

BENEDICT SPENCER BSc
CCTV AND CELL SITE ANALYSIS EXPERT

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Professional Profile

I am a CCTV video and imagery analysis expert and I have examined/processed/analysed thousands of video recordings from all manner of sources including: Private, City, in-vehicle, covert, aircraft etc. Processing varies from conversion from proprietary format to common format, special effects and image analysis (clothing, objects, events and people).

I am also a Cell site analysis expert and I have prepared hundreds of cell site analysis reports for the Courts. Most cases require field surveys to determine what cells provided service at specified addresses, or along specified routes as may be necessary.

Academic Qualifications

Bachelor of Science, **The Open University 1995.**

BTEC National Certificate in Electronic Engineering, **Department of Electronics, Consett Technical College, Consett, Durham 1984-1985.**

Other education, Training & Qualifications:

May 2017, Rohde & Schwarz, 1 day seminar, Demystifying 5G LTE

Jan 2017 CCTV Collision Speed Assessment Course, 3 days, AiTS

Sep 2014 Rohde & Schwarz, 1 day seminar, Test & Optimisation for 4G LTE

Jan 2013 Wray Castle, 4G LTE and forensic aspects of the new technology, 2 days

Sep 2005 LEVA, Three day course on digital video evidence

Oct 2004 Symbiosis, Two day course on Avid Detective forensic video tools

May 2004 LEVA, Three day course on forensic video technology

May 2002 Cognitech, Five day course on Cognitech Investigator forensic video tools

Nov 2001 Royal Photographic Society, two day conference on medical and forensic imaging

Aug 1997 UCL, Two week course on English Phonetics

Forensic Science Career

Case types I have worked on throughout my career vary from relatively minor harassment through to murder, kidnap, and rape and so on. I have undertaken case work for clients in the UK, Ireland, Russia, and Vietnam. I have prepared reports for and given evidence at Family Division, County, Magistrates, Crown, Appeal, High and Sheriff's Courts, Courts Martial and the Special Criminal Court in Dublin.

Some of the infamous cases in which I prepared cell site reports include:

- Aman Kassaye trial for the Graff Diamonds £40m robbery
- Colm Murphy trial for the Omagh bombing
- Ian Huntley trial for the murders of Holly Wells and Jessica Chapman
- Ricky Preddie trial for the murder/manslaughter of Damilola Taylor

Any other relevant information**Membership of Societies**

Member of Forensic Science Society
Member of Institute of Electrical and Electronic Engineers
Member of the Radio Society of Great Britain.

Approvals/Registrations

Member of Chartered Society of Forensic Sciences
Registered with UK Serious Organised Crime Agency
BTEC National Certificate in Electronic Engineering

Employment Experience**1991-current**

Independent forensic scientist specialising in mobile phone cell site analysis and handset examinations, audio/video recordings and other technical matters. Reports prepared for Family Division, County, Magistrates', Crown, Appeal, High and Sheriff's Courts, Courts Martial and the Special Criminal Court (in the Republic of Ireland) in both civil and criminal cases. Approximately 3000 cases since 1991.

November 2000- Feb 2001 LSI Logic Europe Ltd, Greenwood House, London Road, Bracknell, RG12 2UB

Design verification engineering of SC2000 single chip source receiver for Digital Television Satellite receivers.

January 1995 - 1999 - *et seq.* Spencer Research Limited

Electronics design engineering contracting, private research.

July 1995 - December 1998 Westinghouse Signals Ltd, Pew Hill, Wilts. SN15 1JD

Simultaneous with Spencer Research Ltd. R & D Design Engineer on Transmission Based Systems including design of VME bus analogue and digital cards. VME cards designed include:

VME controlled eight channel 50kHz FSK digital attenuator card to simulate train borne transmitter passing over trackside inductive aerials, 96 bi-directional discrete input output card. Discrete could be individually set to outputs or inputs and current settings read back onto the VME bus. Universal transmogriifier module to interface a wide range of serial communications (galvanically isolated and direct coupled RS485 using Manchester, Non-Manchester Inverting and Smiths encoding, RS232 etc.)

System level design and implementation of a System Test Facility to provide the test environment for the hardware / software products that form the TBS.

December 1991 - March 1996. Electronics Engineering contracting

Independent forensic scientist specialising in audio and video recordings, analysis of mobile telephone call data records, mobile telephone cell site field surveys analysis Consultancy to: Westinghouse Systems Ltd - hardware design. Motorola - test equipment hardware design, GEC Plessey Semi-conductors Ltd test equipment design for bipolar testing.

August 1989-December 1991 GEC Plessey Semiconductors, Cheney Manor, Swindon, SN2 2QW

Senior Electronics Engineer, involved in the design of wafer and device testing technology within a bipolar semiconductor plant.

June 1985-August 1989 Racal-Mobilcal Ltd, Reading, Berks.

April 1988 to August 1989, Senior Support Engineer for Development, Production Test, Rework and Quality Assurance Departments. Yield analysis and problem solving. Moved to GEC Plessey.

August 1986 to April 1988, Resident Technical Instructor, Saudi Arabia. Responsible for developing training courses and training military personnel on the use and maintenance of frequency hopping and encrypted radio systems.

June 1985 to August 1986 Senior Test Engineer. Production, test and calibration of a wide range of HF to UHF radio and digital communications systems, with occasional supervisory duties.

December 1975 - April 1982 Military service.

Armed anti-terrorist duties.

Publications & papers

"CW Audio Filter", Maplin Magazine #93

"SSB Audio Filter", Maplin Magazine #94

"Single Chip Iambic Keyer", RadCom, Radio Society of Great Britain, Mar' 97

"Protected 13.2V 40A Power Supply Unit", RadCom, Radio Society of Great Britain, Apr '96.

"Protected 13.8V 5A Power Supply Unit", Ham Radio Today, May 1995.

"An Audio Breakout Box", March 1995, QST, American Radio Relay League.

"A Simple General Purpose AF Amplifier", QST, American Radio Relay League, Dec. 1994

"An Audible VSWR Meter Adapter", QST, American Radio Relay League, July 1994

"Audible VSWR Meter", Ham Radio Today, June 1994.

"AF Function Generator with DFM Readout", QST, American Radio Relay League Apr. 1994.

"AF Waveform Generator", RadCom, Radio Society of Great Britain, June 1994.

"Sealed Lead Acid One-Shot Battery Charger", QST, American Radio Relay League Mar 1994.

"UHF Prescaler", Radio Society of Great Britain (UK) September 1994.

"A 13.8V, 5A Regulated Power Supply", QST, American Radio Relay League Nov. 1993.

"High Stability Crystal Oven", QEX, American Radio Relay League Apr. '93. 17 July, 2017 Page 5 of 5

"Low Battery Warning", Practical Wireless, September 1989.

Patents and Patent Applications

Patent GB9314931.8 Portable Rate of Change of Temperature Detector

Patent GB9314932.6 Portable Smoke Detector

Patent GB9314911.0 Portable Temperature Detector

Patent GB9510814.8 Electronic Control Device

Patent GB9826601.8 Improved Cable Clip

Patent GB9826858.4 Magazine Indicator

Patent GB9900586.0 Firearm Bolt & Sound Moderator Holster