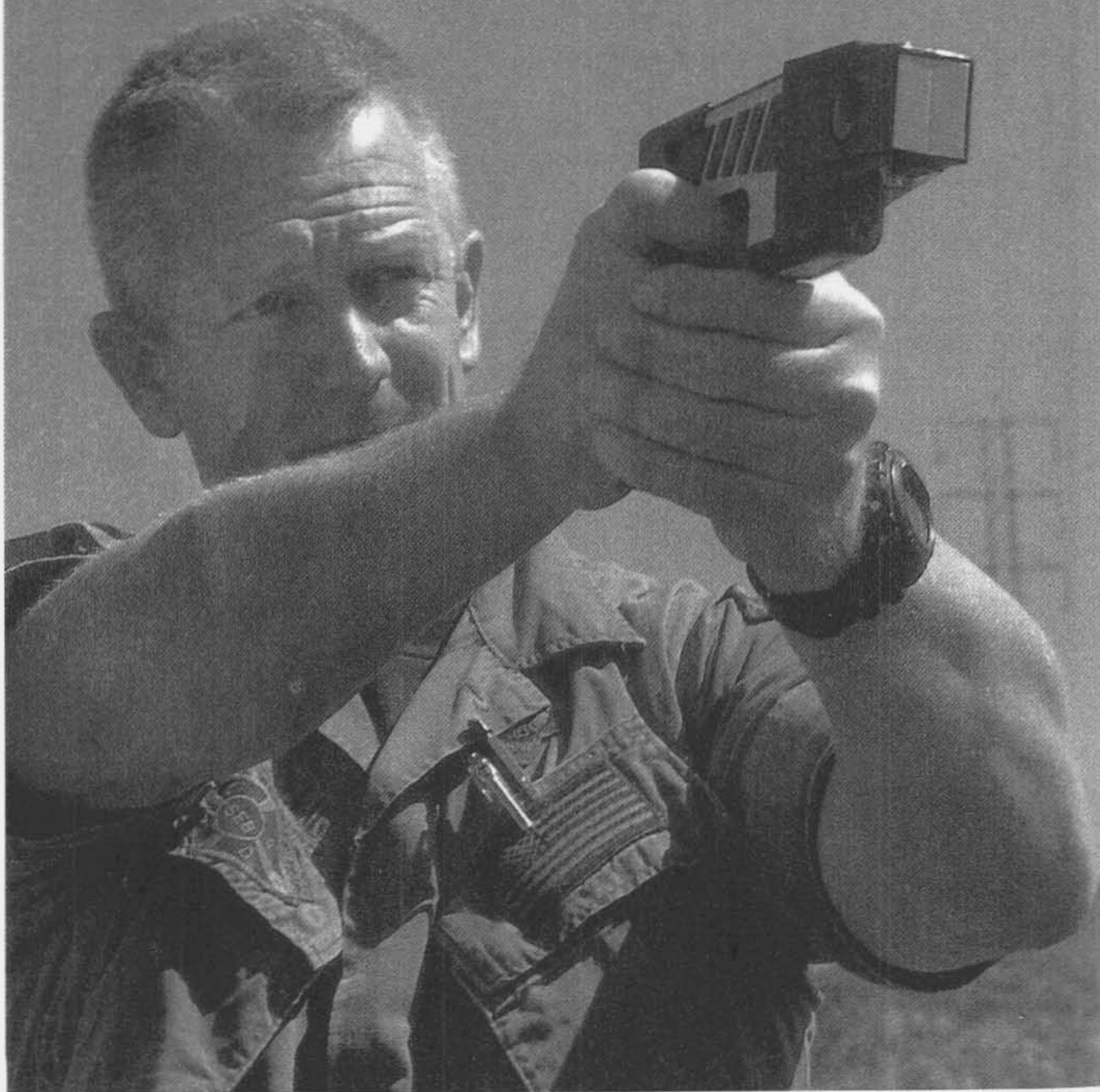


ADVANCED TASER M26

The Ultimate Less-Lethal Weapon?

