

The Bill Blackwood  
Law Enforcement Management Institute of Texas

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Less-Lethal and Non-Lethal Force: Are They Working for Patrol Officers?

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An Administrative Research Paper Submitted in  
Partial Fulfillment of the Requirements for Graduation from the  
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By  
Robert E. Lee

Desoto Police Department  
Desoto, Texas  
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## **ABSTRACT**

Societies demand that law enforcement exercise extreme restraint when using force has caused many agencies to undergo a paradigm shift. Use of less-than-lethal force has moved into the forefront of many studies, special interest groups, and in the media. Agencies should review their officers needs and make an effort to insure that they have provided or do provide adequate equipment for their officers to use in less-than-lethal situations.

In order to determine if agencies are doing this and to and to assess if the less-than-lethal force options already issued are working, a sample of police departments nationwide were surveyed. Almost all agencies indicated that they believed that the uses of less-than-lethal force were causing a decrease in the instances of officer/suspect injuries. Data compiled from all responding agencies, however, indicated that this feeling does not seem to have the statistical support as only one-half of all responding agencies indicated a reduction in officer/suspect injuries. Of the agencies that indicated a decrease almost all had recently instituted, or had already in place, a re-certification-training program.

It is concluded that the less-than-lethal force options that are currently in use or which are currently available to patrol officers nationwide do have the capacity to decrease the numbers of officers/suspects injured. This reduction seems to be dependent as much on the agencies training policies and programs as on what less-than-lethal options they issue.

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## INTRODUCTION

Society demands that law enforcement today exercise extreme restraint in dealing with offenders, regardless of whether or not they are violent. To meet the expectations of society, and without sacrificing their own safety, patrol officers need to have several non-lethal or less-lethal force options available to them. Departmental administrators need to realize that it is essential that patrol officers be equipped with, and trained in, the use of non-lethal and less-lethal force options. In fact, patrol officers, even more so than tactical teams, are generally the first people in law enforcement who encounter situations where alternative force options are needed.

This research focused on the question of whether or not instances of bodily injury or death, to officers and suspects, have decreased since more non-lethal or less-lethal force options have become available in the last few years.

The methods used to inquire into the focus of this research have taken several forms. One method was the collection of statistical data from the Department of Justice and the Federal Bureau of Investigation on the number of law enforcement officers/suspects killed or injured. Another method was the review of current law enforcement related literature for any relevant statistics or data. The final method entailed a three-fold survey of 100 randomly chosen departments from around the nation. The first portion of this survey polled internal affairs divisions (I.A.D.) for the number and types of uses of force by their officers, excluding hand to hand and lethal force, in the last year. The I.A.D. survey also asked for the same numbers 5 and 10 years ago. The second part of this survey was directed to the training divisions. This division was asked to provide information on what types of non-lethal and less-lethal force equipment are

issued to their patrol division and what type and frequency of training is required. The last portion of the survey was directed at the patrol division of these agencies. Each agency surveyed was asked to poll at least five of their patrol officers about whether or not they (the patrol officers) believed that the force options they have available are effective. They were also asked if they believe that they need more options made available to them, and what they would want those options to be. For purposes of this research bodily injury was defined as injuries that required medical attention or hospitalization.

It was anticipated that the findings of this research would show that the instances of bodily injury or death to officers and suspects during use of force encounters have decreased. It is the intent of these findings that they, if validated, serve to convince department administrators that patrol officers are in need of several force options.

This research will benefit law enforcement in that, if it is shown that the instances of bodily injury or death have decreased, then more agencies will acknowledge the need to equip their patrol officers with force options that heretofore have been the sole province of tactical response teams. Even if the instances of bodily injury or death have increased the net benefit to law enforcement should remain the same, being that the findings should still encourage agencies to equip their patrol officers with the most current forms of non-lethal or less-lethal force options available. In any event and regardless of what these findings have shown, agencies need to acknowledge the demands that society places upon its officers.

