The Bill Blackwood
Law Enforcement Management Institute of Texas

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Less Lethal Weapons

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An Administrative Research Paper
Submitted in Partial Fulfillment
Required for Graduation from the
Leadership Command College

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March 11, 2005

ABSTRACT

Is there a need for police agencies to find alternatives to using deadly force? These are some of the questions that many law enforcement agencies throughout the United States are facing today. Each year police officers are forced to use deadly force against suspects who are armed with weapons other than firearms, such as knifes, clubs, bottles, etc., because they have no other options available to them. The research into the question: Is there a need for police agencies to find alternatives to using deadly force weapons, leads to the conclusion that there is a definite need for police agencies to find alternatives to using deadly force. The reason is not only that of liability reasons but also for ethical and moral reasons. This study researched less lethal weapons such as batons, pepper spray, beanbag rounds, rubber projectiles, and the advanced Taser M-26. Based on the research findings for this study it is the believed that agencies should provide their officers with less lethal weapons, particularly the Taser M-26.

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Introduction

"Why did you kill my son? All he had was a knife. Couldn't you have shot the knife out of his hand?" These are some of the questions that many law enforcement agencies throughout the United States are facing today. The relationship between free democratic societies and the police forces chosen by them to maintain law and order is one of balanced tension. Sometimes that tension causes a break and society looks more closely at how order is maintained and force is used (McLaughlin, 1992). In response to these types of questions many law enforcement agencies are searching for ways to give its officer's options of effective force other than using deadly force.

One option is to use less lethal weapons. Less lethal weapons are defined as weapons that are intended to stop the aggressive behavior of a suspect but are not intended to cause death or serious bodily injury (McDonald, 2000). The United States Department of Defense (1996) defines less lethal weapons as weapons that are explicitly designed and primarily employed so as to incapacitate personnel or material, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment. One must always keep in mind that while less lethal weapons are not designed nor intended to cause death or serious injury there is always a possibility that the target can suffer serious injury or death. Lethal weapons attempt to defeat an adversary's ability to resist; less lethal weapons attempt to defeat the adversary's will to resist (Heal, 2000). Each year police officers are forced to use deadly force against suspects who are armed with weapons other than firearms, such as knifes, clubs, bottles, etc., because they have no other options available to them. This project will attempt to identify the different types of less lethal weapons that are available to law enforcement agencies today and will also address the tactical and practical applications of those weapons in a modern police agency,

specifically the Farmers Branch Police Department. Review of reference material included magazine articles, manufacture's data, newspaper articles, information accessed from the Internet, telephone survey, personal interviews with law enforcement practitioners, and the author's personal law enforcement experience that spans nearly 25 years. Hopefully, the Farmers Branch Police Department will be in favor of using less lethal weapons to protect its officers and the public as well as to reduce the number of serious injuries deaths to suspects. Accomplishing these intended results will be a benefit to the department by increasing the publics trust in them as well as reduce the liability amounts paid out to suspects or their families. During the course of this research, it was determined that although there is no guarantee that the use of less lethal weapons will always prevent death or serious injuries, the occurrences of both are drastically reduced. If agencies will spend the money needed to purchase less lethal weapons and will take the time to properly train their officers, it is believed that neither the officer or the agency will be held liable in any civil or criminal action if it is shown that the officer acted within the scope of his or her official duties. The dollar amounts paid out to victims and their families due to the negligent actions of officers in lethal force situations will be reduced significantly in the proper training and employment of less lethal weapons.

Review of Literature

Today's law enforcement agencies are faced with many obstacles, such as the war on terrorism and the lack of funds created by the events of September 11, 2001. Law enforcement is constantly faced with violent crime and the never-ending siege on our young people by the illicit drug industry. Considering these seemingly insurmountable issues being faced by Law enforcement today one issue that is continually echoed throughout the media is the type and amount of forced used by police officers in today's society. Because of the various types of less

than lethal force available, every police administrator must consider more socially acceptable and humane non-violent solutions. The force historically employed by police officers must be reconsidered. Many administrators are turning too less lethal weapons as an alternative to using physical and or deadly force. Some of the different types of less lethal weapons on the market today include night sticks or batons (plastic, metal and wood) pepper spray, bean bag rounds (fired from a shotgun), rubber projectiles fired from different types of weapons and the advanced Taser M-26. All of these types of less than lethal force have positive and negative attributes that need to be considered before deployment. In the next few pages we will examine the pros and cons of some these instruments and attempt to determine what combination of less than leather force is best applicable for the Farmers Branch Police Department Patrol Division.

