time of the incident. When it was returned he noticed that it had been completely valeted and that the rear number plate was loose. The van was seized and he was released on bail.

By this time, the lengthy forensic exam of the scene utilising all methods including tapings, fingerprints, DNA, photography and chemical treatments was complete. A number of blood swabs had been taken and one of these, from the

kitchen, provided a full DNA profile, which came back negative from a search of the national DNA database and international databases. The international databases had been searched because analysis of the profile suggested that it was likely to be of Eastern European origin.

Arkadiusz Szarkowski was arrested on 14/12/14. Telephone analysis had by then established a link between him and the owner of the vehicle and him and a number of unknown individuals. In interview, he denied knowing the victim or being in any way involved in his death. He admitted that he had had the van but didn't recall being in the Potters Bar area. As there was nothing to link him to the incident he was also bailed.

Telephone analysis

Telephones formed a vital part of the investigation and significant numbers were identified following the first arrest of Szarkowski, some of which led to the identification of other offenders. All of the offenders had numerous "dirty" phones all of which dropped off the network on the day we thought the murder had occurred. Telephone data also showed calls between suspects at relevant times and meetings where they all come together both before and after the murder.

Enquiries whilst Szarkowski was in custody led us to identify other phones which he had had access to and this proved highly valuable in telephone analysis that connected him to a network of calls leading up to the date the van was seen at Mr Papadopoulos's house. Cell site analysis eventually put one of his phones in the area at the time, together with those of others.

The phone analysis clearly implicated Szarkowski in the incident and he was rearrested on 09/03/2015. He again denied involvement in the death of Mr Papadopoulos and improvised explanations for the material put to him through staged disclosure. We felt that he was clearly involved in the murder, but were not sure of his exact role and there was no match of his DNA to the scene. When we consulted the CPS they were extremely supportive and, despite there still

being some gaps in the evidence, they recommended that he be charged with murder and we this was done on 12/03/2015.

Enquiries had established that Szarkowski and another man had been involved in a traffic collision and the owner of the other vehicle had taken a photo of the driving licence produced to him by the man with Szarekowski, who had been the driver. This identified him as Sebastian Kimel. Kimel had a history of offending in Poland which included murder, explosive and firearms offences and the targeting of police officers. Telephone analysis identified Kimel as part of the network calling each other in the period before the killing and he was located and arrested on 29/04/2015. A DNA sample was taken from him and in interview he initially didn't admit knowing Mr Papadopoulos and denied any involvement in his death. When his DNA was found to match that found at the scene he provided a prepared statement saying that he had gone to the address with another man, who he claimed only to have a nickname for, to collect a lawful debt. Mr Papadopoulos had assaulted him and broke his nose, which explained why his blood was at the scene. The man he was with then scuffled with Mr Papadopoulos before they both left, at which time Mr Papadopoulos was alive. He was charged with the murder on 01/05/2015.

Telephone analysis identified that a phone associated with a man called Wojciech Ryniak was within the network of those contacting each other prior to the murder and at the scene. Enquiries to trace him established a link with a Thames Valley Police enquiry into an aggravated burglary in April 2015. Ryniak was the offender and had been stabbed to death by the occupant of a house. This link also enabled us to establish that he had stolen the number plates used on the whist van at the time of Mr Papadopoulos' murder.

The third offender to be arrested was Krysztof Turlej, who was arrested on 21/5/15 and charged on 22/5/15. He was an associate of Szarekowski who we were able to link to the offence through his telephone call history and cell site analysis. In interview he made no comment.

ANPR work was carried out in relation to all of the vehicles associated with the above. This was over-layed with phone data and showed significant meetings and previous visits to Potters Bar by the suspects in what were interpreted as reconnaissance of the victims address. Numerous maps were produced to illustrate this data and they were later extremely useful in court.

4. Trial

Disclosure for the trial proved to be an enormous task. The enquiry had taken many months and in addition to the main lines mentioned above, extensive house to house enquiries had been carried out together with enquiries with the Polish community and friends and associated of Mr Papadopoulos. There were over 300 statements and 621 nominal records were created. In all, over 4000 items of material had to be examined during the disclosure process.

Preparations for the trial were also hampered by difficulties in obtaining the suspects offending history from Poland. There is no central record of convictions there and we had to track down individual court records to obtain both intelligence and previous convictions for the court.

The trial was held at the Old Bailey. All of the defendants required translators the trial lasted for seven weeks. They all pleaded not guilty to murder and conspiracy to rob, but Kimel pleaded guilty to the charge of false imprisonment.

