# Implementation of Electro-muscular Disruption Technology at the University of South Florida Police Department

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#### Abstract

Electro-muscular disruption technology has gained widespread acceptance in law enforcement and is in use in many municipal and county law enforcement agencies around the state of Florida. The University of South Florida Police Department is currently exploring the feasibility of issuing electro-muscular disruption devices, also known as dart-firing stun guns, to its officers. This research paper will examine several questions that the University of South Florida Police Department will need to answer before they begin implementation of this technology. The major questions are, will there be community and administrative resistance to the use of dart-firing stun guns in a university setting and are community education programs necessary? This research paper attempts to answer these and other questions by utilizing results from surveys that were conducted of all the state university police departments in Florida. The results of these surveys indicate that the University of South Florida Police Department should not expect any community and administrative resistance to the issuing of dart-firing stun guns to its officers and that community education programs are not necessary prior to implementation.

## Introduction

The University of South Florida Police Department is currently exploring the feasibility of issuing electro-muscular disruption devices, also known as dartfiring stun guns to its officers. The purpose of this research is to learn whether the university environment poses unique barriers to police agencies wishing to implement dart-firing stun guns. My research will also attempt to identify some of the problems that the University of South Florida Police Department may encounter. In addition, the major questions that my research will attempt to answer are. Will there be community and administrative resistance to the use of dart-firing stun guns in a university setting? And, are community education programs prior to implementation necessary? It is this researchers' hypothesis that campus community groups might be opposed to dart-firing stun guns causing university administrators to be hesitant to approve the use of dart-firing stun guns for police agencies under their control. Other issues that the University of South Florida Police Department will need to address include choosing a brand and model of stun gun and establishing training and policy guidelines.

The University of South Florida is the fourteenth largest university in the nation. Its Tampa campus is a large urban campus that serves a population of approximately thirty eight thousand students, four thousand of whom live on campus. The University of South Florida Police Department is a state accredited agency that currently has thirty seven sworn police officers and thirteen non-sworn civilian employees (USF Overview, 2006).

What is electro-muscular disruption technology? Electro-muscular disruption technology was invented over thirty years ago. I learned during my literature review that this technology was referred to by many names, most often by the copyrighted brand name "Taser". Since the Florida State Statutes refer to this technology as dart-firing stun guns I will be referring to this technology as dart-firing stun gun for the rest of this research paper. There are several manufactures of dart-firing stun guns devices, such as Taser International, Stinger and Law Enforcement Technologies. The most common device used in law enforcement applications is the "Taser M26 and X26" manufactured by Taser International. Taser stands for Thomas A. Swift's Electric Rifle. According to the Taser International website, over seven thousand law enforcement agencies currently use the Taser. The Taser utilizes compressed nitrogen to propel two small stainless steel probes up to 35 feet at a speed of over 160 feet per second. These probes are connected to the Taser device by wires. A high voltage low amperage electrical charge is transmitted through these wires into the targets body causing uncontrollable muscular contractions and temporary incapacitation. Because of the high voltage, the shock can be effective through two inches of clothing. The electrical output of the Taser is well below established safety standards and has no long term effects (Taser.com, 2006).

Why do law enforcement agencies need dart-firing stun guns? Dart-firing stun guns provide a safe and effective way to incapacitate and control violent subjects while reducing the risk of serious injury to both the officers involved and the subjects. Officers who confront unarmed violent subjects have several response options. They can attempt to control the subject by using a hands on approach; all police officers receive training in defensive tactics. This option has a high potential for injury to both the officer and the subjects. A police baton, such as a side handle or collapsible baton is carried by many officers, but using this approach has a high potential for injury, for the officer and the subject. Another option is the use of pepper spray, however this does not immediately incapacitate and there is the potential that the spray could affect the officer as well. The benefits of dart-firing stun guns are that they immediately incapacitate and they can be utilized from a safe distance. Studies have shown that dartfiring stun guns reduce injuries to both officers and suspects. This does not mean that dart-firing stun guns are risk free; Amnesty International reports that over one hundred and fifty people have died after being shocked by a Taser (Amnesty.org, 2006). However, other studies have refuted this claim (Taser.com, 2006).

Usually when a death has occurred other factors are involved such as drugs, alcohol, and prior health conditions. Recent studies have linked a condition called "excited delirium" to some of the deaths associated with dart-

firing stun guns. Injuries caused by the subject falling to the ground because of the muscular incapacitation effect of the dart-firing stun guns are another more common cause of injuries.

### Methods

The purpose of this research was to learn whether the university environment posed unique barriers to police agencies such as the University of South Florida, wishing to implement dart-firing stun guns. A telephone survey was conducted with a representative from each of the ten university police agencies in the Florida State University system. Each representative was asked a series of ten questions. These survey questions are listed in the appendix. There were no problems encountered utilizing this survey method and I was able to achieved a one hundred percent response rate. In conducting this survey I learned other significant information regarding the implementation of dart-firing stun guns that I will expound upon in the discussion section of this paper.