First, one must examine batons. According to M. Young (personal communication, January 2005). police batons are normally made from wood or metal and on average are approximately twenty-six inches in length. Some of the positive aspects of the baton are that it is relatively inexpensive and easy to obtain. The visual aspect of the baton is sometimes a deterrent to the criminal. Some of the negative aspects of the baton are is that it is difficult to carry on your person due to the size and stiffness, can cause severe injury and even death if misused and is normally view by the public as a negative means of gaining compliance or control of an individual.

Next let us examine pepper spray. According to K. Riggs (personal communication, January 2005). pepper spray comes in many different brand names and different types of containers; however, it is basically the same product. Pepper spray is made from oleoresin capsicum, which is extracted from a pepper bean. Some of the positive aspects of the pepper spray are that it causes severe stinging and normally last any where from forty-five minutes to

one and one half hours. It is a pain compliance weapon and its effectiveness normally depends on a person's pain tolerance. The pepper spray can be used on multiple targets simultaneously. The pepper spray is lightweight and easy to carry on the officer's duty belt. Some of the negative aspects of the pepper spray are that it can also disable the user and other officers if they come in contact with the spray. The wind has an adverse effect on the spray and can cause it to miss the intended target altogether. The maximum effective range is ten to twelve feet.

Next, one must examine beanbag rounds. According to K. Bratcher, (personal communication, January 2005). beanbag rounds are fired from a shotgun. Beanbag rounds are made up of small pellets and are enclosed in a piece of cloth which is square and measures approximately one and one half inches by one and one half inches. Some of the positive aspects of the beanbag round are the range in which it may be deployed; it is fairly accurate up to thirty yards. It is a pain compliance weapon and can be delivered rapidly. Some of the negative aspects are that the rounds can cause severe damage including death. Although fairly accurate, it is not uncommon for the round to rise or fall several feet during its flight. The shotgun must be carried in the operator's hand or slung over their shoulder, thus making it necessary to also carry a handgun. Next consider the use of rubber projectiles. Rubber projectiles are small rubber ball ammunition. The projectiles are fired from a shotgun and are very accurate up to fifty yards. The projectiles can be skipped across a hard surface thus making it possible to strike an intended target that is hiding behind an object. The projectile rounds are inexpensive. There are several different types of rubber projectiles on the market today. The Power Punch Ballistic Bag was developed to overcome the shortcomings of conventional square beanbag ammunition. This round remains in a more aerodynamic configuration due to the projectiles design and virtually eliminates missed target zones caused by errant projectiles. The Power Punch launches a pliable

26-gram bag producing controlled and directed incapacitation by blunt impact trauma. The blunt trauma impact causes loss of breath, psychological effect, and or pain and extreme discomfort. Its effect is instantaneous and last anywhere from seconds to minutes based on the power factor, distance and location of strike. The bag is fired from a 12-gauge shotgun (A.L.S. Technologies, Inc.). The Trident, Triple Rubber Projectile was developed to overcome the shortcomings of conventional rubber ball ammunition. Most rubber ball ammunition is designed to be skipped off the ground into the target. This form of firing can be adversely affected by snow, mud and soft grassy terrain. This round was designed for a single target engagement allowing the round to strike an individual without causing major main or damage. The Tri-Dent fires 3 each, 46-grain rubber projectiles, producing controlled and directed incapacitation by blunt impact trauma and excruciating pain. Its effective range is 7 yards to 25 yards and is fired from a 12-gauge shotgun and will penetrate heavy clothing. The Hornets Nest, Twenty Rubber Ball Projectile, fires 20 each, .308 diameter rubber projectiles, producing excruciating pain. The stinging effect caused is designed to result in behavior modifications, retreat away from officers or immediate compliance to commands. The Hornets Nest is preferred when you have multiple targets in close proximity to one another. Its effective range is 3 yards to 10 yards and is fired from a 12-gauge shotgun (A.L.S. Technologies, Inc.). Sage International manufactures a multi-role projectile launcher named the SL-6. The SL-6 holds up to six 37 mm projectiles that can contain anything from blunt trauma rounds to pyrotechnic and non-pyrotechnic chemical agents. Most of the pyrotechnic rounds are made to penetrate residential glass, automobile glass, hollow core doors, and ½" plywood (Sage International, Ltd, 2001). The SL-6 is mainly used by SWAT units to deploy chemical agents from a safe distance, but is also very effective in crowd control situations.

