

Los Angeles Times

THURSDAY, MARCH 21, 2002

Brothers Stunned by Their New Success in TASER Trade

Security: Since Sept. 11, the weapons no longer are just obscure law enforcement devices. United Airlines bought 1,300 units for its fleet.

By JULIE CART, TIMES STAFF WRITER

SCOTTSDALE, Ariz. - If fear of domestic terrorism threatens to transform America into an armed camp, Tom Smith and his brother want to be the ones to arm it.

The Smiths run TASER International, the world's leading manufacturer of stun guns. The TASER® has in recent days ceased to be an obscure law enforcement device and is poised to make it big, selling to consumers and private security companies, and now the airline industry.

The brothers, after nearly a decade of financial woes and legal battles, are ready to cash in. Sales since Sept. 11 have increased 167%. The company just filled an order for United Airlines for 1,300 TASERs. The carrier wants to place the stun guns in the cockpits of its 600 jetliners. Over-the-counter sales to the public are suddenly brisk, and the company is planning its first mass advertising campaign. With few restrictions on their sale, stun guns soon may become for today's security-conscious citizens what pepper spray was 20 years ago.

Smith can hardly fathom the company's transformation. "There were times we paid our payroll on credit cards," he said. "And those were all maxed out."

Smith and his brother Rick--both former medical students--picked up the shards of a defunct business in 1993 and began making TASERs after two friends were shot to death in a road rage incident. The murders made them think about personal safety for the first time.

The more they investigated, the more clear it became that there was a void in the market for those who didn't want to use a firearm for self-defense. The answer, they found, was a stun gun, which subdues its target for as long as 90 seconds by emitting powerful electrical shocks that overwhelm a person's central nervous system.

The Smiths decided to get into the business. The first thing they did was seek out the retired NASA scientist who invented the technology for the TASER in the '70s. The scientist, Jack Cover, remembered a stun gun he had read about in the Tom Swift fantasy stories of his youth. He even created the acronym TASER from "Thomas A. Swift Electrical Rifle."

Rick Smith, newly graduated from Harvard, paired with Cover full time to update and refine the technology. Tom Smith, with an MBA from Northern Arizona University, held down a day job and at night worked on structuring the company.

The first order of business

was to change the TASER's triggering mechanism. The old model used gunpowder, so it was classified as a firearm, which required a license to buy--considered off-putting to some consumers. To reach a broader market, the Smiths adopted a new system using compressed gas.

That accomplished, the brothers hired an electronic engineer and gave him the task of designing a prototype. It took a year.

Looking much like a conventional handgun, the barrel of a TASER is fitted with a special cartridge. When the trigger is pulled, compressed nitrogen propels two metal darts at 100 mph. Once attached to the target, the probes send out an electrical charge that the

company says penetrates up to 2 inches of clothing or padding.

The TASER incapacitates a person by emitting pulses of electricity--50,000 volts--that override the person's central nervous system. The shocks are discharged in extremely short bursts and last a total of about five seconds. Someone subdued by a stun gun falls to the ground, muscles convulsing, with no body control.

While there are a handful of companies around the world that make stun guns, each uses unique technology.

During development of the TASER, money was streaming out of the company and none was coming in. The investors--the Smith brothers, their father and his friend--were taking a beating.



TASER International is the leading maker of stun guns such as the one pictured. Sales have increased 167% since Sept. 11.

Modern Self-Defense

Tasers purchased by United Airlines for use in cockpits are similar to the model used by law enforcement personnel, as described below. The model available to the general public is less powerful and has a shorter firing range.

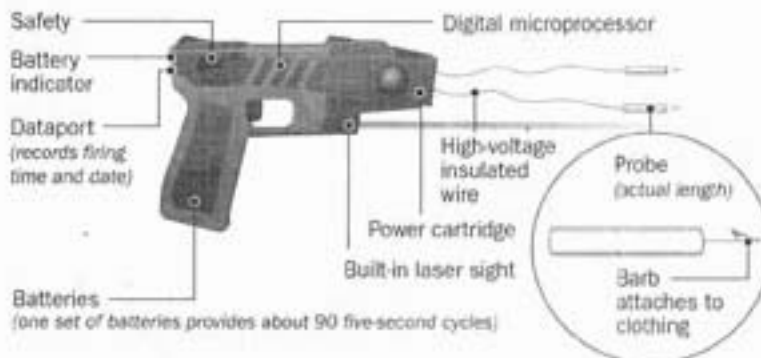
The Weapon

Maximum range: 21 feet

Weight: 18 ounces
(including batteries
and power cartridge)