## REVIEW OF LITERATURE

Current literature about the use of less-than-lethal and less-lethal force is varied in its methodology as it is in its findings. In 1986, the then United States Attorney General, Edwin Meese, convened a conference to examine the development and deployment of non-lethal weapons. Over 150 local, state and federal law enforcement personnel and administrators as well as representatives from the Department of Defense and the scientific academic communities attended. The conferees looked at a wide range of law enforcement needs especially in light of the Supreme Court decision, Tennessee v. Garner 105 S. Ct. 1694,(1985) which restricted the use of deadly force in apprehending fleeing felons because the, “use of deadly force to apprehend an apparently unarmed, non-violent fleeing felon is an unreasonable seizure under the fourth amendment”. This conference broke the classification of the less-than- lethal weapons into three basic categories: electrical, chemical, and impact. The conferees also evinced their belief that the development of weapons that could be used in close-proximity encounters was most urgent (Sweetman, 1986).

A study done by W. C. Bailey(1996) concerning less-than-lethal weapons and police-citizen killings was published in Crime and Delinquency. This study used data collected in 1990 from cities that had populations over 100,000. The studies findings showed no data indicating that police killing rates are affected by the availability of less-than-lethal weapons. Conversely, a study done at the request of the British Columbia Police Commission, also published in 1990, reported that it's findings showed that adding

less-than-lethal force options to the tools available to it's officers would "cost money now but will save a large amount of suffering and cost later" (Jamieson, Hull, Battershill, abstract p.2). This finding was presented to the commission after the task force, created to do the research, visited agencies in Canada and the United States. Along with the police agencies visited the task force also made on-site visits in the United States to six training programs and interviewed criminologists and communication instructors.

In 1996 the U. S. Census Bureau interviewed 6,421 persons over the age of 12, this number represents a national population of nearly 216 million individuals (National Institute of Justice, 1997). Of this 6, 421 it was determined that 1,308 had face to face contact with the police during the year. This number would equate to a nationwide number of 44.6 million individuals. Findings showed that 14 persons, out of the total number, said that during their contact with the police that they were hit, pushed, held, choked, threatened, sprayed with chemical or pepper spray, threatened with a gun, or had some other form of force used against them. The 14 represent a nationwide number of nearly 500,000 individuals. Ten of the 14 who reported this kind of contact with the police also reported that their own actions may have provoked the police to threaten or use force against them during the contact.

Between 1992 and 1994, 482 police officers in Michigan and North Carolina responded to a questionnaire that pertained to the training they have received in less-than-lethal force tactics and equipment since graduating from the police academy (Ross & Jones 1996). The questionnaire addressed the following issues: the types of less-than-lethal weapons officers are authorized to use and the frequency with which departments provide training in such weapons and tactics after leaving the academy. Results of this

survey indicated a lack of retraining in the use of less-than-lethal force weapons. In fact the survey revealed that a number of officers were unaware that their department had a non-lethal force policy. It also revealed that the officers who did know their department had such a policy had never been tested over its contents (Ross, & Jones, 1996).

In general, all of the studied literature depended on surveys, Uniform Crime Reports, or personal interviews in order to gather the information presented. The most notable similarity in the reviewed literature is the consensus among researchers that administrators need to make less-than-lethal force options available and that once these options are available, the recipients should receive regular training in their proper use. As one time director of the National Institute of Justice, James Stewart (1986), noted "Law enforcement officials have long recognized that a wide and dangerous gap exists because the range of tools, the nightstick and the gun, may be either too weak or too strong a response to many police situations"(p. 111). He went on to say "that the highest ideals of our society, justice and the preciousness of human life, demand that we persevere in the search for life-saving tools for arrest. However, it must always be remembered that the tools that we provide are only as good as the people to whom we entrust them" (Stewart, as cited in Trostle, 1997, p. 32) .

The most notable difference in the reviewed literature is not in the findings, although one study did not find any appreciable difference in officer killings (instances where officers killed citizens) and the availability of less-lethal-force options (Bailey, 1996). The difference lies in what each researcher believes is the most important reason for making less-lethal-force options available. The reasons range from liability issues for



the officer and the department to protection of the officer in situations that are potentially dangerous but not to the point where deadly force is justified.

