



CamLite

Office of Law Enforcement Technology Commercialization (OLETC)

Executive Summary by Kara Gray

On a quiet stretch of moonlit rural highway, a local sheriff's deputy initiates a traffic stop after watching a car cross the center line numerous times. As the deputy approaches the vehicle, he reaches for his flashlight, shines it into the car and asks to see the driver's license and registration. As the driver fumbles through the glove box, a crack pipe and an unknown substance in a baggie fall out. The substance field-tests positive for crack cocaine and the driver is arrested. During his trial, the driver claims the officer planted the drugs inside his car, but the deputy has proof that even the best defense attorney cannot deny – a videotape of the entire stop, taken from the deputy's flashlight.

Clearly, this is no ordinary flashlight. It is actually CamLite, an innovative, new mobile wireless audio-video system housed inside a fully-functional flashlight.

The device can transmit both video and audio signals up to 1,000 feet to be received and recorded on a laptop computer, VCR or DVR. After nearly six years in development, the device is now available from CamLite Corporation of Phoenix, AZ.

Equipped with a telescoping pole, CamLite can transmit images from overtop high obstacles, such as a wall or fence, or even from an attic. It can also be used down low, to capture images from under a car, under a bed or inside a manhole.

The camera records 537x505 pixel images at 30 frames per second at a minimum resolution of 380 lines.

The wide-angle lens is self-adjusting to light and self-focusing to ensure high-quality images. The fully-functional 13,500 candlepower flashlight features a high and low adjustable beam, making it useable in almost any situation. This adjustability diminishes "wash-out" in the video.

"There are just so many things that this device has the ability to do that most officers don't have right now," said Jerry Jones, co-founder and chairman of CamLite Corporation. "It's our job to make them aware of what

we have and the applications that are available for CamLite. The portability and versatility of the device—the grab-and-go aspect—are paramount to its success."

And, of course, the unit is extremely rugged and durable to stand up to the law enforcement environment.

The unit has been drop-tested 25 times from six feet onto a concrete floor and continues to operate, making it durable enough to serve all of the same "non-standard" uses of a traditional flashlight—like the ability to prevent a door from being slammed in the officer's face or administering an eye test during a DUI stop. Because CamLite is the size of a standard police-issue flashlight, it will easily fit inside the existing duty belt or vest pouch.

CamLite in the Classroom

CamLite is now being incorporated into the training curriculum at West Virginia University's (WVU) Crime Scene Investigation (CSI) program. One of the top forensics programs in the country,

WVU is home to two new crime scene houses and a garage. Mike Bell, forensics facilities manager at WVU, has been using CamLite to instruct students in processing vehicles in a mock crime scene.

"We use a six foot extension to run it under a vehicle to look for bombs," Bell said. "We also use it when processing the inside of a car. You shine CamLite inside ahead of time so that you don't contaminate the scene. This is often a problem in cars—if a cartridge case is lying against the door, and the CSI can't see it until he or she opens the door, it can fall out and the



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evidence is now compromised. With CamLite we can document the chain of evidence before anything is disturbed.

“It works extremely well, and the fact that it is small and compact, and has a great battery life, makes it even better,” Bell said. “You don’t have to worry about changing the batteries on it after only an hour of use.”

Jones says CamLite is an extension of the in-car video system that many departments are now using. The receiver can be placed inside the car, while the officer keeps the CamLite at his side for easy access.

“In the case of a traffic stop where CamLite is used, now we can see what the subject is doing, rather than just what the officer is doing,” Jones said. “You can take it right up to the car and record what goes on inside the car, in addition to what the patrol car system picks up outside the vehicle.”

Billy Cooper is the assistant director of the Law Enforcement Mobile Video Institute (LEMVI), a national program that trains police officers in the legal and procedural use of in-car video and recording. The LEMVI is teaming up with CamLite to introduce the device as a supplement to the in-car systems on which they provide training.