Finally, one must consider the use of the Taser. The Advanced Taser model M-26, manufactured by Taser International, is one of the most popular of all less lethal weapons found on the market. The M-26 is a conducted Energy Weapon that utilizes compressed nitrogen to shoot two small probes up to 21 feet. These probes are connected to the weapon by two insulated wires that deliver a 26 watt, 50,000- volt charge of electricity and are powered by 8 double "A" batteries. When the probes make contact with the target, the M-26 transmits the electrical pulses along the wires and into the body of the target. The M-26 is effective through up to two inches of clothing. Conducted energy weapons use electrical energy to affect the signaling mechanisms used by the human body to communicate. The electricity produced by the weapon interferes with the communication system of the body. The M-26 sends a series of electrical signals called Taser Waves or T-Waves, which are quite similar to those used by the brain to communicate with the body. The T-Waves overpower the normal electrical signals within the body' s nerve fibers. The human target instantly loses control of his body and cannot perform coordinated actions, thus causing the body to fall to the floor (Taser International, 2000).

In order to justify using the Taser M-26, the author researched actual cases in which police officers used the Taser M-26 as an alternative to using deadly force. On April 8, 2000 Victoria police officers were dispatched to a local mental health hospital were they encountered a patient who was extremely violent and out of control. The patient was waving his arms, swearing, making threats to kill both the police and everyone else in the hospital. Verbal attempts to gain the patients voluntary compliance failed. The patient challenged officers to a fistfight, put on sunglasses to help keep pepper spray out of his eyes and positioned himself in a fighting stance. The patient was shot one time with the Taser M-26 and fell to the ground and

was immediately taken into custody. The patient became very compliant and followed all instructions from the police officers and hospital staff without further incident. No injuries occurred to police, hospital staff, or the patient (Taser International, 2000). On April 9, 2000 Victoria police officers were dispatched to assist an outside agency with a man that was armed with a knife and had assaulted a taxi driver. The subject then climbed onto the top of a building. When officers arrived it was learned that the subject was highly intoxicated on alcohol and cocaine. It was also learned that the subject was a skilled martial artist who was not afraid to fight with police. The subject threatened to kill any officer that attempted to climb up to get him. The subject further stated that he would also take an officer's gun if they attempted to get him. Several police officers distracted the subject by placing a ladder at the front of the building. While the subject was distracted an officer that was armed with a Taser M-26 and a cover officer that was armed with a lethal weapon climbed onto the roof undetected. Once the subject was far enough away from the ledge of the building the officer fired the M-26 into the back of the subject. Within 1-2 seconds the subject fall to the ground and was immediately taken into custody. Once in custody, the subject asked what he had been shoot with, when the officer advised him it was a Taser gun, the subject stated, "I never want to be hit by that thing again, next time I will do whatever you tell me to do." In this incident neither the police nor the subject were injured. In both these incidents it is believed that officers would have been justified in using deadly force, however, due to the availability of an alternative method of force, less lethal weapons, officers were able to gain control of a volatile situation without death or injury occurring to anyone (Taser International, 2000). In order to justify using beanbag rounds the author reviewed actual cases in which police officers had used the beanbag rounds as an alternative to using deadly force. On Sunday, April 16, 2000 officers from the Newport,

Cincinnati Police Department were dispatched to their downtown area where it was reported that a man with was armed with a knife and was threatening to harm himself and others. An officer confronted the subject and when he refused to relinquish the knife, the officer shot him with several rounds causing him to drop the knife. Officers were then able to take him into custody without harm to himself or herself or severe injury to the subject (Cincinnati Enquirer, 2000). On February 6, 2003 an officer with the Green Bay, Wisconsin Police Department shot a 21-year-old man that was armed with a knife. After a lengthy negotiation, the man refused to give up the knife and was shot three times, once in the hip, then in the hand holding the knife and once in the buttocks. The subject dropped the knife and was taken into custody (Green Bay Press-Gazette, 2003). In both of those situations it is safe to say that both subjects would have probably been killed or seriously injured by lethal force.

