

The Voice on the Radio

with [Melissa Mann](#)

Police History: How a NASA scientist invented the TASER

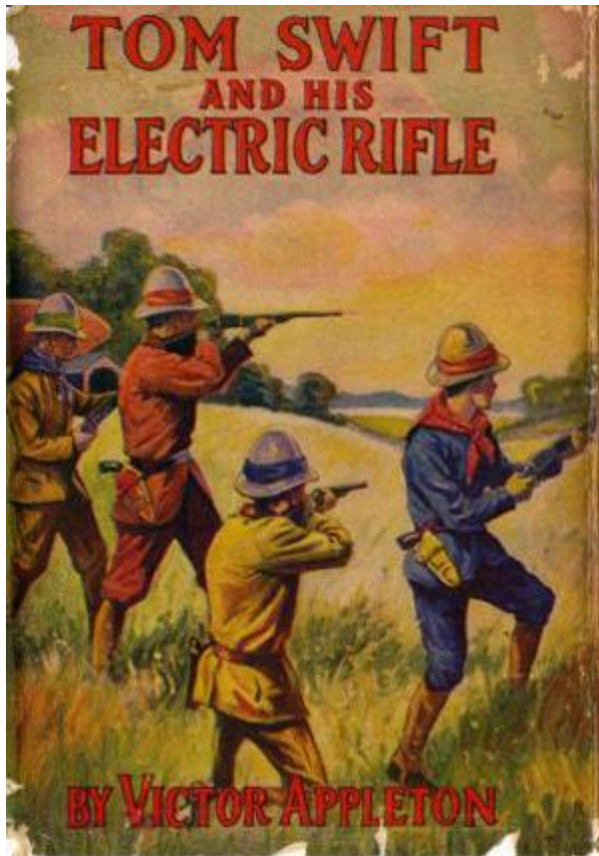
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One of the biggest challenges among law enforcement agencies is to determine the best suited tactic to swiftly and efficiently gain control of suspects who are resisting or being non-compliant. Often times, pain compliance tools such as OC spray are not effective to individuals who are not affected by pain.

When hands-on tactics lead to increased resistance and a higher acidosis in both the suspect and officer which may lead to injury, research shows that use of an Electronic Control Device (ECD) is a viable option – minimizing the struggle by incapacitating the subject [without reliance on pain compliance](#).

[TASER](#) ECDs are found in more than 40 countries at 15,000 law enforcement agencies, with nearly 6,000 agencies deploying ECDs [as standard issue equipment](#).



The history of the TASER ECD dates back as far as 1911 during the publication of the 'Tom Swift' adventure stories. (WikiCommons Image)

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When you're in a stand-off confrontation, nonlethal weapons can often help you end it. But let's add in some important tactical lessons learned in recent years.

The Birth of the TASER

The electronic control device that is used today was invented by NASA aerospace scientist Jack Cover (who reportedly worked on the Apollo moon landing program), who experimented with using electricity [as a non-deadly weapon](#).

The history of the TASER ECD dates back as far as 1911 during the publication of the 'Tom Swift' adventure stories. The children's book series featured the "Thomas Swift Electric Rifle" from which the name TASER was derived. The acronym "TASER" came about in 1976 because creator Jack Cover became tired of answering his phone and spelling out "T-S-E-R." Cover added the A to create the name TASER, an acronym which any law enforcement industry personnel will recognize even today.

During the 60s, patrolmen were known to carry electronic cattle prods as "shock batons" for crowd control. Use of these devices eventually led to public outrage and accusations of discrimination and cruelty. Inventors rushed to find a suitable less lethal weapon replacement which included ideas such as a long range electrical Supersoaker and an air gun with electrode needle projectiles. Neither weapon was successful.

During the summer of 1965 just before the Watts riots broke out, President Johnson ordered a study of "free society" and associated crime trends. The completed study recommended techniques for handling unruly citizens. The study stated that patrolmen were to have a "non-lethal" method of incapacitating a criminal which was efficient and had minimal risk for lasting injury.

Inspiration came for Cover after reading a newspaper article about a man who accidentally walked into an electrified fence and survived even though he was temporarily immobilized.

Cover's idea wasn't all that different than others which came before. Much like the electrode needles of the air gun, the TASER delivered a pair of electrode projectiles which are tethered to a gun through small wires. The projectiles deliver a high-voltage, low amperage pulse of electricity which could potentially [subdue a person without killing him](#). The TASER was patented in 1974.

The original version of the TASER used gunpowder as a propellant. As such, the government classified Cover's invention as a firearm which would limit its sales. Most law enforcement agencies were not convinced enough to implement the electric "firearm" among the troops. The device was considered more of a boutique item and was carried around in patrol supervisor's vehicles. Cover tried to sell his invention in any manner which he could. He even marketed the item to airlines as a protection device against airplane hijackers.

In 1993, two brothers teamed up with Cover to further the creation and improvement of the device. The "advanced" model of the TASER used compressed nitrogen as a propellant instead of gunpowder and was released in 1999. Police agencies slowly began to come around. Sales increased with the ability for the device to be freely [sold to the public](#).

A Safe Alternative

Founded in 1993, [TASER International](#) still markets a product based on the original invention by Cover. The TASER device is now considered a worthy tool that protects

officers from violent subjects and is a protection to subjects simultaneously. Other than scrapes and bruises, studies illustrated only minimal injuries over a three year survey conducted on six participating law enforcement agencies. A [full 99.75 percent](#) of shocked criminal suspects received only mild injuries.

All gathered data reflects that ECDs — although not completely risk free — result in reduced injuries to both officer and suspect when affecting an arrest with suspect resistance. Use-of-force claims and citizen complaints also reflected a drop in numbers [when an ECD is utilized](#).

More than 13,400 law enforcement agencies around the world use the TASER. 375,000 individual officers carry them on their duty belt in addition to more than 181,000 private citizens who carry them. The ECD is an exceptional less lethal option for today's police officer and will likely continue to be for many, many years to come.