The Bill Blackwood Law Enforcement Management Institute of Texas

Study Regarding the Mandated Use & Wear of Ballistic Body Armor for Uniformed Personnel

A Leadership White Paper Submitted in Partial Fulfillment Required for Graduation from the Leadership Command College

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ABSTRACT

In July of 2001, Officer Rick Norman of the Knoxville, Tennessee police department conducted a "routine" traffic stop. The stop, made for a defective tail light, ended with Officer Norman being shot in the chest by the intoxicated driver. Officer Norman, who was not wearing body armor, survived this incident. On May 20, 2008, Officer Norman was dispatched to a residential burglary, and upon arrival, was shot multiple times in the chest and in the back. Again, Officer Norman was not wearing body armor. Officer Norman stated after the 2001 shooting, "I know, however, my policy has changed. Cause I was told by my boss, not Chief Keith, but my wife, from now on my vest will be on when I leave the house" (as cited in McLamb, 2008, para. 2).

It is unknown what may be going through the minds of some officers when they decide to wear or not wear department issued body armor. One thing for certain is that body armor improves the chances of survival if an officer is shot in the covered abdominal/thoracic area. In the case of Officer Norman, the Knoxville, Tennessee police department provides ballistic, or body armor, protection. Like many departments providing this vital piece of safety equipment, Knoxville does not have a "mandatory" wear policy, as the agency leaves this discretion up to the individual officer.

A vast majority of law enforcement agencies across the nation mandate that officers carry firearms for the simple fact of protecting both the officer and citizens. It would only make sense, then, that an agency that issues ballistic protection also enforce the wearing of such protective equipment to all uniformed personnel for the sake of the officer, his/her family, and the community. The sources for this paper include FBI publications, U.S. government regulations, news articles, and internet sites.

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INTRODUCTION

Initially, the thought placed behind the idea of a mandatory, ballistic protection, or bulletproof, vest was a simple one. There are many thoughts and ideas, some simple while others are vast, as to why an officer in this day and time should wear such an available item. If an agency is making a piece of equipment available, then the same agency should require the uniformed officer to wear the bullet-proof vest every time the officer is in uniform.

A simple strapping on of an item, which has been proven to be effective in ballistic protection, should be mandatory. An agency will provide an officer with a uniform, and require its wear, as should the use of the bullet-proof vest. Not only is this one of the more expensive personal wear items an agency will purchase, it is an item that can potentially save a human life, which has no monetary value.

Any one individual who has been around law enforcement for any length of time, regardless of the size of the agency, is aware of the potential dangers that these men and women are subjected to on a daily basis. The United States Department of Justice, in cooperation with the Federal Bureau of Investigation and Criminal Justice Information Service Division has been compiling data for years on the numbers of and statistical data of Law Enforcement Officers Killed and Assaulted (LEOKA). The data sequences used for this paper are from within the last decade, 2000 through 2009. Through the compiled data, it is shown that an alarming number of officers have been feloniously killed in the last ten years. Of the 536 killed, alarming rates of 341 were actually wearing ballistic protection (as seen in Table I) (U.S. Department of Justice, 2010).

the wear of ballistic protection. Closer observation shows that of the 341 officer killed, 315 were killed with firearms. Of the 315, 220 were shot in areas that offered no protection from ballistic/bullet-proof vest.

With modern technologies, which allow lighter, more effective ballistic materials, it is hard to imagine that a person engaged in the active law enforcement profession would not opt to wear a simple item that could potentially save their lives, nor is it fathomable that an agency head would not dictate that an individual assigned to a patrol function not be mandated to wear ballistic protection throughout their tour of duty. Having all the aforementioned in mind, an agency chief, head, or director should mandate through policy the wear and use of body armor, ballistic protection, or bullet-proof vests for every uniformed officer who responds to calls for service within the community.

POSITION

Ballistic body armor has been proven, time and time again, to save the lives of those who use the equipment and are subjected to the unfortunate circumstance of an officer involved shooting. In 1975, DuPont and the International Association of Chiefs of Police (IACP) started the IACP/DuPont Kevlar Survivor's club. Since the survivor's club inception, there have been over 3,000 law enforcement officials inducted into the club. These survivors have survived both ballistic and non-ballistic events because they were wearing ballistic body armor at the time of the incident (Carson, 2006).

