

Weapons for Today's World May Not Require 'Perfection'

City Police, 'World's Sheriff' have different needs when it comes to Non-Lethal weapons

by Jeffrey J. Hinkle

Industry officials interested in manufacturing non-lethal weaponry should be prepared to tailor their marketing strategies to the defense and law enforcement markets.

Their needs, in most cases, are different.

This was one recurring theme at NDIA's third annual Non-Lethal Defense Conference conducted recently in Laurel, Maryland. The conference brought together an international assembly of military leaders, law enforcement officials, and industry representatives.

One military official described what he believed to be the futuristic ideal: a mobile, high tech "kit of capabilities" enabling a soldier to respond in nano-seconds, lethally or non-lethally—depending on the situation. He called this the "Starship Trooper approach."

High tech perfection, however, is not necessarily the requirement when it comes to law enforcement.

"We're desperately seeking better tools," said Lt. Charles Heal, Los Angeles Sheriff's Department. "In fact, we are passionate about this. But I tell industry people all the time: 'If it doesn't work right now—right away, I'm not that interested in it,'" said Heal.

"They try to sell us what they are marketing to the Defense Department. It's bells and whistles to us. We don't care if it's state-of-the-art," he said. "As long it's better than what we have now."

Both law enforcement and the military are aggressively seeking non-lethal means to deal with mounting world tensions. In a world where a television camera is never far away, officials are asking industry to provide effective methods of dealing with unruly crowds, stone-throwing mobs, human shields, and dangerous individuals.

Wyatt Earp

David Boyd, director of science and technology for the National Institute of Justice—an arm of the Department of Justice, said that what law enforcement has now is very limited. "Not much has changed since the days of Wyatt Earp. We have to talk, beat, or shoot an assailant into submission."

The mistake manufacturers make, said Boyd, is assuming military and law enforcement standards are the same. "They're not. The military standard is to minimize collat-



Net launchers, which come in several sizes depending on the task at hand, offer a non-lethal capture alternative for both soldiers and law enforcement officials.

(GETEC America Corp. photo)

eral damage. In law enforcement, the standard is to completely eliminate collateral damage. The military makes the mission first priority. Our first priority is innocent bystanders."

Available funding was cited as the biggest contrast when it comes to law enforcement and less-than-lethal weapons.

"We assume that we can't afford the 'perfect solution,'" said Boyd. Safety and funding issues intersect, Boyd said, because municipalities face costly liability concerns should their non-lethal capabilities turn lethal.

"I've had city attorneys tell me that they would rather see an officer shoot-to-kill rather than shoot-to-wound, because a disability suit is much more expensive than a wrongful death suit," said James K. Stewart, former director of the National Institute of Principal Justice.

Increasingly, the arena that the modern

soldier faces looks more and more like that of the police officer. Several Defense Department officials cited urban battlegrounds as the catalyst in the move towards non-lethal weapons.

Dr. Clarence Kitchens, director of weapons technologies for the office of the secretary of defense, said the "United States has quickly become the 'world's town sheriff.' Urban warfare of tomorrow will look a lot like crime does today. Consequently, cops and Marines talk a lot about learning from each other."

One official's estimate suggested the world's population will increase by 45 percent during the next 25 years, and the majority of that increase will be in urban areas.

"Our soldiers will face an asymmetrical

environment," said Lt. Gen. Martin Steel, USMC, deputy chief of staff, plans, policy, and operations. "It will not be the equivalent of past battlefields. It will be something we have not faced in the past, but it will be similar to the challenges now faced by the Department of Justice. We are on the front edge of a whole new concept of warfare."

Gen. Steele said a commitment must be made now to "never use non-lethal force without the threat of lethal force to back it up." Future weapons must be adaptable to a variety of situations and requirements, "but leave small enough footprints to enhance mobility."

Col. Andrew Mazzara, USMC, director of the joint non-lethal weapons directorate, said that recent missions in Haiti, Somalia, and Bosnia reinforce the need for clearer policy and procedure in the area of non-lethal weapons.

"We need to address the education issue,"

said Col. Mazzara, "from the foot soldiers all the way up to the four-stars. People don't fully understand. We need to get the word out about what these weapons can do.

"Somewhere along the way, all the focus was placed on the tactical level—but without strategic involvement, you have a two-legged stool," he said. "When to employ non-lethal weapons and what to employ needs to be addressed."

Ugly Head

Col. Mazzara also called for the establishment of better training and an improved exchange of information—not just with the services, but with foreign allies as well. He would also like to see a consensus develop as far as which non-lethal weapons are worth exploring.

"A few years ago the Marine Corps used sticky foam in their training videos for Somalia. Now sticky foam keeps rearing its ugly head. We used it to reinforce barriers, but that was where the benefits stopped. It has no other application. It has

too many problems," he said.

