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**IMPLEMENTING THE .223 CARBINE FOR PATROL:  
THE ISSUES AND BENEFITS**

A Policy Research Project  
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## **ABSTRACT**

This research paper is on the topic of the .223 carbine in respect to its use for the first responder, and not just a specialized tool for SWAT. Officers are facing criminals that are not only armed with auto and semi-auto high capacity rifles, but are more commonly wearing body armor and are demonstrating a willingness to shoot it out with police. It is important that our officers be prepared and have the right equipment for the job which includes a .223 carbine.

The purpose of this research project is to identify the benefits of implementing the .223 carbine into the patrol function. Sources for this study came from books, periodicals, police journals, departmental policies, and personal interviews. Research was conducted to analyze the characteristics of the .223 to determine if there were undesirable characteristics associated with this round as well as to identify the positive characteristics. Most of the research centered around the issue of the power of the round and concerns of over penetration. Research concluded that with the right ammunition, there are no fears of over penetration. In fact it was learned that some of the commonly used pistol rounds (9mm and AOS&W in certain loadings) would penetrate further than the .223 in 10% ballistic gelatin as well as wall board constructed for testing. The other characteristics of the .223 Remington were superior terminal ballistics to the pistol caliber carbines, and that it will consistently penetrate body armor when the pistol calibers and the shotgun will not. As an added benefit, it was found that the .223 is more likely to break up and fragment when striking a hard surface rather than to ricochet. This is opposite the pistol bullets and the shotgun slugs or pellets that are very likely to ricochet.

It was concluded that the .223 carbine has the most desirable characteristics of any of the weapons available to the patrol officer. It would be the recommendation of the researcher that a policy be implemented that governs the training, qualifications, carry, and deployment of the .223 carbine for the first responder function.

## TABLE OF CONTENTS

Section	Page
Abstract	
Introduction	1
Historical Context	2
Review of Literature or Practice	4
Discussion of Relevant Issues	8
Conclusion/ Recommendations	11
Bibliography	

## INTRODUCTION

The purpose of this research paper is to identify the benefits of implementing the .223 carbine into the patrol function. Implementation of the carbine will allow the first responding patrol officer the necessary response capability to extreme high threat situations. Currently most agencies utilize this weapon's capability with their Special Weapons and Tactics Units. At least one well documented critical incident has shown the need for patrol officers (first responders) to have access to a rifle in the interim before SWAT can arrive on the scene.

This project should show the advantages of the .223 Carbine versus traditional weapons such as the pistol and shotgun in certain situations. It will also address concerns that an administrator may have about this weapon such as penetration characteristics, accuracy, and training issues. There will be certain comparisons to the ballistics and uses of the .223 Caliber versus the shotgun and to other carbines that fire pistol cartridge rounds. This research paper will make reference to the current trends some of the large agencies are setting concerning the use of the patrol carbine, specifically in the .223 caliber.

The intended audience for this paper will be include the first responders, agency administrators, and members of the community. The first responder would be the street officer who would have the authority to carry the carbine as an additional tool in his arsenal of weapons and the responsibility that goes with it. The administrator is responsible for the policies concerning training, qualifications and deployment of the carbines, and the public has the right to know what kind of weapons their police are carrying and why. The sources used for this research paper will be from numerous sources including published articles, books, police journals,

departmental policies and personal interviews.

The intended outcome of this research is to show the superiority of the .223 Carbine over other traditional options in certain situations. It will show well known critical incidents that were near failures to the law enforcement agencies involved and how the outcome may have been different if the first responders had been armed and qualified with a patrol carbine firing the .223 round.

## **HISTORICAL CONTEXT**

Although American law enforcement have used rifles in some manner throughout American history, the most common shoulder weapon for the patrol officer working in an urban environment has been the 12 gauge pump shotgun. According to Richard Fairburn, "The shotgun has a long history in the U.S. but is not the ideal second weapon for police agencies as many officers do not perform well with them" (R. Fairburn 39). Some departments have experimented with pistol caliber carbines but the trend is back to the .223 carbines (Smith, 50) because the 223 seems to best fill the parameters of a patrol rifle.

During my interview with Clint Smith, director of Thunder Ranch which is a small arms training academy, he stated that "The infamous FBI shootout in Miami on April 11, 1986, was the most significant rifle training catalyst in American law enforcement in the past fifty years" (Smith). Mr. Smith further stated that he had developed what he called an Urban Rifle course in 1983 that was not heavily attended. After the Miami shootout in 1986, he taught more of these rifle courses than all of his other courses combined (Smith).

