JAN 181976 SFChronicle MES MUSC IT The Stun Gun -Do We Need **Another Weapon?**

By Fred Ferretti New York Times

ITS INVENTOR, its manufacturer and its salesmen call it "the first alternative to the gun." Press its twin triggers and a charge of gunpowder ignites, firing two missiles that will strike your assailant (or your victim) and cause him to fall virtually senseless, his muscles thrown into uncontrollable spasms by a supercharged jolt of electricity. It stuns without killing. The pain and injury it inflicts are supposed to be transitory, over in minutes.

Its very name, Taser, is one of those concoctions of technology and romance that we seem to dote upon, like the laser, which nearly cut James Bond in half in "Goldfinger," and the fanciful Phaser, with which "Star Trek's" Captain James Kirk dispatches weird foes to other galaxies. Its full names are the Taser TF-1 and the Taser Public Defender. In the nine months that have passed since it went on sale to the public, more than 2000 of the

"The response to the Taser leaves little doubt that it has fascination for us in these times obsessed with security."

\$199.50 weapons have been pur-chased by housewives, salesmen, schoolteachers, students, security guards, storekeepers and even offduty policemen, presumably for protection against robbery and assault. And in fact the Taser has been used on at least two occasions in New York City to immobilize attackers.

Not everyone agrees that the Taser is as benign a weapon as its marketers have claimed, however, and it has become the focus of some controversy. Most obviously, a weapon that can be used to protect against crimes can also be used to commit them, and Tasers have been used by the perpetrators of robber-ies and muggings in Florida, New York City and New York's Nassau county. Furthermore, some medical county. Furthermore, some medical experts charge that the Taser's effects may actually cause serious injury or even death, particularly if its shock is felt by children, old people, or people with heart or neurological conditions. California has ruled that the Taser is a firearm

and has demanded that each one sold be registered.

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THE TASER is a squared-off flashlight-like device. As a matter of fact, the top portion of its face ter of fact, the top portion of its face is a flashlight. Below the light are two pluglike cassettes. Within each cassette is a dart — resembling a straightened-out fishhook — at-tached to 15 feet of fine wire, coiled for easy release. Atop the molded plastic case are triggers that turn on the flashlight set off the gunpowder the flashlight, set off the gunpowder charges that fire the darts, and release the electric current. It is small, only nine inches long, and weighs about one pound, five ounces.

Its power is generated by tiny batteries similar to those used in computers. Their normal output is 8 watts and 7.5 volts, but a powerful transformer within the Taser generates 50,000 volts when a trigger is pressed. This jolt, sent through the wires into the darts, which have been shot into the skin or clothing of the victim, cause him to become "Tasered.'

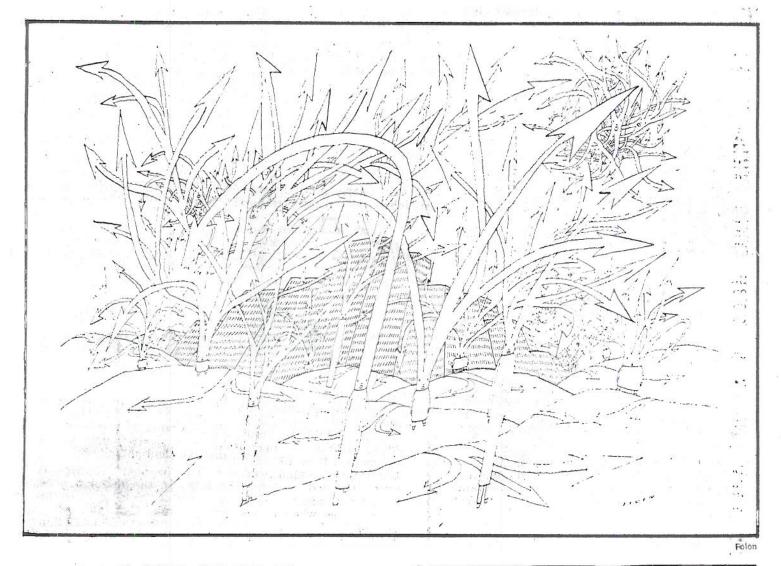
The darts need not pierce the skin to be effective. If they stick into a coat or a jacket, the enormous amount of voltage that can be applied by trigger pressure will cause an electrical spark to leap one and a half inches and send the jolt — also called a "zap" — into the body.

With its range of only 15 feet, the Taser cannot be aimed with preci-sion. The user should aim for the torso, for the darts will often hit as much as two feet apart. The Taser much as two feet apart. The Taser has little muzzle velocity, and the force of the darts is retarded because they remain attached to the wires. Their impact, apart from the electric shock, has been compared to that of a Ping-Pong ball.

A conventional gun is faster, more accurate and more deadly than a Taser, but if Taser darts should strike someone holding a pistol, the gunman would be ren-dered helpless and his loss of muscular control would cause him to drop the gun. A shot from a Taser can immobilize an attacker in less than three seconds, and once the darts have attached themselves to his body or clothing, repeated charges can be jolted into him by simply pressing the Taser's trigger.

