Ballistics database a new weapon in solving crime

Norfolk police Detective Eric Flax fires a handgun so he can collect the casings for a database that can determine whether the gun can be traced to any crimes. STEVE EARLEY/THE VIRGINIAN-PILOT

By MATTHEW ROY, The Virginian-Pilot
© February 27, 2007

NORFOLK - The handguns ranged from a hefty Tec-9 with a long protruding clip to a palm-size .38 -caliber pistol caked in dried blood, kept in a stained manila envelope marked "biohazard."

Norfolk police found them discarded in vacant lots, under car seats, and so on. Recently, several officers fired dozens of the weapons at the police range, to gather evidence for a national law enforcement ballistics database.

Police here have long submitted ballistics evidence from major crime scenes to a state forensic lab, where experts compare unique markings on bullets or shell casings with evidence from crime scenes in other cities, even other states.

Now, in a pilot program, Norfolk police are submitting ballistics evidence for weapons that were obtained in more routine matters, such as those found by residents or seized during other sorts of investigations. It's an ongoing effort involving Montreal-based Forensic Technology Inc., a private company with offices in the United States and other countries. Several hundred weapons will be checked.

Pete Gagliardi, a company vice president, said the pilot program is intended to speed up the process of entering weapons into the database, which could lead to cases being cracked more quickly. The company initiated the pilot program and is participating in it free of charge.

The database - the National Integrated Ballistic Information Network, or NIBIN - is under the auspices of the Bureau of Alcohol, Tobacco, Firearms and Explosives. Nationally, the program has led to more than 13,100 "hits," the ATF said, enabling police to link weapons and crimes that they had not known were related.

Police agencies around Virginia participate in the program at varying levels, said Pete Marone, director of the state Department of Forensic Science, which operates Virginia's four crime laboratories and tests firearms.

When a weapon is submitted, technicians fire it, collect the cartridge casings and photograph them. The images are entered into a NIBIN database, and computers compare them with other images for tiny, unique features. When computers find possible matches, technicians examine the casings to make definitive ones.

In Norfolk, officers fire weapons and collect the ejected cartridge casings. Those are sent to a Forensic Technology facility in Florida, where images are created and compared with those on file, Gagliardi said. Any likely matches must be confirmed by technicians at the state laboratory in Virginia.

Officer Chris Amos, a police spokesman, said that "one good match" linking a weapon to a murder case has occurred in the recent tests, and more tests are pending.

Forensic Technology's Web site lists several success stories, including one from Richmond, where an arrest for illegal possession of a handgun in 2004 led to a match that tied the weapon to a drive-by shooting that killed a man. The man who had the gun was convicted of murder, the site says.

- *Reach Matthew Roy at (757) 446-2540 or matthew.roy@pilotonline.com.*