

| NAME | | Robert MILNE |
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| ACADEMIC QUALIFICATIONS | • | me Scene Examination and rint Expertise Kings London |
| PROFESSIONAL POST NOMINALS | | FCSFS, MIAAI, FFS |
| HEAD OFFICE ADDRESS | | PO Box 49727 London N20 0YP |
| TELEPHONE | Switchboard: International: Mobile: | 08444 747 007 +44 (0)20 8361 9922 +44 |
| EMAIL | bob.milne@fireinvestigationsuk.com | |
| WEB | wv | vw.fireinvestigationsuk.com |

CAREER SUMMARY

Robert completed 40 years' service with the Metropolitan Police Directorate of Forensic Services New Scotland Yard, as a forensic practitioner in the roles of ACPO registered Fingerprint expert, Crime Scene Examiner (including fire investigation), Crime Scene Coordinator and in senior management a development role as the Met's first Head of Forensic Intelligence. He is a professional member and Fellow of the Chartered Society of Forensic Sciences (FCSFS), a fellow of the Fingerprint Society (FFS), a member of the International Association for Identification (IAI), a member of the UK Association of Fire Investigators (UK - AFI) and of the International Association of Arson Investigators (IAAI), being the regional representative for London. He was a full associate of The International Academy for Investigative Psychology (IA-IP).

He has considerable experience in the examination of crime and fire scenes also in the management of teams of forensic examiners. He is the author of papers on electrostatic mark lifting (having designed the Pathfinder wireless ESL device used by crime scene examiners worldwide), magnetic fingerprint powders, Forensic Intelligence, footwear marks search and recovery, the mathematics of crime scene linking, and the uses of forensics in crime mapping. He designed in the 1990s the first modern internal filtration fingerprint treatment cabinets leading to the setting up of four volume crime sequential treatment laboratories covering all London's volume crime. He has dealt with all crime types up to and including many homicide cases, including arson homicide, having produced one of the first computer graphics albums

as an aid to explaining the forensic evidence in an arson homicide case at the Central Criminal Court, the Old Bailey in 1997.

As the head of Forensic Intelligence running the Forensic Intelligence Desk in the Met Intelligence Bureau (MIB), he ran a partnership desk with external stakeholders including London Fire Brigade Fire Investigation Team, The London Office for Government, The Forensic Science Service Gov Co, LGC Forensics and academia including the International Academy for Investigative Psychology (Professor David Canter) and The Jill Dando Institute for Crime Science London University. He was the winner of the best lecture at the Jill Dando Institute 3rd National UK Crime Mapping Conference, London University 2005. Whilst with the Met Police he won the Metropolitan Police Blueprint scheme award for ideas & innovation three times.

In his career with the Directorate of Forensic Service Metropolitan Police he was a manager and senior manager in East London dealing routinely with hundreds of arson cases and occasional fire fatalities. He worked with commercial fire investigators in cases where insurance companies had an interest in the police casework and was attached to the Met Fire Investigation Unit for several months whilst engaged at the Met Laboratory. He has given evidence in Crown Courts in arson cases since 1971 until retirement from the Metropolitan Police in 2008.

After retiring from the Met Police in 2008, he has taken the role as the UK Association of Fire Investigators (UK-AFI) Regional Representative for London and attended UK - AFI training events regularly since joining. He works as a technical consultant for Crime Scene Investigation Products Ltd and has delivered lectures and training workshops for the company in the USA, UK, UAE, Europe and Ireland.

Since 2008, he has published articles in Emergency Services Ireland magazine on technical forensic issues and arson investigation, as well as in the Chartered Society of Forensic Sciences publications, the IAI Journal of Identification, the UK-AFI newsletter and in addition has presented at IAAI training conferences in UK and Ireland. He has also presented at the Chartered Society of Forensic Sciences, the International Academy for Investigative Psychology (MSc course), at South Bank University, Huddersfield University and to the Foundation Forensic Science degree students at Queen Mary College, London University. He was the Editor of he International Journal of The Fingerprint Society 2013 to 2015.

He is currently an Associate Fire Investigator with Fire Investigations UK LLP and Fire Investigations Global LLP. A director of his own company, Robert Milne Associates Ltd, linking with forensic professionals in fire investigation and forensic science.