While it has been widely acknowledged that the level of awareness of the less-than-lethal weapons technology is not high among law enforcement officials, the trend in recent literature has been to push for increased research and development into the realm of less-than-lethal force (Stewart, 1986). Also important is the implementation and proper use of developed less-than-lethal force options.

## METHODOLOGY

The research question this paper deals with is whether or not instances of bodily injury and death, to officers and suspects, have decreased since more less-lethal or non-lethal force options have become available.

It was hypothesized that due to the relatively recent advances in the area of less-than-lethal technology that a significant number of agencies would be making several less-lethal, non-lethal force options available to their personnel and that the subsequent number of officers and suspects injured or killed would be on the decline. The general assumption by administrators is that this is true.

To research this topic the main resource utilized was other agencies. A survey consisting of a series of questions directed at internal affairs, training, and patrol divisions was sent out. The questions asked included: 1) How many instances of injuries to officers and suspects occurred during the years of 1999, 1994, and 1989? 2) How long has this department been issuing less-lethal force options and what are they? 3) What are the training requirements and is re-certification required? 4) Do you believe the less-lethal, non-lethal force options available to you are adequate for you to do your job? Recent literature was also reviewed to determine if any other studies have been done on this research question.

The survey was sent to 100 different police departments in cities/counties around the nation, including Alaska and Hawaii. The agencies survey ranged from less than 20 sworn personnel to more than 3,000. Populations in these target cities ranged from less than 1,000 to more than 3 million. Out of the 100 surveys mailed only 18 were returned

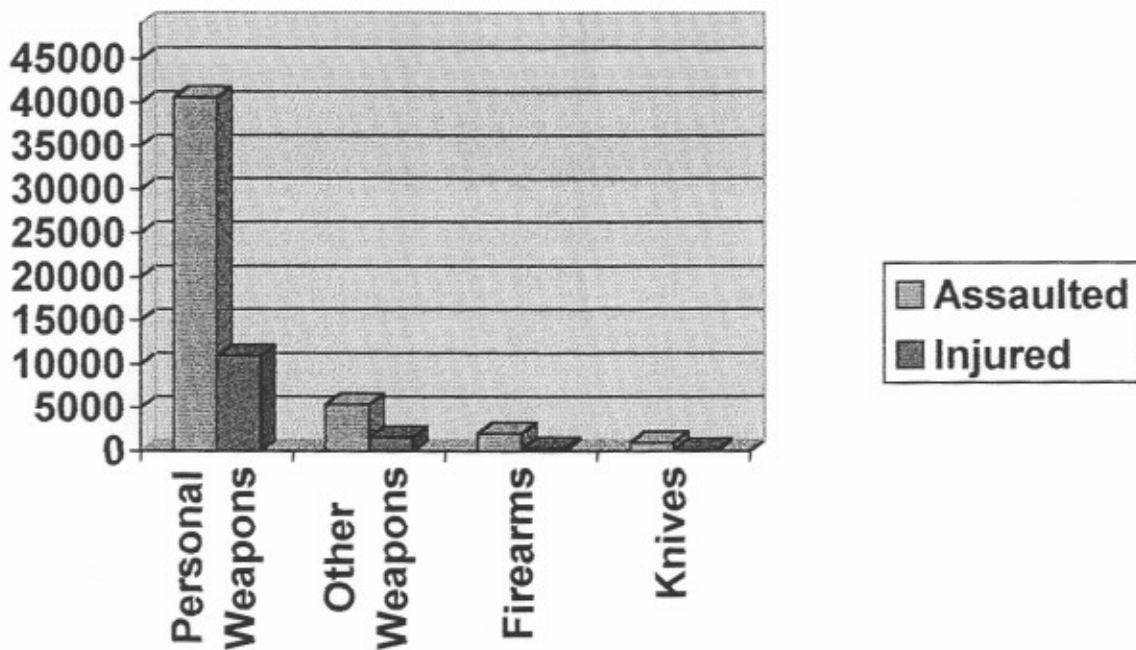
completed. This 18 percent response rate was about the norm expected. Of the surveys returned only 55.5% contained useful information in all requested categories.

