

Peter Alvin Steyl

Full Names: Peter Alvin Steyl

ID Number: 7105245227087

Address: The Forensic Hub, 33 New Road, Midrand

Cell Phone: 082 899 7981

E-Mail: peter.steyl@forensichub.guru

Professional Qualifications, Experience, and Training

From 1999 to 2014, I worked as a Firearm and Toolmark examiner for the South African Police Service's Forensic Science Laboratory in the Ballistics division. Since 2016, I have worked at the Forensic Hub as an independent Forensic Specialist, Ballistics Expert, and Vehicle Examiner. During this time, I examined over 2600 weapon and toolmark cases, as well as 600 car accident and vehicle examination cases. I have frequently testified in courts in South Africa and surrounding countries.

I have successfully completed a three (3) year in-service training course at the Ballistics Section in the theoretical and practical application of the Forensic Ballistics Science.

THE IN-SERVICE TRAINING INCLUDES THE FOLLOWING TOPICS FOR FIREARM AND TOOLMARK INSPECTIONS (FORENSIC BALLISTIC SCIENCE):

- Identification of ammunition-fired bullets and fired Cartridge cases.
- The use of microscopic equipment.
- Microscopic individualization of firearms fired bullets and Cartridge cases.
- Microphotography.
- Identification of firearms.
- The examination of firearm mechanisms.
- The different manufacturing processes of firearms and firearm components.
- The examination of home-made devices.

- Techniques associated with the recovering and restoration processes of obliterated alpha-numeric figures on metals.
- Re-loading of ammunition and the manufacturing processes of ammunition.
- Shot range determination.
- Crime scene investigation and examination techniques.
- Photographing and the documentation of the results during an investigation.
- Microscopic individualization of tools and tool marks.
- Physical matching.
- Documentation of examination results.

INTERNAL FORENSIC BALLISTICS:

- Functioning of firearm mechanisms during the firing process.
- Burning rates of propellant powder and gas pressure.
- The transfer of marks by the firearm to Cartridges fired Cartridge cases and fired bullets.

INTERMEDIATE FORENSIC BALLISTICS:

- The effect that hot gasses, propellant powder, and partially burnt propellant powder have on an intermediate target, before and after the exit of a bullet from the muzzle.
- The forming and effect of secondary missiles caused by intermediate targets.

EXTERNAL FORENSIC BALLISTICS:

- The trajectory of the bullet from the muzzle of the firearm to the final point of impact.

TERMINAL FORENSIC BALLISTICS:

- The wounding effect that the bullet has on tissue (Wound Ballistics).
- The effect that the bullet has on the target.
- The effect that the target has on the bullet.

I have received training in the capturing of fired cartridge cases and fired bullets on IBIS (Integrated Ballistics Identification System)

I visited the following firearm and ammunition manufacturers to ascertain which processes are used in the manufacturing of firearms and ammunition:

- Lyttelton Engineering Works (LIW)
- Truvelo
- New Generation ammunition (NGA)
- Somchem
- Swartklip

I HAVE SUCCESSFULLY COMPLETED THE FOLLOWING QUALIFICATIONS:

- Gunsmithing Trade-Test in accordance with the standards recognized by the National Training Board in terms of section 28 of the Manpower Training Act, 1981. 1997-06-20 to 1997-07-15.
- Advanced Programme in Forensic Criminalistics (UNISA), 2004.

I HAVE SUCCESSFULLY COMPLETED THE FOLLOWING QUALIFICATIONS AND COURSES:

- S A Police Armorer's Course S A Police Logistics Pretoria, 1991 to 1995.
- Certificate in Forensic Firearm and Toolmark Examinations for Specialists, South African Police Service, 2004.
- Vehicle Examiner course, SAPS Technical Training Centre, 2004.
- Advanced Accident Investigation, Analysis and Basic Collision Reconstruction Level 4 Course, CSIR Technology Transfer Centre, 2005.
- Traffic Accident Reconstruction I - presented by Lynn Fricke and Mike DiTallo

at Northwestern University in Chicago, Illinois, USA. 2008.

- Traffic Accident Reconstruction II - presented by Lynn Fricke and Mike DiTallo

at Northwestern University in Chicago, Illinois, USA. 2008.

- IBIS-Brasstrax, Forensic Technology, 2009.

- IBIS-Bullettrax, Forensic Technology, 2009.

- Advanced Shooting Incident Reconstruction presented by Michael Maloney (USA) 2014-01-27 to 2017-02-07.

- Shooting Scene Modelling presented by Michael Maloney (USA) from 2014-02-17 to 2014-02-21.

- Basic Air Brake Systems WABCO 2005.

- Firearm Competency Business-Use Unit Standards

119650,123511,123514,123515 and 123519, Firearm Licensing, 2017.

- Firearm Competency Private-Use Unit Standards 119649,119651 and 119652, Firearm Licensing, 2018.

- Supervise Shooting Exercises Unit Standard 123516, Tactical Defence Training, 2018.

- Supervise Firearm Training Unit Standard 123520, Tactical Defence Training, 2018.

- Conduct Outcome-based Assessments Unit Standard 115753, Tactical Defence Training, 2018.

- Apply Moral Decision-Making and Problem-Solving Strategies Unit Standard 116483, Tactical Defence Training, 2018.