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FIREARMS SAFETY DEVICES
see page 24

CERT Challenge 2002

see page 28

- Biomechanics of Lethal Force Encounters
- LEAD Management at Outdoor Ranges
- Tactical Marksman

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BIOMECHANICS OF LETHAL FORCE ENCOUNTERS –

Officer Movements

By Bill Lewinski, Ph.D.

It is my intent to investigate the dynamics and biomechanics (the mechanics of biological and muscular activity) that occur in officer-involved shootings in a series of research studies. The first of the series started with measuring subject behavior in shooting situations (**The Best of the Police Marksman, Vol, II. See page 5**). The next phase starts with determining and measuring the fundamentals of shooting motions that officers perform in lethal force encounters. I'm aware that officer behavior in shooting situations can be much more complex than the elementary mechanics of drawing and firing or moving and firing that are measured in this study.

However, the reaction times, sight times, and movement times need to be studied, because often they are the only things officers do in shooting situations. Sometimes they form the components of more complicated motions and need to be fractioned out if we are to more fully understand the more complex motions. For instance "lag time" is comprised of a variety of things including movement time. Until we understand and measure the variety of biomechanical motions that officers perform in lethal force encounters, it's difficult to isolate the more complex and profound psychological dynamics, such as perception and judgment time. These other elements, of course, need to be studied and it is my intent to do so, after the physical elements are measured.

The primary purpose of this study is to measure the time it takes to do certain motions. This is not the definitive study on the movements and times of officers in lethal force encounters. However, it is very comprehensive. While the complete research design and a full analysis will not be presented here, it is important to know that a variety of measurements were taken on 68 officers from different sections of the Los Angeles Police Department. Testing was done at one of

All of the following data is measured in hundredths of a second. All of the motions were reactions to a buzzer from a PACT timer.

1. Finger on trigger - simple, unsighted, reaction time – .35
2. Finger on trigger with a sight picture, reaction time – .38
3. Finger on frame - simple, unsighted, reaction time – .45
4. Finger on frame with a sight picture, reaction time – .54
5. Time to fire a second round in a series of three (with sight picture) – .38
6. Time to fire a third round in a series of three (with sight picture) – .36
7. Weapon in low-ready position (45 degree angle) with the finger on frame - raise the weapon, acquire sight picture, fire one round – .83
8. Weapon in tactical or a high/low-ready position with the finger on frame - raise the weapon, acquire sight picture, fire one round – .83
9. Time to move the weapon from the low-ready position to a position on target – .64
10. Time to acquire a sight picture after moving the weapon from between 6 to 22 inches to a position on target – .18
11. Close-ready to a sight picture and fire – 1.0
12. Belt-tuck to a sight picture and fire – 1.0
13. Hollywood high guard to a sight picture and fire – 1.1
14. Bootleg position to a sight picture and fire – 1.3
15. Bootleg position to close contact (combat tuck) position and fire – .92
16. Draw and fire one round (start position was from, hand at the side of the body near the holster, weapon in holster, either snapped or unsnapped.)
    a. Level One Holster -off duty (snapped) – 1.87 (unsnapped) – 1.71
    on duty (snapped) – 1.71 (unsnapped) – 1.61
    b. Level Two Holster - (snapped) – 1.92 (unsnapped) – 1.72
    c. Level Three Holster - (snapped) – 2.00 (unsnapped) – 1.78
17. Draw and fire one round from close contact/combat tuck position (start position was from hand at the side of the body near the holster, weapon snapped in holster.)
    a. Level One off duty – 1.50
    b. Level One on duty – 1.31
    c. Level Two – 1.51
    d. Level Three – 1.70
18. Shotgun - from port to point and fire – 1.28
19. Shotgun - from low-ready to point and fire – .98
20. Shotgun - from high-ready to point and fire – .84

the ranges at the Davis Training Facility. The officers performed movements on the range that either form the foundation of, or are the components of the movements that officers perform in shooting situations or they directly replicated those movements.

For instance, the officers performed motions that allowed me to separate reaction time, movement time and sighting time as seperate components of the full shooting motion. The same movement was sometimes also studied from a number of perspectives. For instance the officers were asked to place their finger on the trigger and react to the stimulus from a PACT timer by pulling the trigger – unsighted, sighted and, finally, the sighted reaction of the first round when the officer was asked to fire three rapid rounds in reaction to the timer. Each officer did this many times. This meant the following three elements could be isolated – the simple trigger pull reaction time, the trigger pull reaction time when the weapon was sighted on target, as well as the first trigger pull reaction time when the officer was sighted on target and was set to fire a series of three rounds. Doing it this way then allowed me to draw out of the data the precise time it takes an officer to acquire a sight picture when the weapon is already pointed in the general direction of the target, and determine the time required to fire a second and third round in a series of three sighted rounds. It also allowed me to determine whether the firing of multiple rounds had an impact on the first round fired. Example: if the officer is set to fire multiple rounds, does it change the reaction time of the first round?