Is using less lethal weapons always safe? The answer to that question is, no. The old adage about "what can go wrong will go wrong" comes into play. Not all situations where less lethal weapons are employed will end in the intended manner. The Journal of International Wound Ballistics Association cites one such case that occurred in Ottawa, Canada in which a suicidal subject was struck by a 12-gauge beanbag. One of the rounds penetrated the subject's chest and lodged in his heart, killing him (The Tactical Edge, 1998). The most common injuries received by the use of less lethal munitions continue to be bruising and contusions. However, there have been at least six reports of deaths in Canada and the United States from the use of less lethal weapons (The Tactical Edge, Spring 2001). During the research for this paper the author was unable to find any cases that involved death or serious injury of any one shot with the Taser M-26. However, one local case is still being debated as to whether or not the M-26 contributed to a death. The incident occurred in Arlington, Texas on December 31, 2002. In an unsuccessful

attempt to prevent a suicide on a highway overpass where a 35-year-old male was threatening to jump off the bridge. As the man was approaching the edge of the bridge, Officer's shot him with the M-26. It is not known at this time whether the effect from the M-26 caused the man to fall over the rail or whether the man's momentum caused him to fall (The Dallas Morning News, 2003).

Methodology

Is there a need for police agencies to find alternatives to using deadly force? Are less lethal weapons the alternative to deadly force? The research into less lethal weapons–combined with the author's knowledge and personal use of less lethal weapons leads to the conclusion that there is a definite need for police agencies to find alternatives to the use of deadly force. The reason is not only that of liability reasons but also for ethical and moral reasons. Review of reference material included magazine articles, manufacture's data, newspaper articles, information accessed from the Internet, telephone survey, personal interviews with law enforcement practitioners, and the author's personal law enforcement experience that spans nearly 25 years. During the course of this research, it was determined that although there is no guarantee that the use of less lethal weapons will always prevent death or serious injuries, the occurrences of both are drastically reduced. If agencies will spend the money needed to purchase less lethal weapons and will take the time to properly train their officers, it is believed that neither the officer or the agency will be held liable in any civil or criminal action if it is shown that the officer acted within the scope of his or her official duties. The dollar amounts paid out to victims and their families due to the negligent actions of officers in lethal force situations will be reduced significantly in the proper training and employment of less lethal weapons.

Findings

Size and nature of the survey conducted included cities in the geographical region surrounding the DFW Metroplex with demographics of cities similar to Farmers Branch. The survey sample is based on the historical method used by the City of Farmers Branch to conduct like surveys. See appendices for detailed information regarding each department surveyed. Ten departments were surveyed; of the ten only three did not have Tasers. Of the seven departments that deploy the Tasers, two only deployed them with supervisors. The departments that deploy the Taser, all were 100 % in favor of them and considered them to be the best less lethal weapon in their respective departments. No deaths or serious injuries have been linked to the Taser. Law Enforcement officials said they like the fact that information is recorded in a Taser's data port each time it is fired. "It keeps everybody honest," Mr. Tuttle said, noting at least six cases in which the data showed suspects had lied about being hit (Steve Tuttle, Dallas Morning News, Sunday, January 12, 2003). But Gerald Le Melle, deputy executive director for Amnesty International USA, said he did not think Taser International could make such claims. "We would like to see proper testing and strict guidelines," he said Mr. Le Melle said his organization fears the shocking device will be used gratuitously or as an instrument of torture (Dallas Morning News, Sunday, January 12, 2003). Ken Cooper, a Taser instructor and director of the Tactical Handgun Training Academy in Kingston, N.Y., said, "Anything can be used as a torture device, including a cigarette. The more Tasers are being used, you're going to find more people surviving potentially lethal force encounters with law enforcement" (Dallas Morning News, Sunday, January 12, 2003). A police officer uses force against a person in order to gain control of that person or to stop some type of aggressive behavior. A police office uses deadly

force against a person when it is the only type of force that will stop the persons behavior, behavior that the officer feels will kill or seriously injure himself or another person.

A police officer that is in fear of his life or the life of another that does not have at his disposal alternatives to using deadly force will most likely turn to the use of deadly force to protect himself or another or will become a victim of death or serious injury or will allow someone else to become a victim of death or serious injury. Police agencies that have administrators that or in touch with the feelings and well beings of their employees and the public in which they are sworn to protect will most likely make available to their personnel less lethal weapons. The administrators will provide the best equipment available and the best training available.

