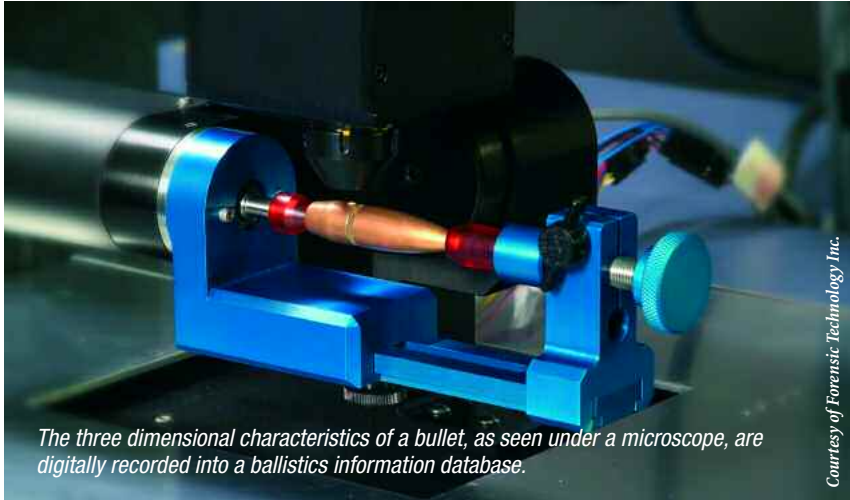


Follow that bullet

by Richard Bray

Ballistics information system supports shared crime scene information



The three dimensional characteristics of a bullet, as seen under a microscope, are digitally recorded into a ballistics information database.

Courtesy of Forensic Technology Inc.

GUN CRIME IS GETTING more dangerous – for the criminals. Law enforcement agencies in Canada and the United States will now exchange ballistics information electronically. Minister of Public Safety Stockwell Day signed a memorandum of understanding with the US Attorney General Alberto Gonzales late last year that will connect databases of bullets and firearms recovered from crime scenes.

Before this agreement came into force, it was so time-consuming and clumsy to trade information across the border that busy detectives often could not do it. Now, the Canadian Integrated Ballistics Identification Network (CIBIN) will connect with the National Integrated Ballistics Information Network (NIBIN) in the United States to find, as the RCMP puts it, “forensically useful linkages between firearms and the crimes in which they have been used.”

The project was remarkably easy to implement for several reasons. First, each country already had a functioning system, with hardware, software and trained personnel. All that was needed was an additional computer server in each country to coordinate between systems. In Canada, the RCMP manages the system and in the US, the Bureau of Alcohol, Tobacco, Firearms and Explosives is the lead agency.

More importantly, there is an internationally recognized standard for the exchange

of ballistics information, a standard set by a Canadian company called Forensic Technology Inc. and its market-leading product, the Integrated Ballistics Information System (IBIS).