The most recent event to show the need for an intermediate rifle for the patrol officer was the North Hollywood Bank robbery. On February 28, 1997, Larry Eugene Phillips, Jr. and Emil

Dechebal Matasareanu robbed the Bank of America in North Hollywood shortly after it opened at 9:00am. After being surrounded by several hundred police officers, the suspects shot it out with police. Suspects were wrapped from their ankles to their necks in body armor and were armed with automatic weapons, which included an AK 47 and MAK 90 with 100 round drums.

Officer's handgun rounds and buckshot from shotguns were bouncing off the custom made kevlar. Pinned down officers were delayed in getting help from a SWAT team that was hung up in traffic. Some officers went to a nearby gun store and were supplied with five 223 AR-15 type rifles (Schneider, 9). According to author Roy Huntington "The rifle is an option in the theory of having right tools available at the time of the threat" and cites this L.A. shootout as a classic case of field officers who had run out of options (Huntington, 41).

Many agencies have added rifles to the weapons selection available to patrol officers in urban environments. Palm Bay, Florida, added rifles after a mass murderer shot and killed six people, including two police officers, in a shopping center (Pilant, 41). However, well publicized examples are not necessary to demonstrate the need for a patrol rifle. Simply check the FBI's latest report on officers killed or injured. Rifles figured into a number of officer deaths (Campbell, 43).

In our community, officers have dealt with criminals wearing body armor on several occasions, one of which could have been hazardous to one officer in particular. Narcotic officers and patrol officers had been dealing with a particular group of dope dealers who routinely sold crack cocaine from their apartment and on the streets. This group of suspects wore body armor daily when they engaged in their illegal activities. Officers considered these subjects very dangerous and even found silhouette targets in one of their apartments with multiple bullet holes

in them with officer's names written on the bottom of the targets. When questioned, they freely admitted to preparing for the day they might shoot those particular officers. Then on July 17, 1997, the Midland County Sheriff's Department prepared a search warrant for one of these subjects from a crime stopper's tip and they were not aware that the suspect might be wearing body armor. They did know there were guns in the apartment so they prepared to make a forced entry with their SWAT Team. They had a hard time with the fortified door and hit it four or five times before they got it open. Deputy Kent Spencer was the first officer through the door and confronted the suspect sitting in a chair with an SKS rifle. He did not see that the suspect had on body armor but he did see the charging handle on the rifle going forward letting him know that the suspect had loaded a round in the chamber and was ready to shoot. As the suspect turned left towards the officer with his rifle, Deputy Spencer fired two rounds from his 45 caliber pistol, one round missing over the suspect's left shoulder and the other round striking him in the left forearm creating enough pain to cause the suspect to surrender. During our interview, Deputy Spencer indicated that he was lucky that day and had learned a valuable lesson. He stated that he would never go into a possible shooting situation again armed with anything but his AR 15 rifle in 223 caliber. He indicated that he favored this weapon over the shotgun for a number of reasons but that the 223 was the only weapon option that he had that would have defeated the body armor that day if he had known the suspect was wearing it (Spencer).

Some departments consider a service rifle a specialized tool for SWAT teams only, but more progressive departments realize the need for first responders (usually a patrol officer) to be trained and armed with a rifle or carbine (Dumas, 47). Mason Williams in his article "The Rifle in Police Work" quotes Professor Allen Bristow in that "The use of the rifle by a police department,

is probably one of the least explored, least experienced with, and perhaps most important topic in the whole police armory" (M. Williams, 50).

## **REVIEW OF LITERATURE OR PRACTICE**

The scope of this project is to show the characteristics of the 223 cartridge, and to make limited comparisons to the other police shoulder arms on the market which are the shotgun and the pistol caliber carbines. Since the primary focus of this project is on the characteristics of the .223 Remington, the references to research done by others will be in the area of penetration characteristics of the .223 Remington cartridge.