There were three main objectives for the IACP and DuPont in forming the partnership. The first was to reduce the deaths and disabilities of law enforcement officers by encouraging the wear of personal body armor. The second was to recognize

those who had survived a life-threatening or disabling event due to the wear of body armor. Last, it was to serve the law enforcement community by collecting the information from these incidents and sharing the valuable information that relates to the survived incidents. Zakhary and Carnes (2007) stated, "The IACP has long recognized the value of ballistic protection for all police officers engaged in the direct delivery of services" (p. 1). In 1999, the Division of State Associations of Chiefs of Police's resolution, titled "Use of Soft Body Armor by Law Enforcement Personnel," was adopted by the IACP as policy. This resolution called for several things. The first was to obtain a proper fit for all law enforcement officers, which is crucial to the effectiveness of ballistic protection. Next, it was to establish a program to educate all law enforcement officers on their personal protection through the use or non-use of routine wear of body armor. The resolution also called for an adoption of a policy involving the wear of ballistic body armor for all field and investigative officers. Last, the IACP resolution called for periodic inspections of soft body armor, which was to include the usable condition, ensuring a proper fit, and a protocol for replacing defective armor as needed (Zakhary & Carnes, 2007).

Kevlar is a man-made material that is woven into a fabric. This fabric is taken into layers and presented into today's ballistic body armor. The Kevlar fibers work to absorb and spread out the initial impact of a high speed projectile or bullet. In order to be effective, according to various manufacturers, the ballistic body armor has to be fitted to the individual. This results in a proper fit and more conducive manner in stoping high-speed projectiles, namely bullets (Kingrey, 1997).

It is known that the state of Texas is not technically an OSHA state, meaning the state itself does not necessarily adhere to all the subjections of OSHA rules. However, this does not preclude a department from being fined or investigated by OSHA or similar authorities. OSHA standard 1910.132 requires an employer to purchase personal protective equipment (PPE) for the employee. These PPE's are utilized to prevent an employee from being injured and/or killed due to an on the job exposure or incident (U.S. Department of Labor, 2010, Section 1910.132 (a)).

The PPE's are defined as protective equipment, including personal protective equipment for the entire body, protective clothing, respiratory devices, and protective shields and barriers. This standard goes on to state that the PPE is to be provided when needed due to hazards encountered, whether through absorption, inhalation, or physical contact (U.S. Department of Labor, 2010, Section 1910.132 (a)). Several states have begun including ballistic body armor within their guidelines and requirements for PPE's. States such as Washington and Oregon have policies directly related to ballistic body armor as PPE's (Washington State Department of Labor & Industries, 2006; Oregon Occupational Safety and Health Division, 2009).

Many departments, throughout the world and in the U.S., prepare annual budgets. Many items are requested to better prepare the department as well as the officer to effectively and safely perform his/her duties. One such item is ballistic body armor. Body armor costs anywhere from \$500 to \$1,500 per vest, depending upon what company bought from and who manufactured the end product. This is a small price to pay compared to the alternatives. One alternative, involving medical costs suffered from a gunshot wound, shows the costs averaging \$14,600 for initial care,

while a lifetime care exceeds \$35,400 on average (Hilts, 1999). The cost of making the ultimate sacrifice averages funeral expenses around \$6,500 (Solomon, 2007). This does not including a "traditional" law enforcement funeral but rather a civilian's.

While there is not any specific number or value that can be placed on that of a human life, one can be placed on costs of the loss of life. As tragic as it may be, funeral expenses or medical treatment costs are a point that many persons can visibly grasp the concept of. As of 2009, the average age of officer killed in the line of duty is 38 (U.S. Department of Justice, FBI, 2010). An agency will pay out 50% of that officer's salary to their spouse for the remainder of the spouse's life. This could conceivably reach over the million dollar mark. With disability in mind, an officer who is unable to return to work due to injuries sustained during a traumatic event, would not only receive medical costs relief, but would also receive up to 75% to 100% of their salary.