The sidebar on page 19 is a straightforward presentation of the research results. The only number presented is the average time for each of the motions. Follow up articles in *The Police Marksman* magazine will present a more comprehensive analysis of the data and examine the implications of the data for officer safety, tactical issues and ultimately an examination of how this data and my previous research on subject movement in shooting situations can help us understand and explain the biomechanics of lethal force encounters. The data has already been analyzed by an SPSS program and will also be presented at a scholarly refereed conference and in a refereed journal.

When evaluating the data, the reader needs to understand that the LAPD has a significant focus on target accuracy in both pre-service and in-service training. Regardless of the motions the officers were asked to perform, they were always working, when possible, for a sight picture before discharge. Also, the LAPD does not train or endorse certain of the motions measured in this study, such as the Hollywood High Guard position, but the officers performed those motions for the benefit of the study.

It is significant however that one of the fastest draws and the slowest draws occurred from a level 3-duty holster and were directly linked to the amount of practice the officer had with that holster.

All of the actions requiring a sight picture were done on the 5-yard line. All unsighted activity was done at the 3-yard line. The weapons involved were mostly 9mm Berettas and 45 Caliber Smith and Wessons. A breakdown by weapons is not provided for each of these activities, but will surface in future articles. (See Chart on page 19).

Observations:

This study is dense with information and offers some interesting data. For example:

> *If a weapon is pointed at a target, it takes 3/100ths of a second to confirm or set the sight picture, before the officer pulls the trigger, if the officer already has his finger on the trigger. If the officer has the finger indexed or on the frame and the weapon is pointed at the target, the time to confirm or set the sight picture is 9/100ths of a second before he completes the trigger pull.*

I think it is fascinating that the time to move from a low-ready position and a tactical low-ready position to a sight position and fire one round is the same for both actions. This appears to defy logic, but it is the case. This is because developing momentum and acquiring a sight picture are the two time-expensive components of both of these motions. Once the officer's arm and weapon develops momentum, moving a distance of 6 to 22 inches was not a significant element in the overall time of either motion. So much effort and time is invested in getting the motion started and then stopping it as the weapon comes on target, and then taking the time to get a sight picture and pull the trigger, that the time to travel up to 22 inches is actually negligible in the overall measurement of either motion.

Another incidental observation is the amount of time it takes to draw from a variety of holsters. It is significant however that one of the fastest draws and the slowest draws occurred from a level 3-duty holster and were directly linked to the amount of practice the officer had with that holster.

It is my observation from the data that the fastest draw occurs from a level one duty holster. But, more significantly, the greatest factor in the speed of the draw is the amount of time the officer spends practicing with that holster. For instance, the average time to draw and fire one round with a sight picture from a level 1-duty holster is 1.71 seconds. One of the officers with a level 3-duty holster was able to draw and fire one round in 1.37 seconds.

Another illusion is that the unsnapped holster is a faster draw than a snapped holster – certainly, many officers have proven this to be true. However, quite a few officers using all levels of holsters actually drew slower from an unsnapped than a snapped holster. The really skillful officers drew at approximately the same time or slower from an unsnapped holster as they did from a snapped holster. For instance, the officer who pulled and fired one sighted round from a snapped level 3 holster in 1.37 seconds, also pulled and fired one sighted round from an unsnapped holster in 1.42 seconds. Many officers said they did the same biomechanical motion, whether the holster was snapped or unsnapped, thus negating the benefit of unsnapping the holster. Other officers said it took them longer to draw from an unsnapped holster because the weapon didn't quite sit in the holster as solidly as if it were snapped in, and was subsequently harder to grasp.

Therefore, the time for confirming the grip on the weapon negated the time advantage of unsnapping the holster. The more unskilled officers were clearly the ones who drew faster from the unsnapped holster. Ironically these

unskilled officers may also be the least skillful in retaining and using their weapon from an unsnapped holster. An analysis of the overall data indicates the time benefit of unsnapping the holster varies from 6 to 11 percent, based on the nature of the holster. A level 1-duty holster has a 6% advantage in speed for the unsnapped holster, while for a level 3 holster, the unsnapped holster had an 11% speed advantage over the snapped. This is a very meager gain in speed for a major loss in officer safety. A gain of 6-11% in speed in the draw could easily be made up by simply practicing drawing the weapon, with speed, an extra three to five times per week, for a relatively brief period of time.