### Outline the Results of Independent Research (Conducted by Others)

In 1994, members of the training staff at Gunsite Training Center conducted penetration tests to compare the penetration characteristics of the .223 Remington cartridge with those of various handgun bullets (9mm, .40S&W, and .45ACP). Bullets were fired into test barriers representing indoor and outdoor walls. The tests were designed to mimic shots fired from inside a building, through the internal rooms, out the exterior wall, and into another similar building nearby. In these tests, the 9mm and .40S&W pistol bullets penetrated more walls than did the .223 Remington in either the 55 grain hollow point or the 55 grain soft point. The pistol bullets exited the exterior wall where the .223 bullets were captured in the exterior wall (Gunsite, p.61).

Hornady Manufacturing has a new line of rifle loadings for the police market called TAP (Tactical Application Police), and in September 1998 they published a penetration test report which included all of their .223 loadings in this line. Hornady offers four loadings in their TAP line, three in polymer tipped bullets (40, 55, and 60 grain) and a 75 grain hollow point. This publication gives the following summary on their .223 Remington loadings; "The .223 TAP loads



are a unique offering to law enforcement. They offer dramatically better terminal performance than any handgun cartridge, yet they do not show over penetration in ballistic gelatin testing. All four defeat Level IIIA ballistic body armor with little effect on the bullet's performance" (Hornady, September 1998).

In 10% ballistic gelatin, when shot from an AR-15 with 16 inch barrel, the .223 TAP gave the following in penetration (Hornady, September 1998, Branscome, p.58); [40 grain = 5.13"] [55 grain = 8"] [60 grain = 10"] [75 grain = 13.68"]

In December of 1991, penetration tests were conducted by the Mesa Arizona Police Department's Firearms Training Unit. Three .223 Remington loadings by Federal were tested along with the 9mm Winchester 147 grain hollow point. Following are penetration test results in 10% ballistic gelatin; [.223 Federal 55 grain hollow point = 10.5"] [.223 Federal 40 grain hollow point "Blitz"= 5"] [.223 Federal 69 grain hollow point = 12"] [9mm Winchester 147 grain hollow point = 17"]

Other test were conducted in external walls constructed for testing purposes at the Mesa Police Firing Range. The conclusion was that the 9mm have a greater potential for penetration through walls than does the .223 (Furr).

Dr. Gary K. Roberts who is a Naval Reserve Officer involved in wound ballistic research, did a report on the comparison of the wound ballistic potential of 9mm vs. .223 cartridges for law enforcement entry applications. His conclusion was that "The incapacitation potential of .223 bullets fired from weapons such as the Colt M-16/AR-15, Heckler & Koch G41 and HK 33, and Ruger Mini-14, is significantly superior to that of the best 9mm bullets fired from SMG's (Roberts)".

### Survey the Practices and Policies of Other Police Departments

In a news release dated March 5, 1997, the Los Angeles County Sheriff's Office announced a new policy of deploying AR-15 rifles. The news release read in part, "Recent events, including the attack on Lakewood Station deputies by suspects with sophisticated weapons and the North Hollywood bank robbery, have prompted a change in the Sheriff's Department's policy of deploying semiautomatic AR-15 rifles (L.A. County S.O.,1).

Sgt. Paul Richards presented a rifle carry proposal to the Arlington Police Department dated April 22, 1997. In his proposal, he listed the five desirable characteristics he believed a police weapon should have and contrasted the .223 Remington and the shotgun with slug, and the handgun. The .223 was the only weapon that met all of the requirements listed in his proposal (Richards, 2). This proposal is still under consideration by the Arlington Police Department (Ingram).

In a memo dated August 17, 1997, Sheriff Larry Carpenter, Ventura County Sheriff's Office, announced an immediate new policy authorizing the deployment of the AR-15 rifle to select deputies. In this memo, Sheriff Carpenter states the shortcomings of the shotgun with either buckshot or slugs and states the advantages of the .223. He also lists the situations where the .223 is the superior weapon which includes violent suspects wearing body armor, suspects armed with high capacity auto or semi-auto weapons, and multiple armed suspects (Carpenter).

In the mid 1980's, Texas Department of Public Safety began issuing the Ruger Mini-14 in .223 Remington. Prior to the Mini-14, DPS Troopers were allowed to carry a 30-30 Winchester carbine. DPS reverted to the Mini 14 because of its characteristics of low recoil, more ammunition, less penetration, and the fact that the .223 Remington was far less likely to ricochet

(Jungkind).

The Midland Police Department currently has a policy which allows officers who have attended department rifle training (three days) to carry a department approved rifle/carbine.

Officers who do carry a patrol rifle must qualify quarterly (MPD).