While not necessarily the most comfortable or convenient piece of equipment to wear, the potential benefits far outweigh any of the associated awkwardness and inconveniences. As with most things in life, the human can adapt to the daily wear of body armor (through training, repeated daily wear), so he/she can overcome some of the hindrances in movements that are commonly associated with the wear. Statistical data provided by LEOKA showed that officer involved shootings occur all times of the year and all times of the day, regardless of the temperature outside (U.S. Department of Justice, 2010).

An administrator does have to look at liability issues when attempting to resolve the question of ballistic body armor. A department is constantly asking and allowing officers to perform potentially dangerous duties on a day-to-day basis. A department

that ignores vicarious liability by not implementing a policy regarding the use of body armor sets itself into a potentially costly situation. The department takes great time in training, educating, and dictating use of force and policies regarding the same in an effort to produce the safest state of mind for the officer. Conceivably then, the department should address the issue of body armor, one that follows guidelines to produce the safest working environment for the officer.

COUNTER POSITION

Officers within various departments that have either no policy or a voluntary wear policy regarding the use and/or wear of body armor refuse to wear such. Some arguments include the lack of comfort, loss of agility, higher body heat, increased perspiration, or the appearance of being overweight ("Why wear body armor," n.d.). Wilson (1998) stated, "Wear ability is the primary issue among officers today as to whether they will wear the soft body armor or not" (p. 9). While it is true that most, if not all of these factors are presented to those who decide to wear body armor, those who do wear the ballistic body armor have learned to overcome these feelings and personal hindrances. As stated earlier, with training and repeated use, one can easily overcome all of the aforementioned arguments. Additionally, today's ballistic body armor is in fact lighter, thinner, and more flexible than ever before.

It is true that throughout this nation, and especially within the state of Texas, temperatures reach well into triple digits during the spring summer and fall months. This can prove to be very uncomfortable when adding ballistic body armor, which compounds the issues of high heat. With heat exposure, the body tends to produce more sweat, which is easily absorbed into the Kevlar fibers, thus further compounding

the issues of heat and water retention. Most vest carriers today offer the option of being made from Gore-Tex[™], which aids in the prevention of water absorption (Kingrey, 1997). Fortunately, within today's law enforcement, the officer may spend little time outside of a building, house, or vehicle. A majority of an officer's tour of duty can easily be within the cool confines of a patrol vehicle, and they are only subjected to the occasional instance of heat exposure.

Another argument often used by officers is that the ballistic body armor worn by a majority of field officers today will not save an officer from being stabbed. While partly true, wearing ballistic body armor, which is rated for bullet projectiles, will aid in the reduction of being cut as there are many layers of Kevlar within the product ("Vest Saves Phoenix Officer in Attack," 2009). There are also vests on the market today that are stab resistant. Usually, these types of vests are bought, purchased, or utilized within the corrections fields, as many of these officers are subjected to a different type of potentially dangerous environment within the prisons and/or jails (Dupont, 2010).

Some believe that ballistic body armor should not be mandatory, as it will not prevent head trauma. While this is true regarding body armor, there are other types of ballistic materials, produced in the forms of helmets or neck protection, that are utilized by many SWAT teams within various agencies. Ballistic body armor, as issued and utilized by many law enforcement officers today, does not offer complete body protection. There is no way to totally prevent injuries received from being shot. However, the law enforcement community recognizes that a majority of officers, historically, have been shot and/or killed in the abdominal area. This area contains a majority of the body's vital organs, which are protected by the use of ballistic body

armor. Simply put, the wear and utilization of protective gear, such as ballistic body armor, can reduce the number of injuries or casualties amongst all law enforcement officers (Baker, 2005, p. 12).