Another interesting observation that may relate to an illusionary belief, is that an officer will gain a lot of speed by taking the weapon out of the holster and hiding it behind his thigh in a bootleg position. The comparison of the time to draw from a bootleg position to a sight picture and fire – versus drawing from a level 1-duty holster to a sight picture and fire – is 4/10ths of a second in favor of shooting from the bootleg position. This is also the time difference between shooting in a combat tuck/close contact position from a bootleg position, and also shooting in a close contact/combat tuck position with a holstered weapon, in level 1 duty holster position. Therefore we can conclude that it doesn't matter which motion the officer makes with the weapon, it is generally 4/10ths of a second faster out of the bootleg position than out of the holster. The reader might also note that any motion from the bootleg position (even the close contact/combat tuck firing position) is obviously much slower than even the 45 degrees, academy trained, low ready position. Again, as with the snapped versus unsnapped holster issue, the officer needs to seriously consider the tactical advantage of a gain of 4/10ths of a second versus the tactical advantage of having the weapon in a secure holster.

A gain of 6-11% in speed in the draw could easily be made up by simply practicing drawing the weapon. . .

Special thanks to the generosity of Los Angeles Police Department, in particular the cooperation of Lt. Nick Zingo and Sgt. Louis Salceda, for their kind assistance in this study. Thanks as well to LAPD firearms instructor Neil Goldberg for his daily assistance in scheduling and range set up. Thanks are also due to Minnesota State University, Mankato who funded this research through a research grant to the author and to a fellow faculty member Dr. Tami Wilkins who assisted with the data analysis.

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FIRED CARTRIDGE CASE EJECTION PATTERNS FROM SEMI-AUTOMATIC FIREARMS

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Abstract

During testimony, "experts" often cite that spent cartridge case ejection locations from a semi-automatic firearm indicate the location of the shooter based on the assumption that most spent cartridge cases land to the right and rear of the shooter. The authors of this study investigated whether spent cartridge case ejection locations are an accurate indicator of a shooter's location. Eight different semi-automatic weapons most frequently used by police officers were used to collect data from eleven different shooting positions. The results highlighted the significant inconsistency of the spent cartridge case ejection locations that occurred across test positions even when several factors including firearm type, firearm position, and ammunition were accounted for. Of 7,670 bullets fired, over 25 percent of the spent cartridge casings landed somewhere other than to the right and rear of the shooter where it is commonly accepted they should land. That pattern inconsistency is significant and demonstrates that determining shooter location from the spent cartridge case alone leads to only a tentative estimate of the shooter's location.

Keywords: ejection patterns; scene reconstruction; semi-automatic firearm; fired cartridge case(s); spent bullet casings; spent cartridges; fired cartridge case location

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Introduction

The authors of this research project intended to determine the level of precision that can be reached and the significance that should be given to a spent cartridge case location alone as a method of determining shooter location when unknown variables include how the firearm is held and/or manipulated. Shooter location is often used in the process of homicide reconstruction and other shooting-related cases, the results of which typically are submitted to the justice system during the course of criminal or civil cases. Therefore, it is imperative to obtain the most accurate shooter location that can be determined from the evidence. Until recently, the impact of human factors, such as stance, firearm motion, firearm position and grip have not been given proper analytical consideration when attempting to determine the shooter's location from the final resting location of a spent cartridge case.

During the investigation of officer-involved shootings and some homicide incidents, knowing the shooter's location can be a vital piece of information in understanding the dynamics of the encounter. Often officers in a complex, rapidly unfolding, life-threatening event of very short duration will not be able to report on their precise or even approximate location because of their intense focus on the threat and their attempts to cope with it (Lewinski, 2008). They may later attempt to "figure out" their location but this can be recognized as the officer's "best guess." However, if for some reason, the officer was attending to or cognizant of his/her location, such as when he/she had used an obstacle for tactical cover, then of course the officer is better able to determine his/her shooting location. In an attempt to more accurately determine a shooter's location, some reconstructionists ("experts who use and analyze physical evidence at a scene, deriving inferences from that data to test theories about prior events" (Garrison, 2003) began to place a heavy weight on the location of the spent cartridge casing(s). This emphasis assumes the reconstructionist can confirm that the spent cartridge case was undisturbed from the time it landed until its final location; was accurately marked for evidence; and did not encounter factors, such as walls and hard or bumpy surfaces at the landing site, that impacted significantly on it while arriving at its location.