BY EUGENE NIELSEN



TASER International® has introduced a revolutionary new less-lethal weapon, the Advanced Taser® M-series EMD weapon, that very well may be the most effective less-lethal weapon in the world today when used within its intended parameters. Unlike earlier TASER® and stun systems that operate in the five- to 14-Watt range, the Advanced Taser M-series uses an 18- to 26-Watt electrical signal. It completely overrides the central nervous system and directly controls the skeletal muscles.

The Advanced Taser sends out a series of electrical signals, called T-Waves™. The T-Waves are very similar to the electrical signals that are used by the brain to communicate with the body. The T-Waves cause an immediate, uncontrollable contraction of the muscle tissue that physically debilitates the target regardless of his or her mental focus or pain tolerance. TASER International refers to the patented technology as Electro Muscular Disruption, or EMD.

Prior to the Advanced Taser, all less-lethal technologies, including TASERs, have relied on some form of pain compliance, distraction or physical immobilization to control a subject. As any experienced officer can attest, they often fail to stop combative, goal-oriented individuals, and individuals under the influence of alcohol or drugs. When less-lethal weapons fail, all too often the only remaining option is an escalation to lethal force.

THE ADVANCED TASER

Three models of the Advanced Taser are available: the M18, M18L and M26. The M26, which is sold only to police and government agencies, has a 26-Watt output. All of the models are identical in their external appearance. The M18 and M18L have an 18-Watt output. S.W.A.T. was provided with an M26 for testing and evaluation.

Unlike other TASER designs, the Advanced Taser is designed to handle and function like a standard duty pistol, making the system intuitive and easy to use. It doesn't require the development of new motor skills. The operator aims and fires the weapon using the same muscle memory and motions that have

been instilled through primary handgun training.

The Advanced Taser is constructed of a proprietary polymer that is designed for maximum toughness. There aren't any moving parts to break. The ambidextrous safety is the only moving part on the weapon. The location and operation of the safety are identical to that of the Beretta M92/96F. Although it looks a lot like a standard firearm trigger, the trigger is a pressure switch that doesn't actually move. Total weight is just 18 ounces fully loaded.

The Advanced Taser is reliable and practically "cop proof." According to TASER International, it can withstand drops of over ten feet without damage. It has even survived being driven over by a 4,500 lb. vehicle! It should certainly withstand the rigors inherent in law enforcement duty.

To prevent the Advanced Taser from being mistaken for a lethal weapon, TASER International provides a user-installed, bright yellow color kit with the M26. With the color kit installed, the M26 looks like something out of Buck Rogers. Come to think of it, the electro-muscular disruption technology is like something out of science fiction—but it sure does work! If an agency desires, the M26 can be special ordered in a bright yellow polymer to overcome any "looks like a hand gun" objection.

The fin and blade sights on the Advanced Taser are similar to the iron sights on a standard duty pistol. The M26 and M18L also have a built-in laser sight to

augment accuracy. The laser also provides a warning to subjects, and can potentially de-escalate hostile situations without the weapon ever having to be fired. Taking the weapon off of "safe" automatically activates the laser.

The M26 is controlled by a digital microprocessor. An onboard memory records the dates and times that the unit is fired. A Windows® 95/98 compatible dataport allows the data to be downloaded to a PC using a special adapter cable. This feature, which isn't available on the M18 and M18L, enables a law enforcement agency to monitor usage patterns and protects (or proves) officers from any unfounded charges of misuse of force.

The dataport also allows the M26 to be fired remotely. This feature has a number of tactical applications. For instance, the M26 can be mounted on a tactical surveillance system, such as a SEARCHCAM®, for use during tactical entries or on robotic entry vehicles.