#### Results

Responses to the first question, does your department currently use a dart-firing stun gun? Of the ten university police agencies contacted, five currently use and one is in the process of purchasing dart-firing stun guns. The five that are currently using dart-firing stun guns are the University of Florida, Florida State University, the University of Central Florida, University of West Florida, and Florida Gulf Coast University. Florida Atlantic University is in the process of purchasing dart-firing stun guns for deployment. The four that do not use dart-firing stun guns are Florida A&M University, Florida International University, the University of North Florida, and New College of Florida.

Responses to the second question, did your department experience any resistance to the implementation of dart-firing stun guns from the university administration? All of the agencies who currently use or are in the process of purchasing dart-firing stun guns stated they did not experience any resistance to the implementation of dart-firing stun guns from their university administrators. Each of the four agencies that do not use dart-firing stun guns stated that administrative resistance was not a factor in their decision not to use dart-firing stun guns.

Responses to question three, did your department experience any resistance to the implementation of dart-firing stun guns from individuals or community groups? All of the agencies who currently use or are in the process of purchasing dart-firing stun guns stated they did not experience any resistance to the implementation of dart-firing stun guns from individuals or community groups. Each of the four agencies that do not use dart-firing stun guns stated that resistance from individuals or community groups was not a factor in their decision not to use dart-firing stun guns.

Responses to question four, did your department conduct any special community education programs before implementation? None of the agencies who currently use or are in the process of purchasing dart-firing stun guns conducted community education programs before implementation. Most of the agencies stated that they did not see the need or even considered conducting community education programs.

Responses to question five, was any community notification given? Five of the six agencies using or implementing dart-firing stun guns reported that the community was made aware of the use of dart-firing stun guns by local media reports, such as articles in the campus newspaper or including questions about the use of dart-firing stun guns in community surveys that were periodically conducted. The remaining one reported no community notification was made.

Responses to question six, did your department experience any barriers unique to the university environment? None of the agencies who currently use or are in the process of purchasing dart-firing stun guns indicated they experienced barriers unique to the university environment.

Responses to question seven, has your department experienced any deaths or injuries caused by the dart-firing stun guns? None of the agencies who currently use dart-firing stun guns reported any deaths or serious injuries linked to their use.

Responses to question eight, what brand and model dart-firing stun gun do you use? All six agencies currently using or implementing dart-firing stun guns use or plan on using the Taser International brand dart-firing stun gun, model Taser M26 or Taser X26. The five agencies that were using the Taser brand reported that they were very satisfied with the Taser and the company's support.

Responses to question nine, how often and how many hours do you train? Each agency currently using dart-firing stun guns required initial training varying from four to eight hours and annual training varying from two to four hours. It should be noted that the 2006 Florida legislature passed new laws requiring the Criminal Justice Standards and Training Commission to establish standards for instruction in the use and training of dart-firing stun guns. I will elaborate on the standards during the discussion section of this paper. All of the agencies currently using dart-firing stun guns surveyed meet or exceed the new state laws governing the use of dart-firing stun guns (Florida State Statutes, 2006). The one agency currently in the process of purchasing and deploying dart-firing stun guns stated that their training and use policies would meet or exceed the state law requirements.

Responses to question ten, how are your instructors trained and certified? All of the agencies used Taser International brand dart-firing stun guns and used in house instructors trained by Taser International certified instructor trainers.

#### Discussion

Looking at the results of the survey I am forced to conclude that my hypothesis, that campus community groups might be opposed and university administrators hesitant to approve the use of dart-firing stun guns for police agencies under their control is not supported by the survey data. None of the agencies surveyed reported any administrative or community resistance.

As for the question, are community education programs necessary, once again I must conclude that my hypothesis was incorrect. My hypothesis here was that if community resistance was experienced that perhaps it was due to a lack of understanding on how dart-firing stun guns function and their benefits. And that this community resistance can be overcome by reaching out to the community and educating them. The survey showed that these police agencies did not conduct any community education programs. When you couple this with the earlier results showing that they did not experience any community resistance to the implementation of dart-firing stun guns, the conclusion may be that community education programs are not necessary.

A common response I received to the question, did your department experience any resistance to the implementation of dart-firing stun guns from the university administration? Was that they were able to convince their university administrators that dart-firing stun guns were a safe and effective way of controlling violent subjects while limiting injuries to officers and subjects. They also were able to point out that use of dart-firing stun guns would save the university money in reduced workmen compensation costs and reduce liability for the university in police use of force situations. Another frequent factor that influenced the decision to issue dart-firing stun guns was the fact that the police and sheriff agencies that surrounded the university were using dart-firing stun guns.