Some reconstructionists engage in a very simplistic analysis, for instance, they may state that the firearm the officer fired ejected its spent cartridge cases to the right and the rear when the firearm was fired on the range. Therefore, they continue further with their analysis by asserting that when the officer fired, and when the spent cartridge cases were ejected, he/she had to be to the left and to the front of the placement of the spent cartridge cases. However, other reconstructionists understanding the effects of weapon manipulation, shooter movement, bounce factors, and other elements, began to list and accommodate for some of them. For example, Edward Hueske has said that reconstruction of an equivalent shooting environment should take into account the following eight variables: weapon design, weapon condition, ammunition type, position weapon was held when fired, movement of weapon during firing, how tightly the weapon was held during firing, type of terrain where shooting occurred, and the presence of obstacles (Hueske, 2006).

Some of this information can be determined quite empirically. For example, the markings found on spent cartridge cases help to illustrate the firearm condition variable. Semi-automatic weapons can leave magazine lip marks, chambering marks, and extractor override marks. Any atypical markings or occurrences might be attributed to the same mechanism that also creates differences in spent cartridge case patterns. The mechanism of the ejector and extractor affects the firearm condition variable, as well as the weapon design variable (Haag, 2006). The purpose of the ejector and extractor in all semi-automatic weapons is the same: to eject the spent cartridge case from the weapon. Literature about semi-automatic firearms reveals that Glock, Sig Sauer, Smith and Wesson, and the Berretta ejector and extractor mechanisms are in many cases similar. However, wear, slight damage, and alignment all seem to be plausible justification for variability/diversity in spent cartridge casing ejection (Ayoob, M 2004; Ayoob, 2005; Sweeney, 2003; Sweeney, 2004). Other elements of the reconstruction such as the grip factors or weapon manipulation, although apparently reasonable, have not been subject to the scrutiny of research to determine their impact on final spent cartridge case location. This study attempts to perform that research.

The placement and reproducibility of spent cartridge case locations from eight semi-automatic firearms is the focus of this study. Much of the literature on spent cartridge cases primarily describes techniques and measurement methods for determining ejection patterns (Garrison, 2003; Hueske, 2006). Less research has been conducted on the impact that human performance factors such as the shooter's grip on the weapon and the weapon's left-right cant or incline/decline (firearm's axes) at the time it was fired has on the location of spent cartridge cases. Similarly, little research has been conducted and published on the impact of firearm position, ammunition, shooter movement, firearm type, and grip on the ability to indicate the shooter's actual location at the time the shot was fired. The authors could only find two studies published in the Journal of Forensic Identification that utilized more than two weapons and looked at different variables such as stance (Sims & Barksdale, 2005; Pepper & Bloomer, 2006).

In this study the researchers used eight different semi-automatic handguns, eleven test positions, and three major weapon gripping techniques/styles with 45 shooters. The study demonstrated that even when done in a controlled environment with several variables accounted for, the ejection patterns of spent cartridge cases remain "trendable" at best. This study has also demonstrated that weapon motion, weapon position, and the grip on the firearm have profound effects on spent cartridge case ejection patterns. Each of the variables previously mentioned is attributable to the human factors in shooting situations, for it is humans who hold, manipulate, and fire the weapon. The weapon design and weapon type variables were accounted for by using weapons in good firing condition and by separating the data depending on weapon type. Even when these factors remain constant, significant variability, and in some cases dramatic variability, has been found in the landings of the spent cartridge cases. Specifically, this study is intended to determine the level of precision that can be reached and the significance that should be given to location of spent cartridge cases alone as a method of determining shooter location when firearm position and manipulation are unknown or not accounted for.

Experimental Design

Study Participants

The 45 participants in this study were fully certified Los Angeles Sheriff's Department (LASD) Deputies. They were all full-time deputies whose time on the job ranged from 2 months to 28 years and were 22 to 50 years old. There was nothing to indicate that any of the participants was more or less skilled than the average officer. They had all participated and qualified in the required training, including the firearms component, to become a certified peace officer in the State of California, and all were current in their certification requirements.