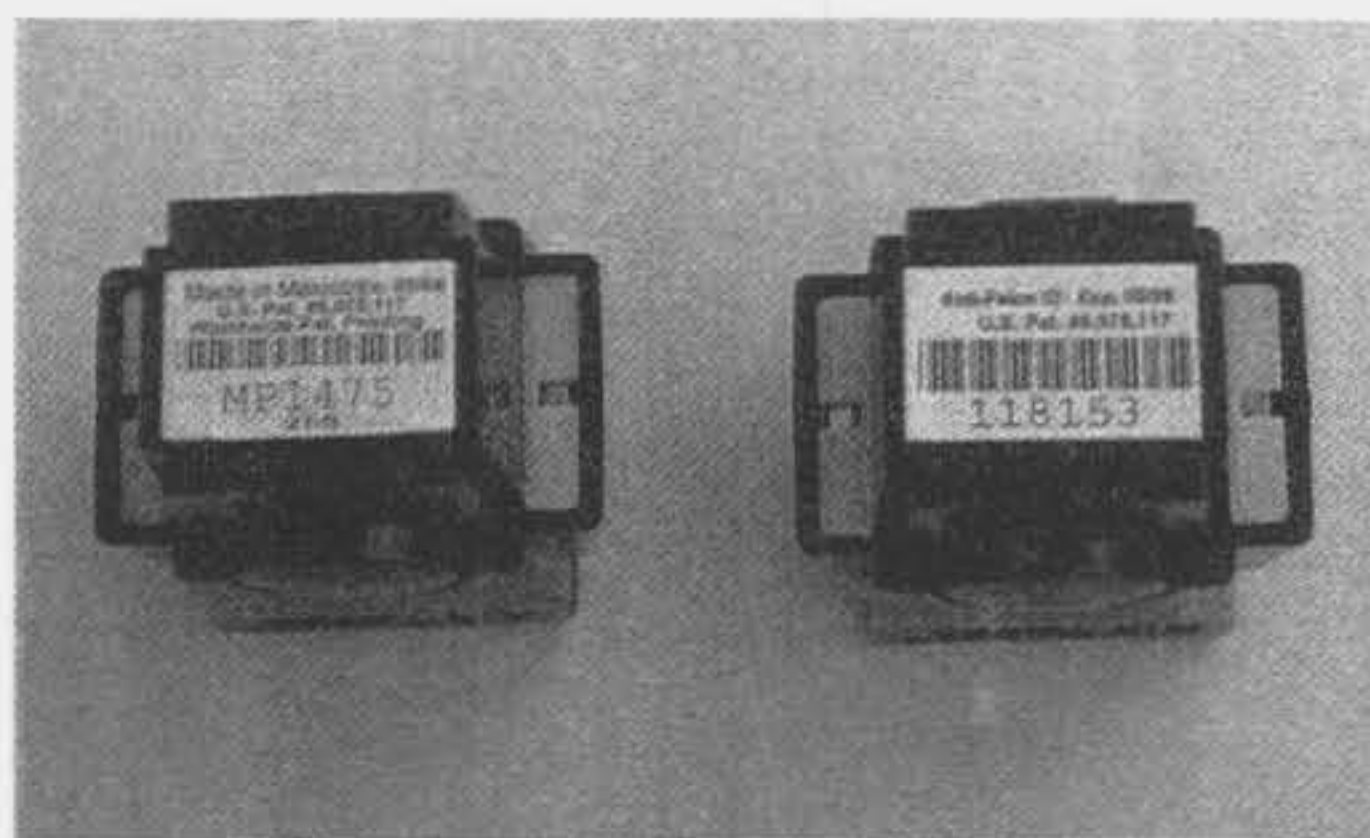
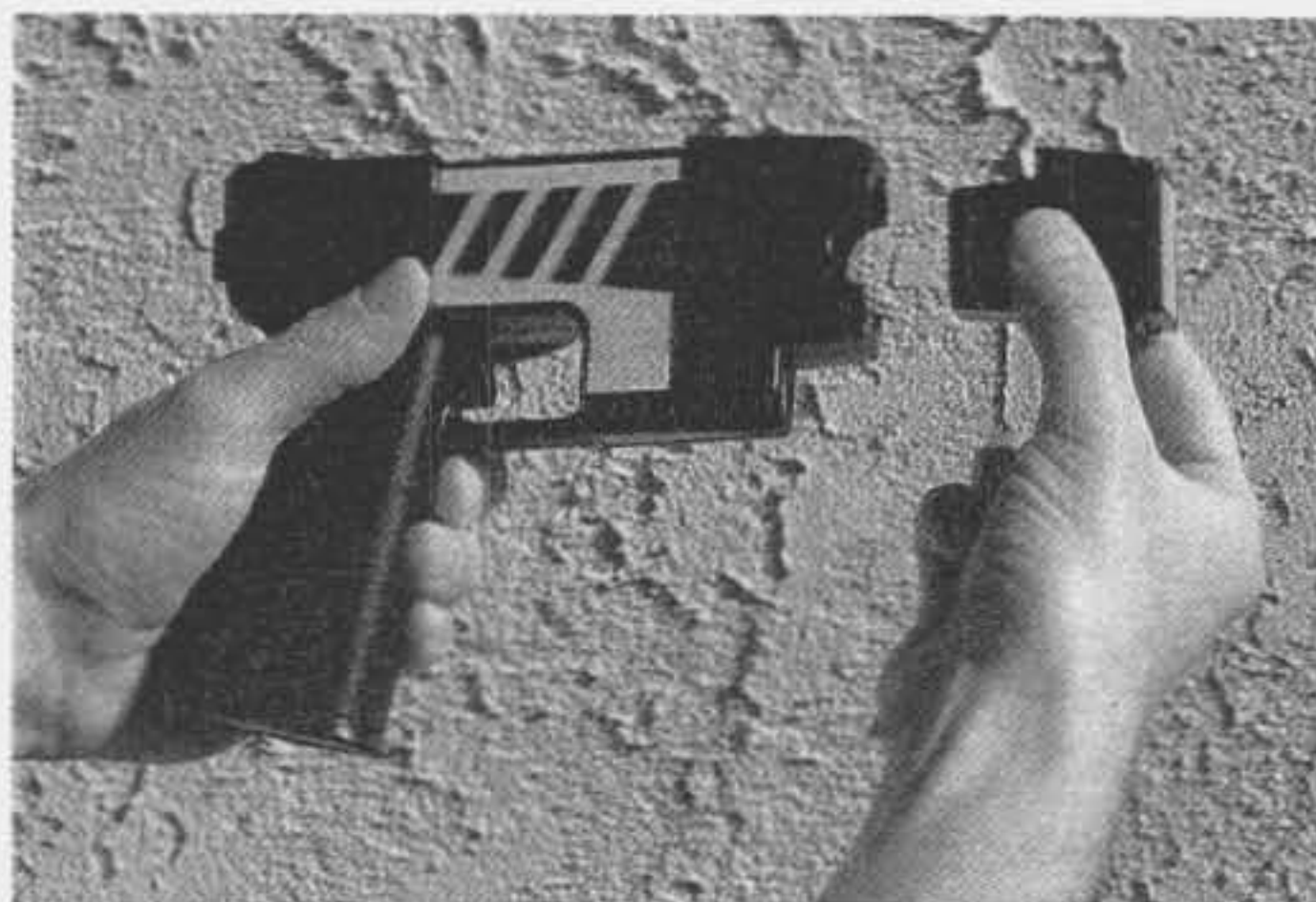
Power for the Advanced Taser is provided by eight AA batteries. The batteries are housed in a battery pack that fits inside the grip of the weapon. Duracell Ultra® alkaline batteries are recommended by the manufacturer. The Advanced Taser has an LED battery status indicator that informs the operator of the status of the batteries at a glance.