#### Compare and Contrast the Research Findings and Practices

The current research on the .223 cartridge seems to center around the penetration characteristics due to misunderstanding of the round by police administrators. The research for this project shows that ammo manufactures are developing special loadings for reduced penetration but current loadings are not believed to be a problem in this area. According to Richard Fairburn, "Even when using military ball ammunition with it's full metal jacket bullet, the AR is not known for deep penetration of either animate or inanimate targets. Poor penetration is precisely why the military adopted a new load for the 5.56mm cartridge using a heavier bullet with a steel insert (R.Fairburn, p49)." All of the articles I found support the theory that the .223 Remington does not present a problem of over penetration with any of the expanding bullets commonly used by law enforcement (Boyle p.54, Pilant p41, Daniels p.25-26, Huntington p45).

The sample of departments I contacted on the west coast have started rifle carry policies as a direct response to the February 1997 bank robbery in North Hollywood. The Arlington police department has a proposal that they are considering based on the "Commando" type crimes occurring around the country in an effort to be prepared for such events in their own community (Richards).

## **DISCUSSION OF RELEVANT ISSUES**

### Identify and Summarize the Key Issues

The issues of this project are the characteristics of the .223 carbine as related to four areas, safety, effectiveness, training issues, and liability issues. Focus in these areas should demonstrate to the reader, the superiority of the .223 Remington in a quality carbine to the shotgun or pistol caliber carbines, as an all around shoulder arm for the first responder (patrol officer).

The first issue is that of safety of the round as it relates to over penetration, potential to ricochet, and the capability of precision bullet placement. The misunderstanding of the .223 that causes concern is the issue of over penetration and resolving that has issue has been the heart of this paper, and research has shown that the .223 Remington is not an over penetrating round. In the area of ricochet potential, while the .223 Remington bullets tend to break up and fragment when hitting a hard surface such as pavement, walls, sidewalks, etc., pistol bullets and shotgun slugs or pellets tend to ricochet (Stock, Boyle p.54). The ability to place precision shots is related to accuracy and the .223 Remington is used as a small caliber sniper rifle as well as a varmint round for hunters and the accuracy of the round has never been in question. However, accuracy comes with the rifle that fires the round and the M16/AR-15 rifle has been developed into one of the most accurate and reliable military rifles in history (R.Fairburn, p.44). The Ruger Mini-14 is not as accurate as the M16/AR-15 rifles but it is certainly more than good enough for patrol rifle needs (R. Fairburn p.45).

The second issue is that of effectiveness which includes range, terminal ballistics, and the ability to penetrate soft body armor. On the issue of range, The shotgun, even when loaded with

slugs, nor the pistol caliber carbines will reliably penetrate soft body armor (Richards, Stock,). The shotgun loaded with slugs also has a limited range and are used most efficiently at ranges of 75 yards or less (Killam p40) while it is suggested that the average police officer should be limited to 50 yards (R. Fairburn p.39). The pistol caliber carbines cannot match the effective range and terminal ballistics of a .223 Remington carbine (D. Fairburn, p.50) and it isn't unusual for a good rifle shot to be able to strike man-sized targets at 300 yards with iron sights using a quality AR-15 type carbine (Campbell, p45). The other characteristics of the .223 are it's ability to reliably penetrate soft body armor up to a Level IIIA rating (Hornady, Stock, Smith, Richards, Williams p.52,). The .223 Remington is a intermediate rifle cartridge with terminal ballistics far superior to any pistol cartridge (R. Fairburn p49, D.Fairburn p.50, Dumas pA8, Daniels p.26, Roberts, Boyle p.54).

The ability to train is an issue when dealing with the excessive recoil of the police shotgun, especially with small stature, recoil sensitive shooters (Boyle p.50). According to Richard Fairburn, "This recoil hampers precise placement of slugs as well as limiting the practice many need to be effective with shot" (R. Fairburn p.39). In fact at least one author states that the recoil sensitive officer will not deploy the shotgun even when it is called for, creating safety issues and impeding the safe conclusion of incidents (Williams p.52). Recoil is a non-issue with the .223 Remington, and specific carbines, the Colt AR-15 and the Ruger Mini-14, are considered user friendly firearms that even a novice can master (Dumas p48). One author concludes that one day of transition training is all that is needed to supply basic rifle training to officers because rifles are easier to shoot than handguns and officers respond quickly to training (Huntington, p45).