He published the text book 'Forensic Intelligence 'Taylor and Francis, CRC Press in 2012. ISBN 9781439860380. In 2016 he has had liaison with USA Homeland Security, who have used his book as a reference in the creation of a forensic intelligence model for the security of the borders of the USA. He is co-presenting on Forensic Intelligence at the IAI Conference, San Antonio on 1 August 2018 with the Forensic Intelligence lead from USA Homeland security.

He is a highly experienced expert witness, having given expert evidence in Coroners Courts and Criminal Courts. He is listed as a Professional Expert Witness in the Register of Expert Witness.

Since joining Fire Investigations UK, as an associate fire investigator, he has dealt with civil and criminal casework, on behalf of solicitors, loss adjusters and insurance companies involving the examinations of buildings, vehicles, electrical equipment and dealt with criminal

arson case reviews, which involved giving evidence in Crown Courts. Notably in 2013, the cases of The Queen V Streeton at Maidstone Crown Court and The Queen V Rookwood at Kingston Crown Court and in 2014, the Queen V Bradley at Snaresbrook Crown Court. In 2015 The Queen v Stajer at Maidstone Crown Court, Queen v Luigalia Liverpool Crown Court, R v Ashmore (arson case) Camberwell Youth Court 2017, R v Prince Aylesbury Crown Court 2018 and R v Chafai Wood Green Crown Court 2018. The results in the cases of Rookwood, Bradley, Stajer and Ashmore resulted in acquittals. He has had successes with civil cases and insurance casework also.

As part of training to cover a contract involving the examination of solar PV installation fires he passed a BPEC solar installation course in 2015. His knowledgeable in the field of electronics having designed the three electrode wireless electrostatic forensic dust mark lifting system. His dissertation for Kings College London is filed at the Home Office Central Research Establishment. He has a City & Guilds Electronics qualification and has been a radio amateur for over 36 years.

QUALIFICATIONS and MEMBERSHIPS

Kings College London University, Diploma in Crime Scene Examination and Fingerprint Expertise 1999.

Certificate of Achievement BPEC DSPVGC Solar Voltaic Systems Non – Installer – 2015

ACPO registered Fingerprint Expert. 5-year programme with examinations passed 1994.

Met Police Detective Training School (Crime Academy) Fingerprint course, Scenes of Crime Course, Fire Investigation course including training with London Fire Brigade and explosives course Woolwich Arsenal Laboratory. Chemicals and Cadavers course, Crime Scene Management course, Advanced Forensic Course with CPD updates throughout his career 1969 to 2008.

Advance Microsoft Office Course Waltham Forest College passed 1994.

Bond Solon presentation of court evidence course Met Police Crime Academy 2002.

Invicta Training course by David Griffiths in dealing with management boards, companies, presentation skills in business negotiations 2002. Met Police Academy Hendon.

IAAI – Evidence Collection Technician (IAAI-ECT) 2013 – 2016.

National Police Improvement Authority (NPIA) Intelligence Managers qualification 2002

Crime Mapping Course - International Association for Investigative Psychology 2007.

Fellow of the Chartered Society of Forensic Sciences (FCSFS) June 2016.

Fellow of The Fingerprint Society (FFS) 1994 to present.

Member of the International Association for Identification (IAI) and a member of the New York Chapter of the IAI.

October 2017 to 2018 Lecturer in Forensic Intelligence for the Masters in Criminalistics Course ISF College Istituto Scienze Forensi, Milan Italy <u>http://www.istitutoscienzeforensi.it/index.html</u>

In August 2018 he co-presented at the IAI Forensic Conference San Antonio Texas, with Robert W Harvey, Chief Cross Border Patrol Agent, Homeland Security USA on the topic of Forensics in Intelligence Led Policing and the Attribution Forensic Intelligence Program for the Security of the Borders of the USA. Robert also presented on the techniques and science used in the search for and Identification of King Richard III.