Some departments may not mandate the wearing of body armor because the individual officer and the department covered by a "mandatory wear" policy may experience a negative morale affect (Fullerton, 2007). It is observed that within many departments, those with authority are in fact the same ones who despise being told what to do. While morale may be affected negatively, the department head executive or chief has a moral and ethical issue of protecting that officer, as well as the officer's family and the community in which they serve. Included with a mandatory wear policy, a chief administrator has the obligation of educating officers and other personnel regarding officer safety, including the use and utilization of ballistic body armor, and this encourages a welcoming reception of the mandatory wear policy. The chief administrator should explain benefits of wearing it and state the reasoning behind the policy. If a policy were posed in a manner of seeking the safest and most effective environment for the officer, the potential for a negative impact would be reduced.

When a chief administrator looks at policy regarding the mandatory issue and use of ballistic protection, this ultimately costs the agency money. With vests averaging \$500 to \$1,500 per vest, a department could easily spend thousands to hundreds of thousands of dollars, depending upon the size of the agency. This cost could prove to significantly cut other budgeted or requested items, which could impact other much needed equipment. The Bulletproof Vest Partnership, created in 1998, aids and provides assistance to agencies in the purchase of ballistic body armor due to the

concerns of the law enforcement community. Since its inception, this partnership has been utilized by many agencies across this nation (U.S. Department of Justice, n.d.).

RECOMMENDATION

In 1997, Kingrey stated, "While the number of officers wearing soft body armor has increased over the past several years, many officers still choose not to wear their body armor" (p. 6). Even though this paper was written and submitted over a decade ago, this statement still holds true today. Kingrey's paper also spoke of the violence being committed against law enforcement officers during that time. Today, while numbers of law enforcement officers killed or assaulted are down from 1997, the personal protection and officer safety should not be allowed to become complacent. A law enforcement agency that provides ballistic protection or body armor should require the use and mandatory wear, with few exceptions, to patrol officers. Upon the purchase and issuance of body armor, an agency should have a policy regarding the use, care, and utilization of the ballistic protection. This policy should state who, when, and where the ballistic protection should be worn and under what circumstances such body armor is not required.

Body armor saves lives and has been proven to do so over time. Cecconi (2008) stated, "Of the approximately 1,200 officers killed in the line of duty since 1980, more than 30 percent might have been saved if they had worn vests" (p. 1). Law enforcement agencies across the nation and around the world continue to seek, purchase, and supply officers with ballistic protection. An agency that spends the funds to make the purchase has an obligation to enforce the use of the body armor for the sake of officer safety and welfare of its employees. Regardless of appearance, morale, agility, or

weather, uniformed personnel should be mandated to wear and use their issued ballistic body armor every time the uniform is worn. This is not only for the protection of the officer, but for the sake of the officer's family, the department, and the community served.

Through the use of education, both the officer and the officer's family acceptance of this mandatory wear policy can easily be encouraged. The incorporation of family into the equation often brings to light the fact that the department and its chief administrator cares about the individual officer as well as their family. The one person or persons who may be able to encourage the wearing of body armor, other than policy, is the family, whether spouse or child.

Ballistic body armor is one budget item that is usually not an item that is ridiculed by a municipal or county or state government. Elected officials charged with ensuring the safety and productivity of employees are quick to realize the benefits of ballistic body armor. Relatively none of these elected officials would argue that the purchase, as great as the price may be, is a waste of taxpayer moneys. The best way to utilize the purchase of ballistic body armor by an agency would be to introduce a written policy regarding the wearing of it by uniformed field personnel.

It is the position of this author, given light of the constant potential of the individual officer being placed in harm's way on a daily basis, that a chief or department head make a policy and enforce this written policy on the mandatory wearing of ballistic body armor. A voluntary policy has allowed officers to become complacent in regards to officer safety issues. One article pointed out, "One cannot know which day might be the day that an angry citizen snaps or a criminal decides to make a stand. That day

would be the wrong day to opt for comfort over safety!" ("Why wear body armor?" n.d., p.1). This policy should be directed at all personnel, especially those who are uniformed and come in to repetitive contact with the public through calls for service. Attention does also need to be placed on those who primarily have reduced contact, either through position within the department or assignment (i.e. administration, detectives, non-sworn personnel) so that they are not excluded from the protections of ballistic body armor (City of Plano, 2008). Many departments throughout the state have policies regarding the voluntary use of ballistic body armor. One particular agency, the Plano Police Department, has an effective policy regarding the mandated use and wear of ballistic body armor by all employed personnel. Wilson (1998) claimed, "The mandated use of department supplied vests is an option to achieve the maximum protection for its officers" (p. 3).