The Advanced Taser uses the same air cartridges as TASER International's Air Taser 34000-series weapons. The air cartridges use compressed inert nitrogen as a propellant to expel two barbed probes (darts) attached to insulated wires. Each air cartridge contains probes, wire and a nitrogen charge. Unlike the original TASER, which uses gunpowder as a propellant, the Advanced Taser and Air Taser aren't classified as firearms by the BATF. They may be purchased and possessed without the restrictions attached to firearms.

The air cartridges are available in two versions: a 21-foot air cartridge for law enforcement and government use, and a 15-foot air cartridge. The air cartridges are distinctively marked for easy identification of each version. Each air cartridge bears an individual serial



ABOVE: Advanced Taser M26 shown with optional yellow color kit installed, to clearly mark it as less-lethal. **LEFT:** Fred Keelin of the Los Angeles County Sheriff's Department's Special Enforcement Bureau (SEB) Special Weapons Team with M26.



ABOVE: Each air cartridge is individually serial numbered.
LEFT: The air cartridges simply snap into place.

number and an expiration date. The cartridges have a five-year shelf life.

Loading and unloading the Advanced Taser is quick and easy. The air cartridges simply snap into place. The Advanced Taser will function as a back-up contact stun weapon, with or without a cartridge in place, possessing the capability of sending T-Waves directly into the body of an assailant.

While it can be employed from zero feet out to the maximum range of the cartridge (15 or 21 feet), operators should try to fire the Advanced Taser from at least three feet away from the target in order to give the probes a little room to spread apart. This allows the Advanced Taser to inject the T-Waves into a greater area of the target. The optimum range for the Advanced Taser is seven to ten feet.

The accuracy of the Advanced Taser is excellent, much better than that of other TASERS. There are several reasons for this. The Advanced Taser, unlike other TASERS, aims just like a handgun. Also contributing to the accuracy is the fact that TASER International's air cartridges utilize a longer probe than older model TASER cartridges. The longer probes provide much greater stability in flight.

The M26 provided to S.W.A.T. placed the top probe within one inch of point of aim at ten feet. The bottom probe is designed to travel at an eight-degree downward angle. In S.W.A.T.'s tests, it performed as advertised.

Although the Advanced Taser should be aimed at the center of the target's chest, a hit anywhere on the body can be effective. The probes don't have to penetrate the skin or cause injury to work. The T-Waves of the Advanced Taser can penetrate over two cumulative inches of cloth-

ing, including leather jackets. The T-Waves aren't transferred to another person in physical contact with the target.

The T-Waves are automatically discharged into the target for five seconds, unless the operator chooses to turn the unit off by actuating the Advanced Taser's safety. The timed automatic-discharge feature eliminates a major cause of failure



ABOVE: Fred Keelin of the Los Angeles Sheriff's Department's Special Enforcement Bureau Special Weapons Team wearing the M26 in TASER International's optional Kydex holster. **RIGHT:** Close-up of the Advanced Taser holster. The holster is OEM manufactured by DeSantis to TASER International's specifications.



with first generation TASER systems—accidentally cutting off the power before the target was fully immobilized by inadvertently releasing the trigger. The design of the Advanced Taser prevents this from occurring.

Small identification tags, called "AFIDs," are ejected whenever an Air Cartridge is fired. AFID stands for Anti Felon Identification Device. There are 20-30 AFIDs in each Air Cartridge. Every AFID tag is imprinted with the serial number of the cartridge, allowing law enforcement agencies to determine who fired the cartridge.

SAFETY

In today's litigious society, the safety of any less-lethal weapon is obviously of concern. The safety testing of the Advanced Taser has been extensive, quite possibly more extensive than with any other less-lethal technology. In developing the Advanced Taser, TASER International chose to follow the same approach that's used in the pharmaceutical and medical device industries. The electrical outputs of the Advanced Taser fall well within the safe levels defined by international standards.