Col. Mazzara said that, instead, during the next five to seven years, the Pentagon will place 29.7 percent of its non-lethal R&D budget on kinetic technologies—those weapons that pack a punch and 24.4 percent of the budget on acoustic weapons—those that produce painful or unpleasant frequencies or soundwaves.

Defense Department officials classify both acoustic and kinetic weapons as "crowd control tools." One promising kinetic weapon is an upgraded claymore mine. The mine—which is preferred because of its universal recognition—is stripped and rebuilt with rubber balls. The universal recognition offers deterrence. Should that deterrence fail, the impact of the balls disperses a crowd quickly and without bloodshed.

Vehicle stoppers are another technology of interest to both military and law enforcement. Microwave transmitters can disable a vehicle's electronic system thereby freezing it in its tracks. Also of interest is a portable

speed bump, which—through remote activation—quickly erects an aircraft-carrier-like-net capable of stopping a 5,000 pound vehicle traveling up to 48 mph.

An individual fleeing on foot can be stopped in a similar method thanks to a hand-held net launcher. A nylon net ejects and drapes the target like captured prey in a Wild Kingdom rerun.

Stingballs, malodorants, entanglements, electric taser-shockers, and dye-markers are also being explored. All offer non-violent solutions to potentially-combustible situations.

Several officials—both from the Pentagon and law enforcement—praised those solutions as necessary in the world where CNN shares the battlefield.

As Bengt Wigbrant, National Defence Research Establishment, Sweden said while he displayed a photo of a cherubic young girl from a recent Bosnian peace-keeping effort: "It would not look good on TV to see this little girl spinning around on the ground caught by a water-cannon." ■

Anatomy of a Policy: How the Clinton Administration Rationalized Non-Lethals

Although different aspects of non-lethal weapons have been explored by different branches of the government for two decades, it was the Clinton administration that first developed an actual "official" policy concerning their use.

Charles Swett, one of the principal architects of that policy, shared its development at NDIA's Non-Lethal Defense Conference in Laurel, Maryland.

Swett, who is assigned to the office of the assistant secretary of defense for special operations/low intensity conflict, outlined the many considerations that had to be addressed before a position could even be adopted.

He said there was resistance early on to any policy regarding non-lethal weapons. "Some people asked, 'why do we need a policy? We don't have a policy for tanks. We don't have a policy for rifles,'" said Swett. "But a policy does exist for nuclear weapons."

The need for weapons policy is not determined by the scale of potential destruction, rather, he said, the "strategic and political significance" of an arms system determines such requirements.

"Non-lethal weapons qualify," he said. "[They] have great strategic value particularly when used in conjunction with other conventional weapons. They can reduce the human and political costs of a conflict. They can strengthen deterrence. And finally, they can help the United States take

the lead in advanced technology."

It was these tenets, said Swett, that convinced the administration to go forward with the formulation of a policy regarding the use of non-lethal weapons.

One major goal of the plan was to eliminate early fears that such weapons violated international arms treaties.

Policy makers also had to decide early on how prominent a role these weapons would play in the Pentagon's efforts. A high profile role could offer deterrence, but it could also accelerate enemy countermeasures. When and which weapons would be used was another consideration.

Certain weapons—like toxic chemicals and blinding lasers—were eliminated early on.

Another option eliminated early in the process was the notion of human testing. Swett said that it was made clear from the beginning that no human experimentation—such as the government's Tuskegee Institute syphilis research in the 1930s—where African American soldiers with the disease were left untreated to measure its effects—or the LSD testing of the 1960s—was to be conducted. "We did that not because of the political sensitivity, but, more importantly, because it's right," said Swett.

An eight-page analysis of national security policy of non-lethal weapons was then submitted for review by, not only the government agencies involved, but the foreign

community as well. After feedback was received from those sources a formal policy was drafted.

Defense Department Directive 3000.3—"A policy for Non-Lethal Weapons" was unveiled by then Deputy Secretary of Defense John P. White July 9, 1996.

The directive defined the weapons as those that have "relatively reversible effects on personnel or material." It also outlined principles which would govern their use, namely: Non-lethals will "discourage, delay, or prevent hostile actions and limit their escalation."

The principles also said weapons "must achieve a ... balance between the competing goals of having a low probability of causing death ... and a high probability of having the desired anti-personnel or anti-material effects."

Swett said the directive made clear the United States was under no obligation to use non-lethals—nor was there to be any hampering of a commander's authority to take what is deemed as "appropriate action in self-defense."

No policy is perfect, Swett said. "We anticipate criticisms from people," he said. From the left of the political spectrum, officials fully expect to hear complaints that such weapons ultimately make war more likely and that they are inhumane. From the right, they anticipate an argument that these weapons risk soldiers lives and belie a lack of resolve. —J/H