This information was analyzed to determine if the instances of injuries have been reduced or are being reduced as a direct result of the availability of less-lethal, non-lethal force options. Once this determination is made the information will be re-analyzed to determine if any specific recommendations in the area of less-lethal, non-lethal force present themselves.

## FINDINGS

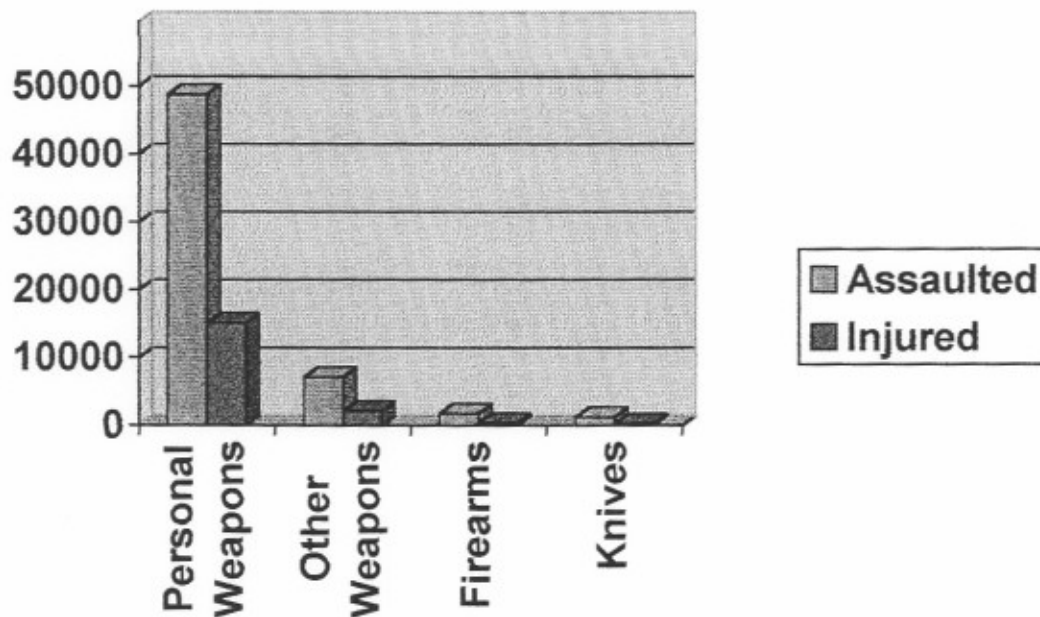
While many studies, articles, and publications were found to deal with less-lethal and non-lethal force, none were found that answered this exact research question in any definitive way, although many assumed that the availability led to fewer instances of injuries. Some literature actually showed an increase in injuries to officers in recent years as was shown in the 1997 and 1998 FBI press releases regarding law enforcement officers killed and injured.

According to the 1998 FBI press release of Law Enforcement Officers Killed and Assaulted in 1997, a total of 49,151 line-of-duty assaults were reported by 8,692 agencies covering 75% of the total United States population. Eighty-three percent of assaults on law enforcement officers during 1997 were committed with personal weapons (hands, feet, fists, etc.). Twenty-seven percent of these assaults resulted in injuries. Eleven percent of the officers were attacked with other dangerous weapons; of these officers, 29 percent were injured. Firearms were used in 4 percent of all assaults; injuries resulted in 15 percent of these incidents. Two percent of the assaults were with knives or cutting instruments; 19 percent of these victims received injuries. See figure 1.



**Figure 1. Law enforcement officers assaulted and injured in 1997.**  
(Source: Federal Bureau of Investigation Press Room, 1998)

According to the 1999 FBI press release concerning 1998 statistics, 59,545 line-of-duty assaults were reported by 8000 law enforcement agencies covering 70% of the total United States Population. Note that fewer agencies reported more assaults. Over eighty-two percent of assaults on law enforcement officers during 1998 were committed with personal weapons. Thirty-one percent of these assaults resulted in injuries. Firearms were used in three percent of assaults; injuries resulted in twenty-one percent of these incidents. Knives or other cutting instruments were used in two percent of assaults; twenty-three percent of these officers received injuries. Twelve percent of the officers were attacked with other dangerous weapons; of these officers, thirty percent were injured. See figure 2.