EXPERIENCE

Robert is a very experienced fire investigator who has been engaged in fire investigations since 1972. During his Metropolitan Police career he had continuous professional development from the Directorate of Forensic Services. In dealing with casework he was a manager of forensic examiners mainly in London's East End where arson crime is a common occurrence. In managing scenes of crime in a number of police divisions the arson casework was almost a weekly event in the East End divisions.

He has dealt with fire scenes ranging from criminal damage cases through the range of offences up to homicide. He has also dealt with large industrial fire investigations. In 1987 he was in charge of night duty scenes of crime the night of the Kings Cross Fire and dealt with British Transport Police liaison and the arrangements for the scientific examination and photography of the scene.

He has a life-long interest in electronics and designed the method and circuitry for wireless electrostatic lifting of dust marks, publishing technical articles in the Journal of the Forensic Science Society and the IAI on the topic. The resulting device from his research, the Pathfinder ESL, is in use and copied worldwide. Every FBI field examiner has a Pathfinder. He worked with Labcaire, a fume cabinet manufacturer to top down design automatic internal filtration chemical treatment cabinets and made forensic chemical treatments available safely and easily in police buildings. The concept has been copied by many manufacturers worldwide. He introduced the project to roll out modern sequential treatment laboratories based on the automatic cabinet concept. Four such laboratories processed all the Met Police volume crime fingerprint exhibits with a 90-hour turnaround time at an initial installation cost of £4.5 million pounds.

In the 1990s with the introduction of modern information technology he realised that police systems were generating big data so set about developing the concept of Forensic Intelligence. He managed the project to introduce Forensic Intelligence to the Metropolitan Police and in 2002 opened the first Forensic Intelligence Unit at Hendon implanting a £1,5-million-pound project. The concept was developed and he became the Head of the Forensic Desk in the Met Intelligence Bureau (MIB). In the MIB he created a partnership desk and Dr Peter Mansi was the fire investigation partner as Head of Fire Investigation London Fire Brigade. Working in partnership enabled a merging of the Fire Brigade Real Fire database and the Met Police Arson Database through creating a common data structure. This enabled

the patterns of fire setting to be seen in its complete context resulting in a number of arsonists being detected. The partnership also included liaison with the Juvenile Fire-setter Intervention Scheme Advisor from 2002 onwards.

Since becoming an Associate Fire Investigator with Fire Investigations UK LLP (FIUK LLP) he has had a number of successful cases for clients ranging from private clients successfully securing compensation to insurance companies resolving issues through the use of FIUK fire investigation reports on fire origin and cause. He has a good success rate in Crown Court casework to date. He has dealt with fire investigations involving electrical products, lithium battery fires and white goods fires. He has also dealt with commercial premises fires involving ducting fires, catering equipment failures and electrical failures.

A skilled presenter he has lectured at the following universities UCL, South Bank, Huddersfield, UCLAN, Warwick, Brunel and Queen Mary College London. He presented at the 8th USA Crime Mapping Conference Savannah, on The Mapping of Forensic Evidence and Forensic Intelligence 2005. He won the best lecture award of the 3rd National UK Crime Mapping Conference Jill Dando Institute London in 2005.

A skilled forensic examiner he has presented at the IAI in Milwaukee 2011 and ran electrostatic mark search and recovery courses for the IAI. In 2015 he presented at the New York IAI conference in Syracuse and ran an electrostatic marks search and recovery course for CSI accreditation.

He has presented on cruise ships on the topics of celebrated historical forensic cases on the Sun Princess 2012, The Queen Mary 2 in 2014 and in 2016, The Independence of the Seas.

PRESENTATIONS & PAPERS

Presentations and papers since 2000.

The Mapping of Forensic Evidence and Forensic Intelligence. 3rd National Crime Mapping Conference London University 2005. Won best lecture of conference award.

The Mapping of Forensic Evidence and the Mathematics of Scene Linking. 8th USA National Crime Mapping Conference Savannah 2005.

Forensic Intelligence in Arson Investigation with Peter MANSI Brunel University 2009.

Forensic Intelligence. Conference of The Forensic Science Society (now the Chartered Society of Forensic Sciences) 2009.

How Science Came to Scotland Yard. Queen Mary College London University 2010

The Development of the concept of the Crime Scene Investigator (CSI) 19th Century to modern times, Huddersfield University 2011.

