



StressVest: Next Step in Force on Force Training

by Richard
April 2nd, 2012

StressVest™ INC is looking to revolutionize force-on-force training for law enforcement officers by eliminating many of the traditional problems associated with Simunitions, paintball and airsoft training. The StressVest concept is simple, but the execution would appear to be a real work of technological art.

Force-on-force training is where officers to use some type of simulated or altered firearm to work directly against human role players. Think of it as more advanced “cops and robbers” you might have played as a kid. This allows trainers to introduce more realistic training scenarios than are possible with video training systems.

Many agencies use Simunition gear, which allows you to convert your duty weapon to fire a small paint marker. The marker causes varying degrees of pain (how close were you?) and clearly indicates who was shot or not.

There are drawbacks to using Simunition equipment. First is cost: it ain't cheap feeding guns with Sim rounds. Second is safety. There have been unfortunate incidents when a firearm loaded with real ammo made its way into the training area. Officers have been killed when their partner was using a gun they *thought* was converted to Sim rounds.

One of the other disadvantages to Simunition training is the use of protective equipment. Because Sim rounds are relatively high velocity rounds, they can leave significant bruising and even break the skin. So, wearing a full face mask is a must. This means that your face, eyes and ears are all covered when going through exercises. While this may simulate perceptual narrowing, it is a real pain in the arse when you are just trying to talk to someone in a scenario.

Oh, and don't get me started on germ swapping when officers are sharing those masks.

Other agencies are using airsoft guns, which will not fire real ammo. Airsoft also tends to be cheaper than Sim rounds. The problem with airsoft is they tend not to be as realistic, and generally there isn't the same painful feedback when you are hit.

This is where StressVest comes in. StressVest uses a eye-safe laser to activate sensors on a vest panel worn by the participants. When the panel is “hit,” the vest will send a Taser-like shock to the user. Not enough to cause incapacitation, but enough to cause pain.

Plus, the vest can continue to send pain to that area that has been hit through the rest of the scenario. This allows the wearer to fight through the pain (simulating their wounds) and finish the exercise. This reinforces the concept of not giving up and staying in the fight.

Varying degrees of pain can be sent depending on how the trainers set up the system. For users just starting out, low levels are likely adequate. Officers with a greater deal of experience in using the vests can be given greater degrees of pain stimuli. The idea is to make sure the officers do not get “comfortable” with being shot.

Good news for the role players: the signal can be a vibration instead of pain, meaning that welt-covered bodies from being repeatedly shot at close range are a thing of the past.

The vests also appear durable:

There are a wealth of other possibilities with the StressVest. The video above shows the vest being used to simulate the dominant arm being rendered useless and what happens to a team when an IED goes off. Heck, they even have suicide bomb vests if you are training for such environments.

MSRP on the StressVest products isn't cheap: about \$3900 for a pair of vests and about \$200 for pistol conversions. You are likely to get better pricing if you buy a group of them. Plus, it looks like the price is a fixed expense – in other words, you are not having to go back to them every time you want to order up more of their “ammo”.