Kimel told the court that Mr Papadopoulos had died accidentally during a debt collection gone wrong. He said that Ryniak, the fourth offender who had died during a later aggravated robbery, had gone crazy and attacked both him and Mr Papadopoulos when they went to his house to seize £100,000 and 2kg of cocaine in exchange for a 25 per cent cut.

Szarkowski claimed to have known little about the crime, although he had driven the others to and from Mr Papadopolous's house on several occasions. He had also obtained handcuffs, searched the internet for information about Rolex watches and bought a lock pick that had been found in Kimel's possession. When

questioned by lawyers acting for his co-defendants he admitted that they had found out about Mr Papadopoulos's wealth through females working for an escort agency.

Sebastien Kimel was convicted of murder, conspiracy to rob and false imprisonment. He was sentenced to life. Arkadiusz Szarkowski was convicted of manslaughter, conspiracy to rob and false imprisonment. He was sentenced to 13 years imprisonment. Krzysztof Turlej was convicted of manslaughter, conspiracy to rob and false imprisonment. He was also sentenced to 13 years imprisonment.

5. Lessons Learned

One of the main lessons I learned was the difficulty of moving forward when it is not certain how the victim died or even if the incident is a crime. This not only creates the obvious difficulty of interpreting the circumstances but, as noted above, it also has an impact on the way that managers and staff view the investigation. Without a clear cut crime, interpretations that seek to explain the circumstances as no crime can emerge and need to be rigorously tested before they are accepted. In this case, following the old adage of treating the case as murder until the contrary is proved certainly paid dividends.

I felt that not having the pathologist visit the scene hampered his ability to interpret what had taken place. In the event, we overcame the problem by developing a strategy to link the scene examination and forensic strategy and the pathology to develop an interpretation that was accepted by the court.

Linked to the above is the fact that the opportunity for doing some types of test, as in this case the tracheobronchial lavage, may be lost once the first post mortem examination is over. What I learned from this case is that where the PM is inconclusive, it is probably a good idea to take some time out to think through various hypotheses as to the possible causes of death before the PM is concluded. This may provide the opportunity to carry out appropriate test whilst there is still a chance of obtaining relevant material. Had we done that, we may

or may not have thought of suffocation, but we never even gave ourselves the opportunity of doing so.

The difficulty in getting information from Poland was a surprise. The lack of a central record of criminal information made obtaining intelligence about our suspects extremely difficult. It also meant that checks on UK databases, at Interpol and Europol are not reliable because a negative return does not mean the individual does not have a record or intelligence in Poland. Furthermore, although Interpol had a record of a European Arrest Warrant for Kimel, it did not have a copy of the warrant itself, and it was difficult to obtain it from Poland. Once we did have it, we found that it contained a wealth of intelligence. The lesson I learned from this was not to assume that other countries have records that are as comprehensive and easy to access as in the UK and also, if you know there is a European Arrest Warrant, make early attempt to get a copy.

Disclosure always seems to present some level of difficulty but in this case it was extremely hard. There was a change of disclosure officer part way through the enquiry and because the suspects had all been arrested at different times and had been kept in custody we ended up working against tight custody time limits for the trial. As usual, once everyone had been charged staff started to be deployed to other enquiries and with only six weeks to go before the trial we realised that we had a large volume of material still to process for disclosure. The only way of getting it done was to put a large team on to it and the lesson I learned was that in a case of this size it is probably better to have a full disclosure team working from the outset.

Index of the Journal of Homicide and Major Incident Investigation

Back copies of the *Journal* are available on-line at the Criminal Investigation Research Network <http://criminology.research.southwales.ac.uk/journal-of-homicide/>