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APPENDIX

Table I. Law Enforcement Officers Feloniously Killed (U.S. Department of Justice – Federal Bureau of Investigation, 2010)

Table 37

Law Enforcement Officers Feloniously Killed

Number of Victim Officers Wearing Uniform, Body Armor, or Holster, 2000–2009

Victim officer			Total :	2000	2001 ¹	2002	2003	2004	2005	2006	2007	2008	2009
Number of victim officers	Total		536	51	70	56	52	57	55	48	58	41	48
Wearing uniform	Total		410	41	48	47	45	42	43	32	41	31	40
Wearing body armor	Total		341	31	41	37	35	32	34	27	36	32	36
		In uniform	304	30	31	35	34	29	32	22	33	26	32
		Not in uniform	36	1	10	2	1	3	2	4	3	6	4
	repoi	Wearing uniform not rted	1	0	0	0	0	0	0	1	0	0	0
Wearing holster	Total		487	43	63	51	51	53	49	43	52	37	45
		In uniform	404	39	48	46	45	42	43	32	40	30	39
		Not in uniform	82	4	15	5	6	11	6	10	12	7	6
	repoi	Wearing uniform not rted	1	0	0	0	0	0	0	1	0	0	0

¹The deaths of the 72 law enforcement officers that resulted from the events of September 11, 2001, are not included in this table.

Table II. Law Enforcement Officers Feloniously Killed with Firearms (U.S. Department of Justice – Federal Bureau of Investigation, 2010)

Table 38

Law Enforcement Officers Feloniously Killed with Firearms

Location of Fatal Firearm Wound and Number of Victim Officers Wearing Body Armor, 2000–2009

	of fatal firearm wound	Total	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of												
victim officers	Total	490	47	61	51	45	54	50	46	56	35	45
killed	Front head	151	21	27	14	9	10	17	10	18	9	16
with firearms	Rear head	41	2	3	8	5	6	6	5	3	1	2
	Side head	53	1	4	7	7	7	2	5	7	8	5
	Neck/throat	45	5	3	3	5	3	5	7	2	5	7
	Front upper torso/chest	135	14	16	12	12	19	14	11	19	7	11
	Rear upper torso/back	21	2	3	1	3	0	2	3	5	1	1
	Front lower torso/stomach	28	2	5	3	3	4	3	2	1	4	1
	Rear lower torso/back	7	0	0	1	0	3	1	1	1	0	0
	Front below waist	5	0	0	1	1	0	0	2	0	0	1
	Rear below waist	3	0	0	1	0	2	0	0	0	0	0
	Arms/hands	0	0	0	0	0	0	0	0	0	0	0
	Fatal wound location not reported	1	0	0	0	0	0	0	0	0	0	1
Number of												
victim officers												
killed	Total Front head	315 117	29 16	38 21	34 12	31 6	31 5	30 12	26 9	34 15	29 9	33 12
with firearms	Rear head	28	2	1	5	3	5	4	3	2	1	2
while wearing												
body armor	Side head	38	1	2	4	5	3	2	3	7	6	5
armor	Neck/throat	33	2	3	3	4	3	3	4	1	4	6
	Front upper torso/chest	70	5	9	4	8	11	8	6	7	5	7
	Rear upper torso/back	8	2	1	0	1	0	0	1	1	1	1
	Front lower torso/stomach	13	1	1	3	3	1	1	0	0	3	0
	Rear lower torso/back	4	0	0	1	0	2	0	0	1	0	0
	Front below waist	2	0	0	1	1	0	0	0	0	0	0
	Rear below waist	2	0	0	1	0	1	0	0	0	0	0
	Arms/hands	0	0	0	0	0	0	0	0	0	0	0