**Figure 2. Law enforcement officers assaulted and injured in 1998. (Source: Federal Bureau of Investigation Press Room, 1999)**

My survey findings indicated two things. First, that most departments fail to keep records on officers/suspects injured. Second, that of the agencies that responded to the survey which provided useable data, 50% showed an increase in the number of officers injured in their department in recent years. The 50% that reported no change or showed a decrease reported that they had, just within the past few years began issuing new types of less-than-lethal force options. The most common type of new issue was some form of pepper spray or mace. The agencies which reported a decrease also reported having had recent training in the use of the less-than-lethal force options or having a required re-

certification program in place. Re-certification being the mandated regular re-training in the use of less-than-lethal force in order to retain the option for use while on duty. Of the agencies that reported an increase, almost none had any type of recent training nor did they have any type of re-certification requirement in place. On the other end of the spectrum 60% of the responding agencies that provided useful data report an increase in the number of suspects injured in the time frame specified in the survey. My survey specifically stated that only those that suffered injury to the extent they needed medical attention should be reported. It is believed that this number was over-reported, due to the fact that over 80% of the agencies surveyed require that their officers after deploying a less-than-lethal force option, contact emergency medical services and have the suspect examined as a precaution. Even though the survey only asked for data from the last fifteen years, in five year increments, it is believed that the data represents a national average for police agencies. One finding that was of interest, is that of all the agencies which responded to the initial survey almost all reported that they believed that the instances of injuries to officers/suspects was decreasing. Even some of the agencies, which reported an increase in the number of officers or suspects injured, reported their belief that instances were decreasing.

In my survey there was a section strictly for patrol and it asked if the officers, 1) felt that they had sufficient less-lethal-force options (equipment) to perform their duties, and 2) if they felt the training they received was sufficient. Seventy percent of the responding officers felt that they had enough less-than-lethal force options, thirty percent said they did not. Sixty four percent of the officers said they believed the training that was provided to them was sufficient, thirty six percent disagreed. See figure 3.