THE TASER'S promoters adver-tise it as "the first effective

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means of defense that does not destroy living tissue or vital organs. If you fire the Taser at a fellow human, you're not left with irrevocable consequences the rest of your life. The Taser does not depend upon physical force to achieve its effectiveness."

It works "on the principle that the myriad of nerves that lace through the body function as an electrical system. These nerves activate the muscles and send messages to the rest of the body.

"When the Taser's electrical force is powered into the body, it generates an electrical current that dominates this existing neuromuscular system. When an attacker has

been 'Tasered,' the muscles in his body involuntarily contract; he is virtually helpless and may experience pain. With most guns, a bullet must hit a vital organ before it can completely immobilize an attacker. That's why a man can be shot in the shoulder or leg or even chest and continue to attack. But if that same attacker were contacted with high voltage electrical energy, the uncontrollable muscle spasms would immobilize him. No matter how big or strong. Or whether he is under the influence of drugs or alcohol."

THE TASER, which received patent number 3,803,463 in April 1974, was devised by a man named John H. Cover of Palos Verdes,

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S.F. Sunday Examiner & Chronicle, Sunday Punch, January 18, 1976

Calif. Cover, a 1960's space-technology engineer with the federal aerospace program, had toyed repeatedly with the idea of building an ⁵ electronic rifle much like the ones ⁶ Buck Rogers and Flash Gordon used ⁶ to sling over their shoulders. The ¹⁷ patent, however, was for an electric ¹ "hand-held immobilizing" weapon. ¹⁷

In concept, the device is not really all that revolutionary. In 1852 someone applied for a patent on an U electric harpoon whose cables would j be attached to the copper undersides t of whaleboats. And 100 years later, 1 one Thomas D. Ryan applied for a patent on an electric gun that would produce heart stoppage as well as electric shocks. In 1957, patents for electric spears, arrows and lances with self-contained power sources were filed. Cover drew on these concepts as well as on his own research and came up with the idea of the flashlightlike electric gun. The patent was bought by Alvin Simon, president of Advanced Chemical Technology of City of Industry, Calif., and Taser Systems, Inc. became its subsidiary with Cover as president.

From 1971 to 1973 the Taser advanced towards production with the idea that it might become a piece of basic equipment on the country's airlines to combat hijackings. But when the airlines began to rely on electronic searches, they lost interest in the Taser, says Simon, so it was developed as "the alternative to the gun."

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WHO BUYS Tasers? And why? Vernon H. Juergens of Carroll, Iowa, president of a poultry consultant group, bought two. "My daughter goes to school at UCLA. The school's all right, but I don't think too highly of the area around it in terms of crime. At first, I gave her a regular gun. Then a doctor friend mentioned this new kind of gun. It was a much better idea.

"You know, with a gun, if a defender injures the attacker, under our system he can be brought to court. If my daughter had to use a gun — well, I think I'd rather she defend herself than not. But I think it would be a devastating thing to live with the thought that you'd killed someone. So the Taser seemed ideal. It doesn't take accuracy. It will stop you even if it hits your arm. If it's taken away the attacker cannot use it back to injure my daughter or kill her."

A New York City policeman bought a Taser for his personal use off duty, and a doctor with an office in what he called a "bad" part of Brooklyn bought one to be prepared, he said, for break-ins and drug-theft attempts. A woman who makes her living taking jewelry to trade shows around the country — often as much as \$100,000 worth — bought three Tasers because, she said, "How could you use a pistol in crowds?".

A middle-aged woman who lives alone bought one to keep on her night table, and a young couple bought a pair of Tasers — His and Hers — before leaving their home in Massachusetts for a honeymoon trip to Central and South America.

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THE RESPONSE to the Taser on both coasts and at points between leaves little doubt that it has fascination for us in these times when we are becoming obsessed with security. There is likewise little doubt that a lot of people are accepting the claim that it is a true — albeit limited — alternative to the gun and that interest in it' is growing.

Last summer, for example, Senator Edward M. Kennedy of Massachusetts, long an advocate of gun control, wrote one seller concerning the Taser. "Can a child easily operate the weapon or are there any safety devices to prevent accidental discharge? What , are present restrictions on the sale of the Taser? What is the general price range of the Taser on the retail market? What proportion of sales have gone to law enforcement agencies? Retail outlets? Are you familiar with any studies made to determine the effects of the shock on children? The elderly? Persons with heart conditions?"

Had the Senator not accepted the Taser's premise that it is a positive alternative to the gun, he might have asked some more basic questions. My son and daughter asked them of me one evening as we spoke of the Taser during the course of my research into it.

Why is there a need for the Taser? Why is there a need for an alternative to the gun? Isn't the Taser just another gun? And why do we *need* another gun?

I really couldn't give them an answer that made a good argument for the Taser, for they were right, I guess. A gun is a gun is a gun, no matter what it is called.