

Case Study:

IED Training with V.I.C.E. - “Training the brain”

The Virtual Interactive Combat Environment (V.I.C.E.) is a scalable Commercial Off-The-Shelf (COTS) product designed to train cognitive skills needed by military, homeland security, and law enforcement personnel in confronting and resolving potential and actual conflict scenarios within urban environments. V.I.C.E. enables initial and sustainment training of individual and team skills associated with the Tactics, Techniques, and Procedures (TTP) of squad and fire team maneuvering and engagement; supporting various situations from large scale conflicts in an urban operations environments, to small 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 an ideal training system for teaching the proper Tactics, Techniques, and Procedures (TTPs) when reacting to Improvised Explosive Devices in the field. In 2007, V.I.C.E. was evaluated for its effectiveness in training of the 39&9/40&11 Warrior Tasks and Battle Drills used in Infantry training by the Army at Fort Benning, GA. During the evaluation, CPT Jesse Beaudin from Fort Benning said, “[V.I.C.E. has] outstanding potential as an IED training system for the detection and defeat of IEDs. [V.I.C.E. is] currently unmatched in IET (Initial Entry Training).” He goes on to say that “V.I.C.E. excels at training on how to react to IEDs at the Team and Squad Level. [V.I.C.E.] allows us to easily train in any type of environment. V.I.C.E. improves the soldiers’ Situational Awareness.”

At Fort Benning, they are evaluating the unique advantages of the V.I.C.E. system to train soldiers to react to IEDs. The Afghanistan Village environment is used, and the fire team is instructed to move along a patrol route in a staggered column formation. The Drill Sergeant can then have the V.I.C.E. operator place an IED anywhere in the environment using different locations for each session, so the scenarios are dynamic and engaging and do not allow the students to be trained to the trainer and simply memorize the scenarios. The trainees can then be evaluated on their ability to follow the prescribed “5C” procedures (confirm, clear, call cordon, control). Upon detecting the IED the team will issue the Nine-Line UXO (Unexploded Ordnance) Spot Report and IED Report and the team will carry out the 5C tactics and procedures. Depending on how a particular team seems to be performing the tasks, or to reiterate a particular point, the Drill Sergeant may insert any number of subsequent IEDs into the scenario until the team is performing to task standards.

V.I.C.E. allows for the rapid modification of the training environment by the Instructor/Operator, allowing him to change the scenario for a variety of training requirements. V.I.C.E. allows any object to be used as an IED, and has been developed to train the soldiers' Situational Awareness in all circumstances and environments. IEDs can be unexploded artillery rounds wired together, explosives strapped to a human being, explosives hidden in animal or human carcasses, explosives buried in the ground or in garbage, explosives hidden in a parked vehicle, etc. Almost anything can be used to enhance the development of an acute sense of environmental awareness in the soldiers. The Instructor/Operator has the ability to detonate the IED or set a proximity to the device for detonation. V.I.C.E. can also be used to train soldiers' awareness of suspicious civilian behaviors. A synthetic civilian can easily be scripted to crouch along the side of a road, drop something, and then leave rapidly. In the future, a synthetic Explosive Ordnance Disposal team will move in and dispose of the IED.

V.I.C.E. training prepares the soldiers' minds to be confident in difficult situations. Mistakes are going to be made, and V.I.C.E. provides a learning environment to make them in, before those mistakes have deadly consequences. V.I.C.E. trains soldiers for the situations they are going to face in Iraq and other regions of conflict. Using V.I.C.E., trainees can work out the deficiencies in their tactics and procedures. Encountering a real life IED requires everyone involved to act and react appropriately as an individual, a team, and a squad. V.I.C.E. trains important communication skills to soldiers as individuals, teams, and squads.

In a recent interview published in The Bayonet (a Fort Benning news publication) CPT Beaudin is quoted saying, "If I were still a company commander, I'd use this from day one to the end of week 14. I believe I can train a Soldier five times, [no] 10 times faster with a tool like this. And there is no other tool like this. Every unit should have one." (Source: http://www.thebayonet.com/articles/2007/08/29/news/top_stories/top03.txt)