Tailormade Technology: In-Car Digital Video Recorder

It offers high-quality digital video recording capability in a unit small enough to fit between a patrol car’s visors and continuous recording of images and sounds onto a hard drive in a preprogrammed loop, usually 1 to 2 minutes in length. When overhead pursuit lights are activated, it automatically saves the previous loop and continues recording, without erasing, until pursuit lights are turned off. Images include a date/time stamp and can be synchronized with radar readings and global positioning system data.

At the end of a shift, the hard drive can be removed and images downloaded into a database for search and retrieval. The device includes automatic focus, automatic zoom, and simultaneous audio recording, and provides higher quality images than videotape. Operational range is more than 1,000 feet. It can be activated remotely and images transmitted to headquarters through a panic button. It helps ensure evidence integrity through an electronic chain of custody and an encrypted algorithm that reflects any change to the file.

If the Coban In-Car Digital Video Recorder seems tailor-made to law enforcement needs, it is—in part due to the developer’s goal to meet the unique needs of policing and in part due to the commercialization assistance provided through the Office of Law Enforcement Technology Commercialization (OLETC).

In 2001, Coban Research and Technologies, Inc., set out to apply digital video recording techniques to the particular needs of law enforcement. A pilot project with the Texas Department of Public Safety provided Coban’s designers the opportunity to ride along with officers and fine-tune the newly developed system. Coban began by building a very rugged system for the troopers from Humble, Texas, a Houston suburb.

Coban staff rode with troopers in their newly equipped cruisers, troopers like Jeff Shipley, who once played in the Canadian Football League, and his partner Don Bender. Each stands almost 6½ feet and weighs around 250 pounds. “We were learning how the officers work in the car, how the DA accepts evidence, things like that, and we were able to fine-tune our system to provide great utility for them,” says David Hinojosa, Coban business director.

It was also during 2001 that Hinojosa contacted OLETC to find out more about the law enforcement market. “When Coban called,” says OLETC technology agent Wayne Barte, “we thought they’d be a good candidate for our Commercialization Planning Workshop®. Company representatives attended in June 2002. They got a lot out of the workshop because they put a lot of effort into the process. At that time, they had a real bare-bones system, and didn’t know what agencies could afford to buy or what features officers were looking for in doing their jobs.”

OLETC, located in Wheeling, West Virginia, is the commercialization arm of the National Institute of Justice’s National Law Enforcement and Corrections Technology Center system, with a mission of placing innovative technology in the field and helping law enforcement and correctional officers do their jobs more efficiently and safely, Barte says. At any given time, OLETC staff members are working with a number of vendors that have products in various stages of development. Also, every year OLETC hosts several Commercialization Planning Workshops—4-day events that introduce all elements of the commercialization process to technology innovators and provide guidance on the technology and its proposed business plan.

“We were still wet behind the ears,” Hinojosa says. “I was still trying to understand the whole commercialization process. The workshop was where I began to grasp what we needed to do and the steps that needed to take place. We learned we needed to synchronize our engineering and marketing efforts. Now we’re into the second version of our product.”

After attending the workshop, Hinojosa tried to make a connection with IBM®, calling hundreds of people until he finally got the company’s attention. Coban ultimately
became an IBM business partner, reselling products to IBM. Thus, when the Yakima (Washington) Police Department called looking for a digital video system about a year later, IBM became the prime contractor and Coban became the subcontractor. IBM and Coban have since run pilot projects in Santa Barbara, California; St. Louis, Missouri; and Tyler, Texas.

“All these departments are different, with different procedures, different needs, and different requirements for mounting the hardware in their cars. The pilot projects led to contracts with all three departments,” Hinojosa says.

For more information about the Coban In-Car Digital Video Recorder or the commercialization assistance activities offered by OLET C, contact Wayne Barte, 888–306–5382 or wbarte@oletc.org. OLET C maintains a website at www.oletc.org.