

14 July 2015

BALLISTIC FINGERPRINTING RESEARCH AND EXPERIMENTS

The proposed amendments to the Firearms Control Act 60 of 2000 published late last year contemplate that every firearm in civilian possession will need to be ballistically sampled for purposes of including the data in the Integrated Ballistics Identification System used by the South African Police Service, for comparison in the investigation of crimes committed with firearms.

Yet the United States' National Research Council has noted that the fundamental assumption underlying forensic firearms identification – that every gun leaves microscopic marks on bullets and cartridge cases that are unique to that weapon and remain the same over repeated firings – has not yet been fully demonstrated scientifically and that more research is needed to prove that firearms identification rests on a scientific foundation.

As a result, recognised forensic scientist, Dr David Klatzow, has been commissioned to independently research and write a scientific paper on ballistic fingerprinting. The research to be conducted by Dr Klatzow will examine the primary predictors of the theory, viz. the uniqueness of the markings and the persistence of the micro striations.

In carrying out his research Dr Klatzow be using various firearms (including weapons with polygonal barrels) and ammunition from different manufacturers. In carrying out the research up to 1000 rounds will be fired through each weapon.

The first part of the project was to obtain permission to put a ballistic testing tank on the False Bay Gun Club's shooting range in Glencairn.

The second part of the project was to have a specialised ballistic testing tank manufactured. The tank is 3.5 metres tall, has four integrated legs and a ladder and has been installed by a specialist rigger on a 30 MPa concrete base using a crane and hoist. The necessary spent cartridge case catchers have also been manufactured for use both at the top of the tank and at ground level.

As a result, Dr Klatzow is now in a position to commence carrying out the necessary experiments and research.

While the cost of manufacturing and mounting the tank has been covered by the South African Gunowners' Association, guns and ammunition have been contributed by Bernhard Agencies (two firearms), Dave Sheer (one firearm and 75 cartridges), Formalito (one firearm and 500 cartridges), HJ Drinn (1000 cartridges) and Nicholas Yale cc (two firearms and 3700 cartridges). Members of the firearms community are invited to participate by making contributions, should they wish to do so, in which event they are invited to contact the South African Gunowners' Association at saga@saga.org.za.

Photographs of the tank and other equipment may be viewed at www.saga.org.za

BERNHARD AGENCIES

Dave Sheer
Guns
Sheer Shooting Pleasure

FORMALITO
SPORTS • ARMS • OUTDOOR



NICHOLAS YALE