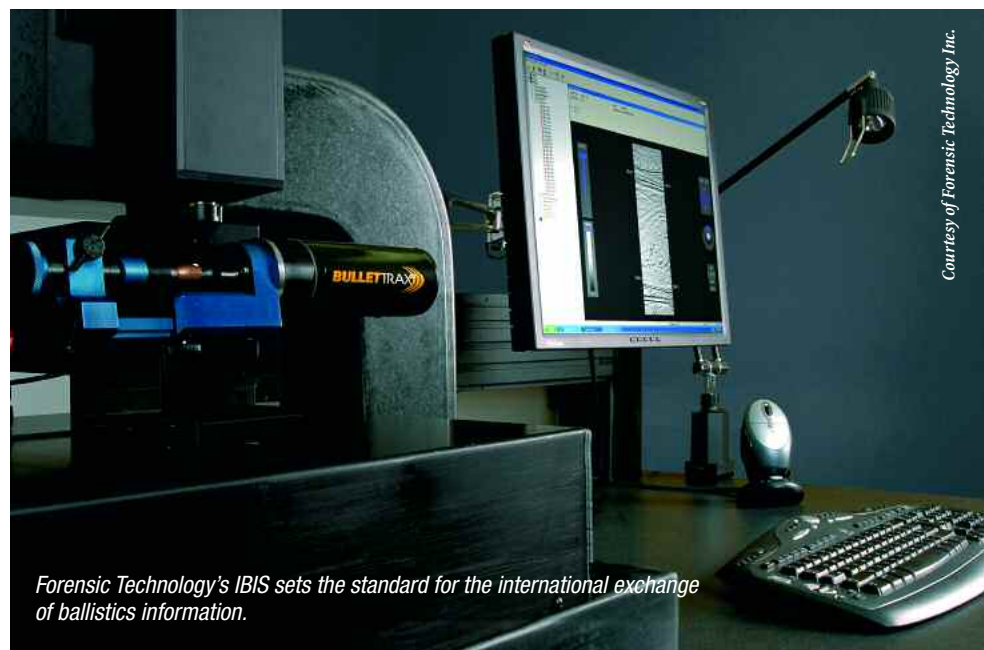
Robert Walsh, already the owner of process engineering firms, created the company in the early 1990s when an RCMP officer responsible for ballistics evidence approached him for help. It was becoming impossible to keep up manually with the workload due to

the volume of evidence that was coming in, mainly due to drug related crime.

Soon after, Walsh arranged a meeting with the Federal Bureau of Investigation’s head ballistician in December 1990. He saw a great opportunity and acted on it. What started as a small research and development project within an existing process automation company soon became a major business on its own. Forensic Technology Inc., which designs and assembles its equipment in Côte St-Luc, Quebec, now employs about 200 people and almost every ballistics laboratory in the world uses IBIS technology. The company has equipment at half a dozen Canadian sites and 235 ballistics labs in the United States. Walsh said, “I guess we are the world standard; we are in 43 countries.”

Prior to the IBIS system, moving ballistics information between cities, let alone countries, was tedious, paper-work intensive, and rarely happened. In the past, evidence from a gun incident in the Los Angeles area would go to the LAPD and probably stay there. The only reason to connect that evidence with

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Forensic Technology’s IBIS sets the standard for the international exchange of ballistics information.

Courtesy of Forensic Technology Inc.

an incident in another jurisdiction would have come from other evidence, not ballistics evidence that a law enforcement agency already had in hand. “It would never see the light of day unless there was some magical hunch that a detective had,” Walsh said. Checking ballistics information under those circumstances was cumbersome and time consuming because chain-of-custody procedures complicate the movement of physical evidence.

Now, information entered into any IBIS machine in Canada and the United States can be swiftly correlated against the other databases.

Walsh said that taking a picture of a cartridge or a bullet is not that difficult but correlation is more difficult. “Over the years, competitors have been able to take good pictures but they have been unable to correlate it. Our latest equipment is three-dimensional, which is a quantum leap you have to do,” he said.

Forensic Technology Inc. deals exclusively with governments around the world, at the municipal, state and federal levels. Not surprisingly, he now knows a great deal about public sector procurement. “We certainly learned a lot. And we are still learning. We have tremendous talent in our contracting office, the ones that are faced with different procurement systems,” he said. “In some places it is sole source. In the US we are sole source. In many countries, it has to go out to bid, period, if somebody says they have something similar. In one country now, the first filter is a request for information. Then they come back with some specific things they want, and the final stage is the RFP where they have written the specs.”

Walsh said, the first countries to implement transborder ballistics information sharing were Denmark, Sweden and Norway because they wanted to share the services of a single ballistics correlator. He is pleased that Canada and the United States have signed a memorandum of understanding because, “Everybody knows there is movement of guns and criminals across the border, in both directions. It gives law enforcement in both countries a capability they wouldn’t have had before, in real time.”

Richard Bray is an Ottawa-based freelance writer and editor specializing in the IT sector. He has been published in magazines and newspapers in Australia, the US and Canada. Before freelancing, he worked as a producer, reporter and senior writer for CBC in Toronto.