Author	Title	Volume Issue Page
Adcock, S.	Financial Investigations: SIO Considerations	6.2.61
Ashcroft, G. Pearson, S.	Managing the Relationship with the Family Liaison Officer	3.1.59
Atherley, A.	Honour Related Violence: Context, Culture, and Consequences	3.1.21
Baker, A. Richards, L.	Prevention of Homicide and Serious Violence	1.1.3
Baker, R. Birch, J.	Operation Wirok: The Discovery of Skeletal Remains in the Birmingham Main Line Canal	7.1.57
Bartle, A. Langley, A.	Analysis of Photo Response Non-uniformity (PRNU).	10.2.45
Beer, J.	Legal Attendance at Post-Mortem Examinations	3.1.85
Berry, R.	Operation Pentameter 2 (UKP2): An overview for the major crime investigator	5.1.53
Blackwood, N.	International Investigations: Current Challenges to British Policing	9.1.39
Book Review	Discovering Through Death: Beliefs and Practices	7.2.84
Book Review	The Ascent of the Detective: Police Sleuths in Victorian and Edwardian England	7.2.86
Book Review	Effective Investigation of Child Homicide and Suspicious Death	8.1.91
Book Review	Blackstone's Senior Investigating Officers Handbook (Third Edition)	9.1.103
Book Review	Blackstone's Emergency Planning, Crisis and Disaster Management (Second Edition)	9.2.102
Bottomley, M. Holt, C.	Familial DNA: a relative success?	7.2.4
Bottomley, M. Holt, C.	The Use of Familial DNA Searching Post Protection of Freedoms Act 2012	9.1.24
Brookman, F. Lloyd-Evans, M.	A Decade of Homicide Debriefs: What has been learnt?	10.1.14
Brunning, M.	Operation Darcy: Serial Killer Joanne Dennehy.	9.2.26
Byron, G.	Forensic Science Support to Critical and Major Incident Investigations: A service Based Approach	5.2.75
Callum, P.	Organised Immigration Crime, Human Trafficking and Exploitation: Operation Attwood.	10.2.5
Carr, L.	Case Study of Mark Corner, the Murder of Two Sex Workers in Liverpool	6.2.75
Clayman, S.	To Snitch or Not To Snitch? Bridging the Gap Between Research and Practice	7.1.103
Cole, T. Brown, J	When is it best to seek assistance from a Behavioural Investigative Adviser?	8.1.62
Cunningham, D.	Crossing the Line: An international case study	4.2.15
Davies, P. Green, J. Price, D. Fyfe, P. Nicholls, G.	The Investigation of Deaths on Land or Premises Owned, Occupied or Under the Control of the Ministry of Defence: Protocol	2.1.33
Derbyshire Constabulary	Derbyshire Constabulary Child Exploitation Investigation Unit: Intervention strategies	5.2.39
Devoil, T. Ryan, S.	Managing and Preventing Critical Incidents	3.1.3

Thompson, M.		
Dismore, O.	Air Support: so much more than just a pretty picture	5.1.27
Donnelly, K.	Operation Sorrento: The investigation into the murder of Pamela Jackson	10.1.48
Doyle, M.	Non-suspicious Death (Or Is It?): The Duties and Responsibilities of the Police	7.1.45
Earl Robinson	Offering Monetary Rewards: A Useful Investigative Tactic When Trawling for Witnesses	7.1.89
Editorial	Editorial	3.2.3
Editorial	What Price Professional Practice?	7.2.1
Editorial	Getting Involved with the Homicide Working Group	8.1.1
Ellis, J. Thompson, S. Bardsley, R. Jefferies, I.	Demystifying the World of Body Search and Blood Dogs	7.2.45
Focus On	Forensic Gait Analysis	4.1.83
Focus on	Forensic Linguistics	4.2.111
Focus On	Forensic Anthropology	5.1.95
Focus On	The National Injuries Database	5.2.87
Focus On	Forensic Pathology	6.2.103
Fox, J.	The Police Response to Infant Deaths	1.1.61
Fox, J.	Are We Killing the Goose?	3.2.67
Fox, J.	Statutory Reviews and the Homicide Investigation	7.2.24
Fox, J.	Is there room for flair in police major crime investigations?	9.1.2
Fox, J.	Statutory Reviews and Homicide Investigation Revisited.	9.2.80
Gerrard, G.	CCTV and Major Incident Investigation: Professionalising the Police Approach	3.2.7
Gradwell, M.	Lost in Translation: The use of interpreters during Operation Lund	2.2.3
Green, R.	Do They Know More Than We Do? What Opportunities Are To Be Gained From Data Held by Other Organisations?	3.2.59
Gregory, A. Rainbow, L.	Enhanced Prioritisation of Familial DNA Searches	7.1.75
Harrison, H. Ross, M. Lees, S.	Operation Sanderling.	10.2.77
Harrison, I.	Protocol for Fire and Rescue Service Assistance to the Police in the Search for Missing Persons	2.2.21
Harrison, M. Donnelly, L.	Buried Homicide Victims: Applied geoforensics in search to locate strategies	4.2.71
Hart, A. Amoret, M. Whitaker, P. Hall, M.	The Use of Forensic Entomology in Criminal Investigations: How it can be of benefit to SIOs	4.1.37
Heath, S.	Using Multi-agency Data to Reduce Deaths from Drug Abuse in Scotland	1.1.15
Hedges, C. Robinson, K.	Child Rescue Alert – saving endangered children.	9.2.41
Hepworth, M.	Operation Bevel: An Insight on How to Manage a Multi-death Investigation in a Healthcare Setting	7.1.35
Herdale, G.	The Legal Framework for Acquiring and Using Passive Data for Policing Purposes	3.2.29
Heydon, T.	Operation Hydration: Internet Murder Enquiry	6.2.23
Hutchinson, T.	The SIO and the Tier 5 Interview Adviser	4.1.25
HWG	HWG National De-brief Model	9.1.79
Jackson, M.	Linked Series Stranger Attacks and Homicide: The debrief of Operation Yeaddiss and related offences	5.1.5
Jackson, M. Brown, D. Watson, D.	Police Investigation of Healthcare Incidents in Community Settings	7.1.19
Jackson, M. Smith, A. Watson, D.	Mental Health Homicides a Joint Police and NHS Approach	8.1.30
James, N.	Responding to Major Disorder in Prison Establishments and Immigration	6.2.87

