

Case Study:

Precision Marksman/Sniper Training with V.I.C.E. –

“Communication, decision-making, and engagement training”

V.I.C.E. is a scalable Commercial Off-The-Shelf (COTS) product designed to train cognitive skills needed by law enforcement, military, and homeland security personnel in confronting and resolving potential and actual conflict scenarios principally in urban environments. V.I.C.E. enables initial and sustainment training of individual and team skills associated with Tactical Operations to include team maneuvering and target/suspect engagement; supporting various situations from large scale conflicts in an urban operations environment, to smaller scale civilian crime. V.I.C.E. provides realistic training through the integration of patent pending technologies along with high fidelity immersive virtual environments, realistic simulated weapons with wireless data-link devices, team communications devices, and real-time translation of student actions into the running scenario, all supported by low-cost PC hardware. The wireless-enabled weapons provide a key capability for students to seamlessly control their own movement through the environment

V.I.C.E. is the perfect system to provide cognitive skills training to new or experienced Police Precision Marksmen (Snipers). In a recent system demonstration, Tony Levatino (SWAT Commander, Rifle Instructor, and Police Subject Matter Expert) was able to instruct SWAT operators who were previously unfamiliar with Precision Marksman techniques and was able to provide them with the basic tactics and techniques necessary to select hide locations around a simulated barricaded suspect location without being detected, and to provide real-time observation information concerning suspect and hostage movements within the primary target location. The following is his account of the demonstration:

“During one scenario we utilized the urban apartment house database. I selected a second story apartment that had a balcony that looked out onto the street and that had windows that officers could observe the movement of the suspect and hostage inside. I was easily able to place a suspect (adult male) with a handgun being controlled by my Assistant Instructor and a computer controlled Artificial Intelligent hostage (juvenile male). Depending on which training action I wanted to take, my Assistant Instructor would move the suspect about the apartment and move the hostage to different locations.

“I briefed both the Entry Team and the four Marksmen giving them the scenario that a distraught father armed with a handgun was intoxicated, suicidal, and holding his juvenile son hostage. I instructed the Marksmen to covertly emplace across the street in an apartment building in such a manner as to cover all possible shot angles into the location in the event the Commander requested a deadly force resolution. While another instructor briefed the Entry Team on the route through the apartment building to the hallway where the primary location was situated the Marksmen took up their positions with one officer acting as an Observer. They immediately provided real-time intelligence information as I had my Assistant Instructor move the suspect and hostage throughout the apartment.

“I was able to keep track of the movements of all the officers and the suspect/hostage on the Instructor Screen with individual views of each team, and by invisibly moving within the scenario to see if I observe the officers from the suspect’s vantage point. It provided good practice for their communications techniques back to the Command Post and gave me an excellent opportunity to train them on exact type of information a Commander would be interested in.

“I escalated the threat-level of the scenario after approximately ten minutes and told all Team Members that the Hostage Negotiations Team had indicated that the suspect said he was going to kill his son and himself. I ordered a Marksman Initiated Resolution and requested the Entry Team perform a Crisis Entry following the Marksmen’s shot. I had the Assistant Instructor move the suspect near the window where only a part of his face was visible and authorized two Marksmen to fire in the event the suspect presented himself. Almost simultaneously both Marksmen fired and hit him in the head. Upon hearing the shot, the entry

team who had evacuated the hallway (encountering Artificially Intelligent non-hostiles hiding in adjacent apartments) entered, rescued the hostage, secured the suspect and cleared the remainder of the apartment.

“I had all officers return for a debrief and we were able to replay the scenario and watch Team movements around the apartment. We examined the pros-and-cons of the locations the Marksmen had selected, I asked them about their thought decision-making processes and provided an overall critique as we replayed the entire scenario utilizing V.I.C.E.’s After Action Review.

“Using this basic scenario, I then had all Marksmen return to their respective Student Stations as I moved the suspect to a more difficult location in the apartment and allowed them to attempt shots. I moved the suspect to the balcony, the bedroom, armed him at times, unarmed him, and even armed the hostage (turning him into a suspect.) The varying possibilities to change this one basic scenario were almost limitless. I added the entry team working scenarios in the hallway as the Marksmen looked for the suspect hiding the in the apartment. I unexpectedly had the suspect walk into the hallway and surprised the officers covering the door and a fire fight ensued. I then was able to add another hostage and placed both hostages at the window with the suspect presenting only a portion of his head for a shot. Later, I had the suspect move the hostage out onto the balcony in the classic hostage-taker position and allowed Marksmen to attempt this difficult shot.

“I was amazed by the breadth of scenarios I could create, and the amount of information that I was able to provide in a brief amount of time. I was able to explain, demonstrate, and then have the officers perform many complicated tactics that would have taken me hours in the classroom and range to teach. All officers commented that this was some of the most worthwhile and valuable training they had received, and many of them stayed behind and assumed the role of Entry Team as I instructed the next Marksman Course.

“V.I.C.E. is the most significant instructional tool currently available that I have encountered to provide cognitive skills training in communication, decision-making and engagement training.”