ON THE FIRING LINE

Training coordinator Tom Buttyan shows the different guns used at Butler County Community College's simulation weapons system, made by Meggitt Training Systems, that can be used to train law enforcement.

BC3 provides high-tech public safety training

When integrated properly, technology can save time and money while offering adaptability.

As a result, Butler County Community College has been using technology to complement its public safety training programs for years.

For the past several months, the college's Community & Workforce division has been showcasing a simulation weapons training system it bought about a year ago with a $120,000 grant from the U.S. Department of Justice.

The use of the portable training system is part of the college's ongoing effort to expand its role in public safety by working with local law enforcement entities.

Already, the college has been using the system to train personnel for the Butler County Prison and the Penn Township Police Department. It also has received input from a number of other departments.

The system, by Meggitt Training Systems of Suwanee, Ga., is comprised of real firearms — several semi-automatic pistols, a shotgun, an assault rifle and a Taser — that have been modified to no longer shoot projectiles but instead to communicate with computers and a large digital projection screen using lasers and Bluetooth wireless technology.

Driven by software, the equipment works together to create a virtual interactive shooting experience that can range from firing at still targets placed at various distances on a realistic backdrop to video scenarios aimed at simulating real-life emergencies.

The goal is to keep officers' training fresh so they can react as quickly and appropriately as possible.

During a showcase for Butler School District officials and its armed police officers in December, Tom Buttyan, an emergency medical services and continuing education specialist with BC3, ran officers through a series of drills two at a time.

The officers used BC3's Glock 17 handguns retrofitted to work with the system. That brand and model is a common choice in the law enforcement field and similar to the 25 pistols the Butler School Board purchased for its police force in 2013 in response to the December 2012 Sandy Hook Elementary School shootings in Newtown, Conn.

The pistols also are converted to use magazines that hold compressed air instead of bullets. That enables the pull of the trigger to cycle the slide of the gun and simulate the recoil that would be created from firing a real bullet.

Speakers connected to the system also offer feedback in the form of gunshot sounds, dialogue and other audio.

The first few drills featured still and moving targets, but the last two were custom-recorded video sequences applicable to campus police.

The first video scenario depicted a student threatening three others with a knife, while the second involved an adult holding a hostage at gunpoint in a classroom.

The actions the officers took during the scenarios influenced the outcome, and at the end of each drill, the officers were scored on accuracy. Also, each sequence can be recorded so officers can reflect on their decision making after the scenario.

"This is a very good training tool," Paul Epps, coordinator of Butler's school police, said.

Epps, a retired state trooper who is one of about 25 officers serving the district, said the Meggitt system is similar to simulation systems used by law enforcement for firearms training. However, he said the ability to create custom scenarios better suits the school force's needs in being primed for emergency situations.

In addition to being portable and able to be used indoors, Buttyan said the system has other advantages over traditional firearms or situational training.

Instead of reloading magazines with real ammunition, which takes a considerable amount of time, the system's magazines are refilled in seconds by an air tank.

At a cost of about $900 per day to use BC3's Meggitt system, Buttyan said there also is money-saving potential.

He explained that during the series of drills run by the school police, each officer fired 120 rounds. If they were using a standard type of law enforcement

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ammunition, such as .40-caliber S&W, which costs about 32 cents per round, they would have each spent $38.40 to complete the drills. That's more than $750 in ammunition costs based on 20 participants, he said.

But for Buttyan, a father with children in the district who also works as a paramedic for Butler Ambulance Service, the biggest benefit of the system is offering accessible and flexible training that helps keep officers sharp.

"These guys are protecting our kids," he said.

Another technology-driven system the school has been using for public safety training for the past five years is the Advanced Disaster Management Simulator.

ADMS, a product of Environmental Tectonics Corp., of Southampton, Bucks County, is an interactive virtual reality simulator for training officers and disaster management teams at all levels, from on-scene operations to off-scene coordination and planning.

The goal is to improve command structure and coordination without having to shut down a location to the public with a simulation in the field. Instead, participants never have to leave the college's Public Safety Training Facility.

There are a dozen or so computer-generated environments in which just about any type of emergency scenario can take place, from a fire started in a waste basket to an active shooter in an office building. The operator also can change many variables, such as weather and time of day.

Those participating do so through a first-person perspective at several input stations outfitted with a computer, joystick and large monitor. They give and take commands, and they interact with the environment. Part of that interaction also includes artificial intelligence in the form of other emergency responders, bystanders and traffic.

The system was bought with a $1.16 million grant from the U.S. Department of Justice, and there are a few others at schools nationwide. ❖