The Principles of Electrostatic Mark Lifting IAI Conference Milwaukee USA 2011

Jack the Ripper a Crime Analyst View IAI Conference Milwaukee USA 2011.

Footwear evidence recovery techniques quality refresher delivered to all Met Police scene examiners 2006-7.

Forensics in Crime Intelligence. Conference of the International Academy for Investigative Psychology, South Bank University 2009.

Paper. Electrostatic Mark Lifting IAI Journal of Identification 2014

Lectures on the history of forensic science and celebrated cases Sun Princess liner 2012.

Published the reference book 'Forensic Intelligence' CRC Press 2012.

Editor of Fingerprint Whorld, the International Journal of the Fingerprint Society 2013 to 2015. Published a number of articles on scenes of crime technologies.

Published in CSEye the magazine of the Chartered Society of Forensic Sciences on Jack the Ripper, what have we learned? 2014. Also a science and technology article 'New Wet Vacuum Touch DNA System M-Vac' 2016.

Delivered a series of forensic presentations on the Queen Mary 2 Liner for Cunard September 2014.

Chartered Society of Forensic Sciences, Fire Investigation Conference, Leeds, 2015, made a joint presentation with Dave Scaysbrook, forensic scientist. 'The case for the defence in the UK' an outline of Criminal Procedure Rules Part 33 and the role of the defence expert in criminal trials.

Continued professional development topics: -

2013 UK AFI Annual Training Conference (ATC). Anthropology and fire, The investigation of gas explosions, Recent fire investigation research at UCLAN, A prospective on multiagency fire investigations.

2013 UK AFI 10 Year Anniversary Conference. Forensic social media, Real fire small scale demonstrations, Crown Prosecution Service, Health & Safety Executive, Court room skills.

2014 UK AFI AGM & ATC. Fatal Fires: A Pathologist's View, An Overview of the Complex Fires at Lakanal and Warwickshire, The Joint Fire & Police Investigation into the Multiple Fatal Fire – The Philpot Case.

2015 UK AFI AGM & ATC. The Safety Issues Relating to imported counterfeit goods, Electronic cigarette project, Reduced ignition propensity cigarettes, Counterfeit iPhone chargers.

2015 Fire Investigation Conference CSFS Leeds. Where were we? Where are we? Mick Gardiner Associates, Fire investigation in London (London Fire Brigade (LFB)), Developing the inter-service approach in the Shires, Fatal fires- Challenges facing the SIO, Lessons learned in a complex fire investigation (Derbyshire Police), Recent observations from human bodies in fires (DeHaan), Scottish Fire & Rescue Service moving forward, Current trends in UK fire causes (LFB), RIP smoking still kills – research into reduced ignition propensity cigarettes, Case for the defence in the USA, Case for the defence in the UK.

2015 UK AFI Summer Training Conference. A progress update on the Fire Investigation Protocol, Fatal fire, Bawn Vale Farsley Leeds, A study into the self-heating of snack food,

Acoustic smoke deposition on smoke detectors, Clydach fire and murders, Taser and petrol vapour do not mix (Chris Clarke FIUK), Hydrocarbon detector dog v photo ionisation detector.

2016 UK AFI AGM & ATC. NFPA 921 – The changing world of fire investigation, Fire behaviour and fire safety, Serial arsonist and murder- lessons learned, Texas 15 fire fatality case study, the advantages of a collegiate approach in the multi-agency investigation of deliberate fire events, Fires involving electrical intakes- a journey, Post flashover ventilation matrix, Resistance is futile (electrical fires & calculations), The vehicle fire challenge.

2016 to the present Robert has been involved in the examination of fire and non-terrorist explosion scenes on behalf of insurance companies. He has also reviewed routinely Crown Court arson cases on behalf of law firms involved in criminal trials.

In 2018, through a homicide forensic cold case review on behalf of a client, whose son was murdered in 2002. The forensics and legal team assembled by Robert has won the case in the High Court in London, obtaining substantial damages for his client. The case is now undergoing a full judicial review in the High Court to take the case to the next stage when the court orders the release of the evidence to the forensic science laboratory working with the cold case team.

R. Milne September 2018