The last issue would be any concerns of liability related to the .223 Remington caliber or

the carbines that fire the round. Any police weapon comes with responsibility and liability and the .223 is no different. As an agency or an individual officer, there is the responsibility to train and to qualify at regular intervals. However, it has been established through the research for this project that the .223 does not penetrate as much as some common pistol rounds issued for police service, and it is not prone to ricochet as does the shotgun rounds (slugs or pellets) or pistol bullets. It is easier to shoot than the shotgun or pistol and has the capability for precise shot placement. All of this adds up to reduced liability as the risk of innocent bystanders being struck are reduced.

The only constraints with this program is the cost of the new weapons and the cost of training. As with any weapon carried by police officers, there should be written policy on the carry and deployment of such weapon. Much like departments across the country did when they made the transition from revolvers to semi auto pistols, officers should attend training and show proficiency through a qualification course before they are allowed to carry the new weapon.

The opportunity would be in the form of officer/citizen safety. A .223 carbine would fill a void in the street officers' arsenal of weapons that would allow him to handle a crisis situation that no other weapon could. The only way to win a rifle fight is with a rifle and as they found out in North Hollywood, California on February 28, 1997. The first responding officers may not have the time or opportunity to wait for SWAT.

A new policy allowing the carry and deployment of a .223 carbine could be done in two ways, the department could furnish the weapon or the officer could purchase their own department approved weapon. Many departments are currently furnishing Remington Model 870 shotguns and the current price is around \$335.00 for the police model (Walls). The current price

for a Ruger Mini 14 is approximately the same \$335.00 (Walls). The cost of the Colt AR-15 is around \$677.00 but it is a quality, rugged, and accurate rifle that may be worth the extra cost to some officers or departments. The approximate cost of ammunition in small quantities would be \$0.53 per round for shotgun slugs or buckshot as compared to \$0.17 per round for .223 rounds. However, because there is no recoil factor with the .223, the officer may shoot it considerably more than the shotgun thereby driving up the cost of ammunition but also raising his or her proficiency level at the same time.

## **CONCLUSIONI RECOMMENDATIONS**

In this research, I have identified two highly publicized events that were examples in which the officers were outgunned by suspects who were armed with rifles or automatic weapons. In one of those cases the officers took a heavy toll having two agents killed and several wounded and in the other case, the fight ended only when the officers were able to arm themselves with rifles. In the first case, there was no SWAT team as the team of agents were not expecting the violent suspect response they received. In the second case, the SWAT team got held up in traffic while en route to the scene. The purpose of this research project is to identify the benefits of implementing the .223 carbine into the patrol function so that the first responder has the ability to react to extreme high threat situations.

This topic is relevant because of the weapons officers are now facing and the fact that it is more common for criminals to wear body armor when conducting their illegal activities. I have shown an example in my own community where the suspect was wearing body armor, was armed with a semi-automatic rifle, and had the willingness to shoot the officer. A rifle is the only weapon that will consistently penetrate soft body armor and the .223 is on the bottom of the

power scale and does not possess the undesirable characteristics of the higher power rifles.

The issues that I examined in this research was the characteristics of the .223 caliber. I specifically looked for the undesirable characteristic of over penetration and found there was not a problem in this area. To the contrary, the .223 Remington penetrates less than the 9mm and .40S& W pistol rounds in some loadings in either the 10% ballistic gelatin or wall board testing media. As an added measure of safety, I discovered that the .223, when striking a hard surface, was very unlikely to ricochet due to break up and fragmentation of the bullet where as the pistol bullets and the shotgun slugs or pellets are very prone to ricochet. And, as already stated, the .223 will consistently penetrate soft body armor where the shotgun and pistol bullets will not. The .223 Remington also has much better terminal ballistics than any pistol bullet. And finally, research showed that training was made easy due to low recoil and the ability to place precision shots. Officers can shoot more because there is no punishing recoil and respond quickly to training.

Research has clearly shown that the .223 carbine has characteristics that make it superior to the pistol, to pistol caliber carbines, and even to the traditional shotgun as an all around patrol weapon. I would recommend the implementation of a .223 carbine policy whether the department provides the weapon or the officer buys their own, or a mixture of both. By having officers with rifles who are trained and qualified, hopefully we can prevent such tragic events as were identified in this research project. The way to prevent the tragic loss of life is to be prepared and that includes the use of rifles in modern day policing.



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