Those agencies who were not using dart-firing stun guns stated that lack of financial resources was the main reason for not deploying dart-firing stun guns. Several of these agencies were also taking a wait and see approach. One stated that it had considered issuing dart-firing stun guns, but decided to wait after the local sheriff department stopped using dart-firing stun guns.

I should note that most of the public outcry against dart-firing stun guns has been associated with deaths or serious injuries related to their use. None of the surveyed agencies had experienced any deaths or serious injuries connected to the use of dart-firing stun guns. This could explain why these agencies had not experienced any public opposition to their use of dart-firing stun guns. It is my opinion that any deaths resulting from police actions will always have the potential to provoke a strong public reaction regardless of the fact that prior community education programs were conducted.

Before deploying dart-firing stun guns the University of South Florida Police Department will need to develop policies and procedures covering the use of dart-firing stun guns, training and reporting requirements, medical evaluations, and other operational issues. Sample polices can be obtained from other state universities police departments and from local police and sheriff departments. To date, law enforcement agencies have used dart-firing stun guns on persons as young as six and as old as 92 years. This is a policy question that will need to be addressed, under what circumstances is using a dart-firing stun guns not authorized (Mingo, Wolf, Mesloh, & Kelchner, 2005).

The University of South Florida Police Department will have to develop a comprehensive training program that reinforces its policies and procedures. The new Florida State laws specify that a minimum of fours of training in dart-firing stun guns use will be added the basic skills course required for certification as a law enforcement officer and for any officer currently authorized to carry dart-firing stun guns. In addition each officer who is authorized by his or her agency to use dart-firing stun guns will receive a minimum of one hour training annually. The laws state that the decision to use dart-firing stun guns "must involve an arrest or custodial situation during which the person who is the subject of the arrest or custody escalates resistance to the officer from passive physical resistance to active physical resistance and the person has the apparent ability to physically threaten the officer or others, is preparing or attempting to flee or escape the officers or others". Florida State Statutes state that the training officers receive on dart-firing stun guns "must include the effect that the dart-firing stun gun may have on a person" (Florida State Statutes, 2006). None of the agencies surveyed required that officers wishing to carry dart-firing stun guns experience a shock from one of the devices. All of the agencies left the decision on whether or not to receive a shock up to the individual officers and some even reported that a majority of the officers who received the training volunteered to be shocked. Officers need to be aware of the limitations of dart-firing stun guns. Such as thick or baggy clothing, probes missing the target, the fact that you only get one shot and the need to have a back up officer available. The Taser brand dart-firing stun gun is designed to work through clothing up to two inches thick. However, very thick clothing like heavy winter jackets can prevent the transfer of the incapacitating electrical energy. Officers need to learn the target areas and not to target the face, neck, and groin. All of the agencies surveyed required documenting the use of dart-firing stun guns on a use of force form. Training should cover maintenance, calibration and the data download procedure and cameras on the newer model Taser brand dart-firing stun gun.

Deployment decisions will need to be made. Are there resources available to issue a dart-firing stun gun to every officer at one time or will a phased deployment have to be implemented? Many departments issue dartfiring stun guns to special operation units or street supervisors first (Arena A. 2006). If a phased deployment system is used, dart-firing stun guns should be given to the street officers who will most likely need to use them the most.

Lastly, after dart-firing stun guns have been fully placed into use, an ongoing evaluation process should be developed to ensure that the department stays up to date on the latest developments in the technology and that the devices are working properly.

In conclusion my research has shown that dart-firing stun guns are a useful tool for law enforcement in a university setting. There does not appear to be many community and administrative barriers as I once believed. Of course

like any new technology used, the University of South Florida Police Department will have an initial investment of manpower and financial resources to establish standards, training and policies. However, my research has convinced me that USFPD should move forward with the implementation of this technology. And I plan to highly recommend the use of this technology to the Chief of the University of South Florida Police Department.

Lieutenant Joe Anderson has worked for the University of South Florida Police Department since 1986. He also worked for two years with the Tavares Police Department before joining USFPD. Joe is currently the Lieutenant supervising Training, Crime Prevention and Special Events planning. He is a certified instructor in firearms, RAD and ASP baton. Joe has a bachelor's degree in Criminology from Florida State University and is pursuing his Master's degree in Criminology from the University of South Florida.

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# Appendix

# Survey Questions

- 1. Does your department currently use a dart-firing stun gun?
- 2. Did your department experience any resistance to the implementation of dartfiring stun guns from the university administration?
- 3. Did your department experience any resistance to the implementation of dartfiring stun guns from individuals or community groups?
- 4. Did your department conduct any special community education programs before implementation?
- 5. Was there any community notification given?
- 6. Did your department experience any barriers unique to the university environment?
- 7. Has your department experienced any deaths or injuries caused by the dart-firing stun guns?
- 8. What brand and model dart-firing stun gun do you use?
- 9. How often and how many hours do you train?
- 10. How are your instructors trained and certified?