Based on the research findings for this paper it is believed that agencies should provide their officers with the Taser M-26. The cost of the M-26, which is approximately $400.00 per weapon, is exceptional less than the possible cost that arise from liability issues. The M-26 is compact and can be easily carried by patrol officers. The M-26 is simple to operate and has simplistic functions that require minimal training. The physical effects that the M-26 produces on its targets are minor, about the same level of pain associated with receiving a shot from a syringe. The psychological effects that the M-26 produces is not permanent except that most subjects that are shot with the weapon and subsequently find themselves in a similar situation which might produce the threat of being shot again, will normally surrender and submit to verbal commands. Although there is no guarantee that the use of less lethal weapons will always prevent death or serious injuries, the occurrences of both are drastically reduced. If agencies will spend the money needed to purchase less lethal weapons and will take the time to properly train their officers, it is believed that neither the officer or the agency will be held liable in any civil or criminal action if it is shown that the officer acted within the scope of his or her official duties.

The dollar amounts paid out to victims and their families due to the negligent actions of officers in lethal force situations will be reduced significantly in the proper training and employment of less lethal weapons.

Conclusion

"Why did you kill my son? All he had was a knife. Couldn't you have shot the knife out of his hand?" Each year police officers are forced to use deadly force against suspects who are armed with weapons other than firearms, such as knifes, clubs, bottles, etc., because they have no other options available to them. The problem that most law enforcement agencies face today is that of trying to find alternatives for their officers to use other than deadly force. This study has researched different types of weapons that are on the market today and that are practical to law enforcement officers and that provide alternatives by identifying a means of force other than deadly force, that force is in the form of less lethal weapons. Of all the less lethal weapons researched for this study the author feels that the weapon that provides the best results with the less change of causing injury to the suspect or police officer is the M-26 Taser by Taser International, Inc. In the previous reading we have examined the pros and cons of various less than lethal options in an attempt to determine what combination of less than leather force is best applicable for the Farmers Branch Police Department Patrol Division. Because the police baton, beanbag rounds and rubber projectiles cause blunt force trauma and can easily cause serious bodily injury including death and because pepper spray is only effective in ideal weather conditions it is the recommendation of this author that the Farmers Branch Police Department not only add the Taser M-26 to its list of approved less lethal weapons, but that it be available to all patrol officers during their tour of duty. It is hard to determine who will benefit the most from this study the officers, the suspects, or the taxpayers. It is the belief of the author that all

will benefit; the officers will suffer fewer injuries and will not be subject to as many false accusations or lawsuits. The suspect will benefit because there is no ill effects from the Taser M-26. The taxpayers will benefit through the governmental agencies that serve them in several ways; fewer injuries to its employees, fewer lawsuits, fewer complainants by suspects as well as different activist groups; also, the trust that the citizens will gain in those hired to protect and serve them.

References

All new power punch ballistic bag series. Retrieved September 25, 2003, from http://www.ozarkmtns.com/less-lethal/products/cat3.htm

Eiserer, Tanya (2003, January 12). *More police turning to Tasers*. The Dallas Morning News, pp. 41A, 34A.

Flynn, Terry (2000). *Shotgun 'beanbag' add police option*. Retrieved September 30 2003, from http://www.enquirer.com/editions/2000/04/16/loc_shotgun_beanbags_add.html

Heal, Sid. (2000). *The evolution from non-lethal to less lethal*. Retrieved January 11, 2001, from http:www.airtaser.com

Hubbs, K. (1998). *Are less lethal munitions really safe and effective*. The Tactical Edge, 78 & 82.

M26 stops emotionally disturbed (EDP). Retrieved December 23, 2003, from http://www.airtaser.com/Web_2000/M26Uses.htm

McLaughlin, Vance. (1992). *Police and the use of force*. Westport, Connecticut: Praeger Publishers.

Nelesen, Andy (2003*). Less-lethal weapons' aim to bring'em in alive*. Retrieved September 30, 2003, from http://www.greenbaypressgazette.com/news/archive/local_8511826.shtml

Pacholick, S. (2005). *Super charged*. Public Risk, 20 (2), 8-11.

Suicidal on cocaine and alcohol with knife. Retrieved December 23, 2000, from http://www.airtaser.com/Web_2000/M26Uses.htm

The Tri-Dent. Retrieved September 25, 2003 from http://www.ozarkmtns.com/less-lethal/products/cat5.htm