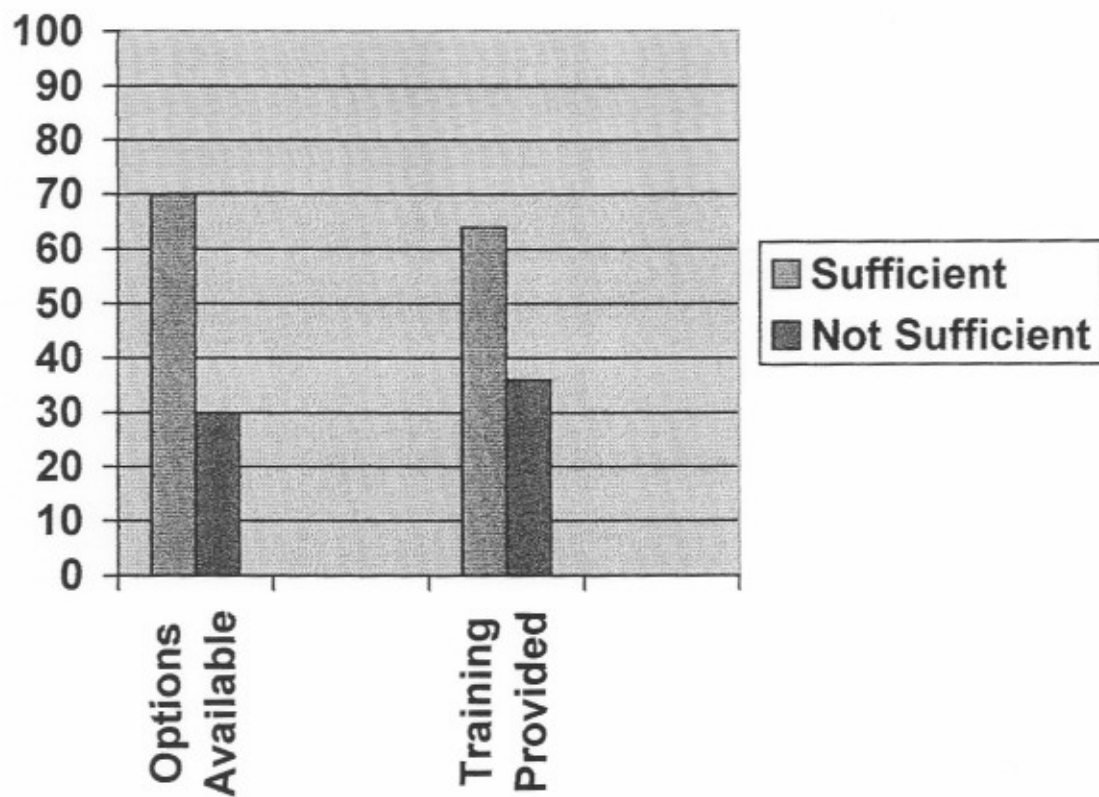


Figure 3. Patrol Division Question: Are the less-than-lethal options available to you, and the training you receive, sufficient for you to do your job?



## CONCLUSIONS

Findings indicate that most agencies feel that less-than-lethal force options are working within their agencies and that the number of injuries to officers/suspects are at a decline. However, conclusions drawn from research and survey indicate that this may be a false assumption on the part of agencies due primarily to the fact that few agencies appear to track the number of uses of less-than-lethal force within their own ranks. Most agencies surveyed did indicate that all uses of force are investigated or reviewed by internal affairs or by an administrative review board. While the immediate review of the use of force is necessary, by not keeping track of it's uses for statistical purposes a valuable source of information is ignored. If this information is not maintained and periodically reviewed how can any type of problem, with personnel or agency policies, be identified and/or corrected? Only by the proper documenting and review of all instances of use of force can an agency identify any potential or existing problem and take steps to correct these problems before they become damaging to the department.

The survey indicated that a "balance" exists between the number of agencies that had increases in the number of officers/suspects injured and those that had decreases. Most of the agencies that reported decreases had recently, within the time frame specified in the survey, issued new less-than-lethal force options and had conducted routine or re-certification training to maintain proficiency with the options issued. This suggests that training is the key to reducing the number of officer/suspects injured. Every agency that issues any type of less-than-lethal force options, and which does not have a routine training program, should immediately institute a program of in-service training and

require re-certification at least once every 12 months. Agency administrators should closely monitor this training, as indications are that if such a program is followed then instances of injuries may decrease following this training. Many of the agencies surveyed already had this type of program in place, however, the average was once every 24 months for re-training and re-certification. Since less-than-lethal force exceeds deadly force in the frequency of its use then the obvious conclusion would be that training in less-than-lethal force should at least mirror the training received in deadly force.

The data obtained from the officer only portion of the survey leads to the conclusion that most officer feel they have enough tools and training to carry out there duties. Seventy percent felt that the tools were sufficient and sixty four percent felt that training was sufficient. However, thirty percent felt that they did not have enough tools and thirty six percent felt that their training was insufficient. This should concern administrators in that three out of ten officers do not believe they have enough less-than-lethal force options to perform their duties, and almost four out of ten believe that their training is not sufficient. This is a large enough percentage of a department to conclude that agencies should conduct a needs assessment for their patrol division to determine for themselves if their officers needs are being met in the areas of training and less-than-lethal equipment.

The final conclusion drawn from my research is that all agencies must work to insure that they provide equipment and training that is not only practical but useful to their officers. Failure to provide less-than-lethal force options that can be applied in different situations can lead to uses of deadly force in situations that could have been resolved with less-than-lethal means. This failure on the part of agencies could lead to

lawsuits filed under the auspices of the individual states for wrongful death and those filed under 42 U.S.C. 1983 for civil rights violations. Even more impacting on a department is the psychological and emotional trauma uses of deadly force have on officers. Many officers, after having used deadly force can no longer cope with the day to day demands of law enforcement, suffer family problems, emotional problems, health problems and some even commit suicide. The results of the use of deadly force and its effect on officers is too varied to elaborate fully upon here, it is enough to know that if less-than-lethal force is an option to officers then the use of deadly force can truly become a last resort.