Medical studies show that the Advanced Taser has absolutely no effect on heart rhythms. Medical experts don't foresee any increased risk to patients with either pacemakers or implantable defibrillators. TASER International will provide law enforcement agencies with extensive, in-depth medical safety information on the Advanced Taser upon request.

More than 375 human

volunteers have been subjected to the Advanced Taser as of this writing. In all cases, there has been virtually 100% instant incapacitation. Even the most focused, combat-trained individuals have been immediately stopped. To quote Sergeant Burt Robinson of the Chandler, Arizona, Police Department SWAT Team, "It just takes your legs out. It's like a jackhammer going

kaboom, kaboom, kaboom!"

Recovery times vary with the individual. It generally takes from several seconds to a few minutes for full recovery after being "hit" with T-Waves from an Advanced Taser. There haven't been any long term effects or injuries from the Advanced Taser in any of the volunteers. At the most there has only been

some minor skin irritation, similar to mild sun burn.

From a practical standpoint, the only real risks of physical injury associated with the use of the Advanced Taser are secondary injuries from falling or being hit in the eye with a probe. These risks apply to other TASERs as well. While no weapon system is without risk (after all, a weapon is a weapon), the risks from the employment of the Advanced Taser are substantially less than from other currently available less-lethal weapon systems.

The Advanced Taser M-series EMD weapons come with a Pelican®-style, foam-padded hard case, practice target, instruction manual and a training video or CD-ROM. Optional accessories include a Kydex® holster and a dataport/PC adapter cable (M26 only).

The optional holster is an OEM product that's manufactured by DeSantis® to TASER International's specifications. A swivel clip attachment, similar to those that are commonly used for radios, allows an operator to mount and remove the holster from his or her belt in about a second. TASER International also plans on coming out with a paddle holster in the very near future.

The Advanced Taser M-series is available from authorized TASER International dealers and distributors. Readers should contact the manufacturer for the location of their nearest dealer or distributor. The Advanced Taser M26 has an agency price of \$399.95. It comes with a lifetime \$25 no-questions-asked replacement warranty. Instructor and individual officer certification training is available.

CONCLUSIONS

Having tested the M26, reviewed the medical data and reviewed data from the field, I must say that I am very impressed with the Advanced Taser. It's certainly one of the most exciting and effective less-lethal tools to come along in recent memory. Within its intended tactical and design parameters, it could very well be the ultimate less-lethal weapon. ●

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ADVANCED TASER M-SERIES SPECIFICATIONS

Effectiveness	In pre-release testing, the unit incapacitated 100% of test subjects.
Long Term Effects	None (except for potential eye injuries or injuries related to falling).
Range	15 or 21 feet.
Optimum Performance	Seven to ten feet.
Backup if Probes Miss	If launched probes miss, backup electrodes on front of weapon allow it to be used as a stun gun.
Automatic Impulse Regulation	Once probes are launched, unit stays active for five seconds to keep target reliably down.
Thickness of Clothing	Up to 2.5 inches of cumulative clothing—even leather jackets.
Recovery Time	Varies by individual—generally several minutes.
Low Battery Indicator	Yes—Light Emitting Diode (LED).
Safety	Yes—Prevents firing and activates laser on laser-equipped models.
Sights	Fin and blade. Also laser on M18L and M26.
Operational Temperature Range	20-114 degrees Fahrenheit.
Dataport	Allows downloading of usage data and remote firing (M26 only).
Warranty	Lifetime \$25 replacement warranty.
Weight	18 ounces (with battery).
Batteries	Eight AA batteries. Duracell Ultra recommended. Can use rechargeable batteries as well, but battery indicator may not function with rechargeable batteries.
T-Wave Output	50 KV Peak 1.76 J per pulse.
M18 and M18L	Ten pulses per second, 18 Watt output.
M26	15 pulses per second, 26 Watt output.