	Removal Centres	
James, P.	National Ballistics Intelligence Service: Every gun tells a different story	4.1.15
Jones, D. Grieve, J. Milne, B.	Reviewing the Reviewers: A tool to aid homicide reviews	4.2.59
Jones, D.	The Relationship Between Homicide rates and Forensic Post Mortem Examinations in England and Wales.	9.2.58
Jones, I.	Investigation of Deaths Following Police Contact	2.1.93
Kirby, S. Turner, G.	Think Crime, Think Car, Think ANPR: The Use of ANPR in Major Crime Investigations	3.2.35
Lawrence, K.	Investigation into the murder of Hell's Angel Gerard Tobin on the M40: a murder committed by an Organised Crime Group	5.1.39
Linden, W. Campbell, P.	The Phoenix Database: Homicide Analysis, Action Learning and Knowledge Sharing	6.2.5
Lloyd-Evans, M.	Domestic Homicide Reviews	9.1.55
Lloyd-Evans, M. Bethell, P.	Review of Undetected Historic Serious Crime: Why bother?	5.2.3
Lowe, T. Innes, M. Roberts, C.	The Impact of Homicide on Community Reassurance	3.1.67
Maher, S.	Professionalising Investigation: An update on the SIO development programme PIP Level 3	6.1.51
Maher, S.	PIP Registration Update.	9.2.92
Marsh, N.	Injury Photography: Is it more than skin deep?	6.2.45
Marshall, D.	Child Homicides: A suspect in the family. Issues for the Family Liaison Strategy	4.1.69
Mayes, J. Brown, A. Marshall, D. Weber, A. Risdon, A. Sebire, N.	Risk Factors for Intra-familial Unlawful and Suspicious Child Deaths: A retrospective study of cases in London	6.1.77
McCabe, S.	Operation Coveyville: Double no body murder investigation	6.1.59
McNally, M.	Using the National Mobile Phone Register in Homicide Investigations	4.2.101
Mogg, S.	The Human Tissue Act 2004: Implications for the Senior Investigating Officer	5.1.83
Mooney, J.	HOLMES: From inception to modern day via lessons learned	6.1.31
Morgan, J.	Cross Border Investigation Strategy: The Sidney Cox Murder Investigation	9.2.1
NABIS	National Ballistics Intelligence Service Update	5.1.37
NABIS	National Ballistics Intelligence Service Update	5.2.57
NABIS	National Ballistics Intelligence Service Update	6.1.73
NABIS	National Ballistics Intelligence Service Update	6.2.57
NABIS	National Ballistics Intelligence Service Update	7.1.117
NABIS	National Ballistics Intelligence Service Update	7.2.42
NABIS	National Ballistics Intelligence Service Update	8.1.57
NCA	Crime Operational Support Team Update	9.1.37
NCA	Crime Operational Support Team Update	9.2.53
NCA	Crime Operational Support Team Update	10.1.46
Niven, N. Burchall, G.	The Development of Intelligence-Led Mass DNA Screening	3.1.51
Niven, N. Massie, R.	Social Networking as an Intelligence / Investigative Tool :Case Study	6.2.33
NPIA	POLKA Update - Major Crime Investigation Community	7.1.44
NPIA	NPIA Missing Persons Bureau Update	7.1.72
NPIA	Focus On: Sleep Related Fatal Vehicle Crashes	7.1.121
NPIA	The POLKA Major Crime Investigation Community	7.2.22
NPIA	UK Missing Persons Bureau Update	7.2.71
Palmer, P.	Liability for Negligent Investigation: The Osman legacy	2.2.33
Partridge, A.	Operation Castorland	7.2.73
Pearce, A.	Criminal Cases Review Commission: The first ten years	4.1.49