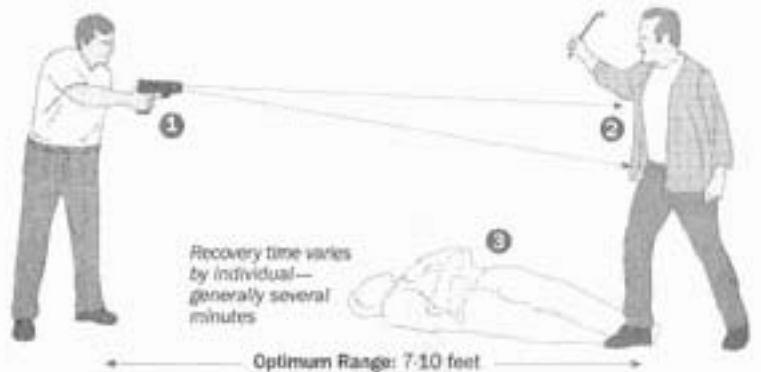
Probe speed:
180-200 feet per second

Power:
Electrical impulses can
penetrate 2 inches
of clothing



How It Works

1. Probe fired by compressed nitrogen.
2. Electrical impulses, 15 to 20 per second, overpower sensory and motor nerves.
3. Person targeted loses neuromuscular control. Shocks last about 5 seconds and can be re-administered.



Source: Taser International; graphics reporting by TOM REINKEN / Los Angeles Times

PERRY PEREZ, R. TORO / Los Angeles Times

“From 1993 to 2001, we only had two months where we had the end-of-the-month payroll covered at the start of the month,” said Tom Smith, 34. “I can tell you, that’s a tough way to live.”

Just about the time the company and its new product were ready to enter the all-important law enforcement market in 1995, the Smiths hit a snag. TASER International and another company, TASERtron, had licensing agreements with Cover, who holds patents on much of the technology.

The TASERtron company believed it had secured exclusive rights to market its product to law enforcement and the military. TASER International believed it had an unrestricted license to sell to anyone.

TASERtron filed suit. Smith said he didn’t have enough money to fight back, leading

the two companies to agree that TASER International would stay out of the law enforcement and military market until February 1998.

“We didn’t worry too much because we thought the consumer market would be pretty good,” Smith said.

Their early, low-power model, Air TASER, was sold at stores such as the Sharper Image. But Smith discovered that consumers would not buy TASERs until they were used and endorsed by police officers.

Shut out of the market that would give it credibility, the company foundered. To save money, the Smiths moved manufacturing to Mexico, and cut their work force from 80 people to 12.

In the midst of that financial morass, the Smiths made what proved to be a disastrous decision: producing

the Auto TASER, essentially an electrified “Club” steering wheel lock.

“No one bought it,” Smith said, still mystified. “My brother started calling it the Bearded Lady: Everyone wanted to look at it and no one would take it home.”

Three times the company appeared headed into bankruptcy.

Then, as if to confirm the brothers’ rotten timing, just as they prepared to take the company public two years ago, the bottom fell out of the dot-com world and venture capital dried up overnight.

“We were meeting with people just as Nasdaq fell. We had to pull brokers from under desks to talk to us,” Smith said.

Still, they prevailed. TASER’s stock rose 180% in its first year. This week, it surged 13% after an analyst touted

the company in a business publication.

Smith said the attention from United’s purchase has caused the company to accelerate plans to move strongly into the consumer market. Now available in fewer than 100 stores nationwide, the company expects TASERs to be sold in an additional 500 stores by the end of the year.

The consumer model costs about \$120; the law enforcement model about \$600.

TASERs are standard issue for more than 1,000 police departments around the country, and the Smiths now dominate the market they once were forbidden to explore.

“After Sept. 11, the phones have been ringing off the hook,” said Jason Woodside, owner of the International Spy Shop in San Francisco, which sells two models of TASERs. “A lot of guys buy them for their wives before they go on trips. I’ve sold a few to jewelry store owners. For people into self-defense who are not comfortable killing people, this is the thing.”

From a nondescript suburban industrial park here, the 1-pound weapons are shipped to customers in 60 countries. The Smiths’ work force, made up entirely of Serbian war refugees relocated here by church groups, each day turns out about 150 TASERs and thousands of rounds of ammunition cartridges.

The company projects record sales of about \$12 million this year.

“We knew there was a market out there,” Smith said. “There were many nights when Rick and I were here, filling orders at midnight and drinking beers, saying, ‘What are we doing?’ There were some dark days. I guess it’s all been worth it.”

TASER® is a registered trademark of TASER International, Inc.