“This is an excellent tool that can assist officers in doing their jobs. CamLite is more designed for the street officer in his or her general work,” Cooper said. “What we’re trying to teach as part of this concept is increasing the officers’ credibility. CamLite can help them to document what they find, where they find it and what condition it was in. Anything that we see that helps the actual street officer—it is them that we’re dealing with—if we see technology that will assist them, I see it as a benefit to the system.”

Endless Versatility in a Compact Device

CamLite’s greatest attribute is its versatility. The device can be used in almost any law enforcement application, bringing real-time video and audio documentation to any scenario.

The mobility, ruggedness and ease of use, make it an ideal tool for use in traffic stops, DUI cases, search and seizure operations, SWAT deployment, street apprehensions, domestic disturbances, and crime scene and arson investigations.

The possible applications for CamLite seem to be limited only by the user’s imagination. In fact, the team behind CamLite has already devised a number of potential applications outside the law enforcement industry. These include inspections for buildings, construction sites, utility systems and manufacturing facilities, as well as insurance claims adjustment procedures.

Jones believes that there is an incredible potential for military applications of CamLite, as well. In fact, just recently the CamLite team linked up with Telenor, a European mobile telecommunications company, to demonstrate the transmission of the CamLite audio/video signal via satellite. The demonstration took place at the request of the U.S. Marine Corp at Camp Pendleton, CA.

“From Camp Pendleton, we were able to connect to Atlanta, GA and send the signal at 16 frames per second,” Jones said, adding that this is only about a .75 second delay. “They were actually reading the embroidered name tags on the Marines’ uniforms. The quality was that good.” Jones notes that images from CamLite can be transmitted over a standard Internet connection, but the result is a much slower frames-per-second rate.

In addition to the satellite transmission systems, CamLite has also been integrated with facial recognition software, and Jones says they have even tested it with iris recognition applications.

The OLETC Advantage

Contributing to the successful development of CamLite has been their involvement with the Office of Law Enforcement Technology Commercialization (OLETC). A program of the National Institute of Justice (NIJ), OLETC’s mission is to assist in the commercialization of technologies for use in the public safety industries.

Using a specific set of criteria to evaluate technologies and assess their value in the field, OLETC can provide technology developers with market research, commercialization assistance and networking opportunities.

In 2001, the CamLite team attended an OLETC Commercialization Planning Workshop® (CPW). The CPW® allows for a “total immersion” experience in the commercialization process. The workshops culminate in the

creation of a commercialization plan.

“The workshop was a great experience for us,” Jones said. “We were in the marketing business at that time, coming out with a new product. It was a really good class for us at that point.” In addition to the CPW®, CamLite was featured in a scenario at the annual OLETC Mock Prison Riot®. This provided an opportunity for trained law enforcement and corrections professionals to utilize CamLite in a realistic scenario. OLETC staff also presented the technology at the American Correctional Association’s conference in 2002.

“OLETC has been a great resource for us,” said David Nielsen, CamLite’s CEO. “They’ve been able to give us good information about the market, they’ve been good about introducing us to that market, and they have given us almost instant credibility. When we talk to people and tell them that OLETC has our technology and we’re working with them, it gives us credibility.”

Creating a Buzz: TV Drama Meets Real-World Efficacy

CamLite Corporation has just begun an aggressive marketing and education program that Jones hopes will increase awareness and use of CamLite. Jones recently met with the producers of the top-rated television show *CSI* to talk about incorporating CamLite into an episode of this CBS crime scene investigation drama.

“They are indicating they may be using CamLite in one of the last four episodes of this season [2004-2005],” Jones said, adding that they are also planning to work with the producers of spin-off shows *CSI: Miami* and *CSI: New York*, as well as NBC’s medical examination drama, *Crossing Jordan*.

In the real world, CamLite units are already in use at the Port of Los Angeles Police Department; Clackamass County (OR) Sheriff’s Department; the City of Sumter (SC) Police Department and at the Los Angeles County Sheriff’s Office.

In addition, CamLite is also being utilized to search cars entering a domestic Boeing facility, and by Skechers Footwear to conduct inventory and warehouse inspections.

For more information about CamLite, visit www.camlite.com, and for more information about OLETC, visit www.oletc.org or call 888-306-5382.