Harding, C.		
Pearson, S.	Managing Cross-Border Single Homicide Investigations	4.2.27
Porter, C.	Low Template DNA Profiling: A guide for Senior Investigating Officers	6.1.13
Rainbow, L. Gregory, A.	Behavioural Investigative Advice: A contemporary view	5.1.71
Reid, S.	Crimewatch Explained	4.2.3
Reid, S.	Media: A useful investigative tool	5.2.59
Richards, L.	Homicide Prevention: Findings from the Multi-agency Domestic Violence Homicide Reviews	2.2.53
Roach, J.	Long Interval Detections and Under the Radar Offenders	8.1.20
Roach, J.	The Devil and the Detail: Local analysis of homicide for investigators and policy makers	9.1.86
Roycroft, M.	What Solves Hard to Solve Murders? Identifying the Solving Factors for Category A and Category B Murders. Does the SIO's Decision Making Make a Difference?	3.1.93
Rycroft, M.	Historical Analysis of Public Inquiries of Homicide Investigations	4.2.43
Saleem, F.	Homicide in a Diverse World: SIO Conference Editorial 2010	7.1.5
Sawers, M.	Major Crime Reviews	4.1.3
Sawyer, N.	The Major Crime Scene De-contamination Gateway	7.2.61
Scott, I.	Investigating Drug Related Deaths	1.1.25
Scott, I.	Organ and Tissue Donation Opportunities during Police Investigations into Suspicious Death or Fatal Road Traffic Collisions	6.1.3
Smart, K.	Follow the Money: The Use of Financial Information in Major Crime Investigations	3.2.21
Smith, K.	NCOPE Crime Operations: Supporting Serious and Series Crime Investigations	2.1.39
Smith, M.	The Corporate Manslaughter and Corporate Homicide Act 2007: A challenge for investigators?	4.1.97
SOCA	Crime Operational Support Update	8.1.39
Stelfox, P.	The Role of Confidants in Homicide Investigations	2.1.79
Stelfox, P.	Improving Practitioner Research into Homicide and Major Incident Investigation	8.1.75
Stelfox, P.	The HWG Practitioner Research Group Trace Interview and Eliminate Research Proposal.	10.1.88
Stelfox, P.	The Evolution of Homicide Investigation in the UK.	10.2.92
Swift, B.	Methods of Time Since Death Estimation within the Early Post-mortem Interval	6.1.97
Taylor, S.	Operation Scotia: The investigation into the death of Georgia Varley	10.1.73
Tennet, A. Dixon, H.	Stealing Time: The Use of Passive Data During Operation Nuthatch	3.2.43
Vesely, L. Lloyd-Evans, M.	Reviews of Long Term Missing Persons and Unidentified Found Bodies	8.1.2
Wate, R.	Responding to Public Inquiries: Lessons learnt from the Bichard Inquiry	2.2.42
Wate, R. Birch, M.	Deposition Sites: Case studies Operation Fincham and Operation Sumac	4.2.87
Wate, R. Marshall, D.	Effective Investigation of Intra-familial Child Homicide and Suspicious Death	5.2.17
Watts, S.	Investigating Deaths in Healthcare Settings	1.1.37
White, G.	Prison, Probation and Immigration Related Deaths in Custody: A Protocol for Police Investigations	2.1.53
White, W.	Guidance in the Use of Serving Prisoners as Witnesses	1.1.53
Withers, P. Hulme, A.	The David Guilfoyle Murder Investigation.	10.2.58
Woolnough, P. Stevenson, O. Parr, H. Fyfe, N.	Investigating missing persons: learning from interviews with located missing adults.	9.2.14
Woolnough, P. Stevenson, O. Parr, H.	Investigating Missing Persons: Learning from interviews with families.	10.1.1
Wright, M.	T.I.E. Practice: Terminology, Tactics and Training.	10.2.21

Cook, T. Pinder, D. Gregory, A. Shaw, G.		
Wright, M. Waterfield, I.	Homicide Research Group	9.1.19
Wright, M. Waterfield, I.	Homicide Research Group	9.2.73
Wright, M. Waterfield, I.	Homicide Research Group	10.1.68
Wright, M. Waterfield, I.	Homicide Research Group	10.2.70
Young, H. Richards, L. McCusker, S.	Profiling Mentally Disordered Homicide Offenders to Inform Investigative Decision Making and Intervention Strategies	2.1.3