The fact that less-than-lethal force has become a necessity in today's law enforcement community cannot be denied. The public, which already scrutinizes police actions, has become more and more reticent to condone police use of deadly force except as an absolute last resort. The public will scrutinize instances in which less-than-lethal force can be substituted for deadly force even more diligently in the future. Departments, realizing this, should make the necessary equipment and training available to their officers now, instead of waiting until an incident occurs.

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*Tennessee v. Garner*, 105 S. Ct. 1694 (1985); 710 F.2d 240 (6<sup>th</sup> Circuit 1983)

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## APPENDICES



## APPENDIX 1

My name is Robert Lee and I am a Sergeant with the DeSoto, Texas, police department. I am conducting research for a paper on the effectiveness of less-lethal and non-lethal force used by patrol officers. As part of this research I am asking that you take a few moments and complete the enclosed surveys. These surveys encompass three parts, and are directed to three different divisions. One of the surveys is for the internal affairs division and asks for statistics. One part is for the training division and asks about types of less-lethal and non-lethal force that is issued to patrol officers and the training requirements. The last portion is for the patrol division and asks whether or not patrol officers believe that they have enough less-lethal/non-lethal, and if not what they would like to have to better perform their duties. These surveys, along with other research, will be brought together for a paper that will be submitted to the Law Enforcement Management Institute of Texas (LEMIT) that is part of Texas A&M University and Sam Houston State University. Thank you for your time and assistance.

Please mail completed surveys by July 31<sup>st</sup> to:

Sergeant R. E. Lee

DeSoto Police Department

714 E. Beltline Rd.

DeSoto, TX 75115

## APPENDIX 2

### LESS-LETHAL NON-LETHAL FORCE SURVEY INTERNAL AFFAIRS DIVISION

For purposes of this research injury and bodily injury mean only that which necessitated medical attention or hospitalization. Please exclude instances of deadly force use. Thank you for your assistance.

- 1) How many instances of injury to patrol officers, caused by suspects, occurred during the listed years\*?

1999 \_\_\_\_\_

1994 \_\_\_\_\_

1989 \_\_\_\_\_

\*If you do not have #'s available for the listed years please give #'s for the closest available year.

- 2) How many instances of injury to suspects occurred during the listed years\*?

1999 \_\_\_\_\_

1994 \_\_\_\_\_

1989 \_\_\_\_\_

\*If you do not have #'s available for the listed years please give #'s for the closest available year.

- 3) How long has your department been issuing non-lethal or less-lethal force options to patrol officers? What types? I.E. mace, oc/cs, flexible baton (bean bag) round.

- 4) In your opinion and experience in internal affairs has instances of injury to officers and suspects increased or decreased since more less-lethal and non-lethal force options have been being made to patrol officers? Explain.



### **APPENDIX 3**

#### **LESS-LETHAL NON-LETHAL FORCE SURVEY TRAINING DIVISION**

- 1) What types of less-lethal non-lethal force options are issued to your patrol division?
  
  
  
  
  
  
  
  
  
  
- 2) If your tactical division has a rapid deployment plan in operation, what type of less-lethal non-lethal force options do they carry while on duty with patrol?
  
  
  
  
  
  
  
  
  
  
- 3) How long has your department been issuing the different types of less-lethal non-lethal force to patrol? I.E. mace – 5 years, etc.
  
  
  
  
  
  
  
  
  
  
- 4) What are the training requirements for each type of non-lethal less-lethal force? Is re-certification required?

## APPENDIX 4

### LESS-LETHAL NON-LETHAL FORCE SURVEY PATROL DIVISION

Please make copies and distribute to at least 5 patrol officers. Thank you for your assistance.

- 1) Do you believe that the less-lethal and non-lethal force options you have available to you are adequate for you to do your job?

Yes

No

- 2) If no, please explain why not and what, if any, other force options (i.e. bean bags, mace) would you like the department to issue you.

- 3) Do you believe that the current level of training given to you is sufficient? Explain.

- 4) How long have you been an officer and how many times have you had to use a less-lethal or non-lethal force option?