Experimental Site

The experimental site was located at the LASD north shooting range in Los Angeles, California. It consisted of a 30 foot by 30 foot, or 900-square foot, area that had been dug, tilled, and then loosely covered with fine-grain river sand to a depth of three inches. The whole experimental site was then leveled. A smart level was used to confirm this process. This preparation significantly reduced the bounce factor of the spent cartridge casings to nearly zero.

A grid was then constructed over the area using colored string. To further illustrate the grid structure, the experimental site picture, located below, contains some enhanced lines. This split the 900- square foot area into one foot sections in both the x and y direction. A 1-ft/sq transparent plastic template with one-inch grid marks was then constructed. When this was inserted into each square foot that had a spent cartridge casing land in it, it allowed further precise position determination (to the square inch) of the spent cartridge casings. The officers were instructed to shoot from a stake that was driven into the ground at the center of the test site. Each of the officers was told to enter into the grid from the rear and to fire 10 rounds from each of the test positions with the weapon at the center of the grid (zero point). All the test firings end in a slide lock. This has been known to produce aberrant spent cartridge locations on the last casing in some weapons. This was not observed or accounted for in this study. After each officer fired ten rounds from a specified test position, the ten ejected spent cartridge casings were measured and recorded, the casings were then removed and the sand was raked back to a relatively smooth, level surface that had a minimum of three inches of fine sand on top of the tilled soil. (Experimental Site & Pilot Site picture below)

The experimental site was located in a small sheltered valley that was hot and still each testing day, therefore wind speed was not a significant factor on our test results. Wind speed, while possibly a factor in spent cartridge casing ejections patterns, has not been specifically studied by any researcher.

Experimental Site With Enhanced

Experimental Site: Pilot Study Illustration

Firearms and Ammunition

The experiment used eight different types of semi-automatic weapons. The weapons used include: Smith and Wesson 5906, Glock 21, Glock 23, Glock 17, Sig Sauer 226, Sig Sauer 229, H&K USP, and a Berretta 9mm. Weapon type, as well as ammunition type, has said to affect the ejection of spent cartridge casings. In this study the Los Angeles County Sheriff's Department donated all 9mm ammunition, however only the 9 mm ammunition produced by Winchester was used. Federal Ammunition donated the 40-caliber ammunition and Federal also manufactured the 45-caliber ammunition purchased by the researchers. The 40 and 45-caliber ammunition were from the same Federal lot of ammunition. The 9mm ammunition from the LASD cannot be guaranteed to have come from the same lot. However, ammunition manufacturers allow for an approximate three percent (3%) variability between lots of ammunition, based on the manufacturing process (Speer Ammo, personal communication, June, 2004). This can be due to variable pressure resulting from the crimping of the cartridge onto the bullet, the seating and type of primer used, the number of grains and composition of the gunpowder, etc. Therefore the reader should take this three percent variability into account when reviewing the data on 9mm weapons. The reader should also consider applying the single digit variability from lot to lot to all ammunition.

Multiple pilot studies conducted by these researchers on the Glock 9mm, involving test firings with the weapon as it had been held and manipulated by officers in a real life shooting encounter, produced spent shell ejections from 13 feet to the right and rear to 13 feet to the left and front. As noted in the following section, some of the research subjects found some of the actual firing positions, involving movement and firing, difficult to reproduce and subsequently the data from this study on some of the positions has been moderated to some degree in comparison to our pilot studies. For example an officer engaged in a real world encounter might be both rapidly turning and shooting simultaneously as he/she tracked an assailant. Deputies in our study found this difficult to do when we were requiring them to turn and shoot as they passed a specific location. Often they would turn until they reached the assigned direction to shoot towards then stop and shoot. Subsequently there would be little or no motion of the firearm at the time of discharge and ejection of the spent cartridge casing.

Firearm Position, Motion, and Handling

Each officer performed the eleven test conditions in a random order. Prior to each test the officers were directed to hold the weapon in a particular way or to hold it and then move it through a prearranged motion. A smart level was used to help confirm angular positions. Unless otherwise stated the tests have the weapon positioned such that the plane of the weapon is vertical and the weapon is aimed parallel to the horizon. The eleven tests were:

(1) Two handed firm, regular, proper grip on the weapon that places the weapon parallel with or horizontal to the ground and held at eye level with the arms extended.

Position 1: Beginning and End

(2) Two handed regular shooting position, using an improper grip (a side-by-side grip representing the hand position of officers when hurrying to get their gun in position on target from a holster draw).

Position 2: Beginning and End

(3) One handed grip with the firearm parallel with or horizontal to the ground.

Position 3: Beginning and End

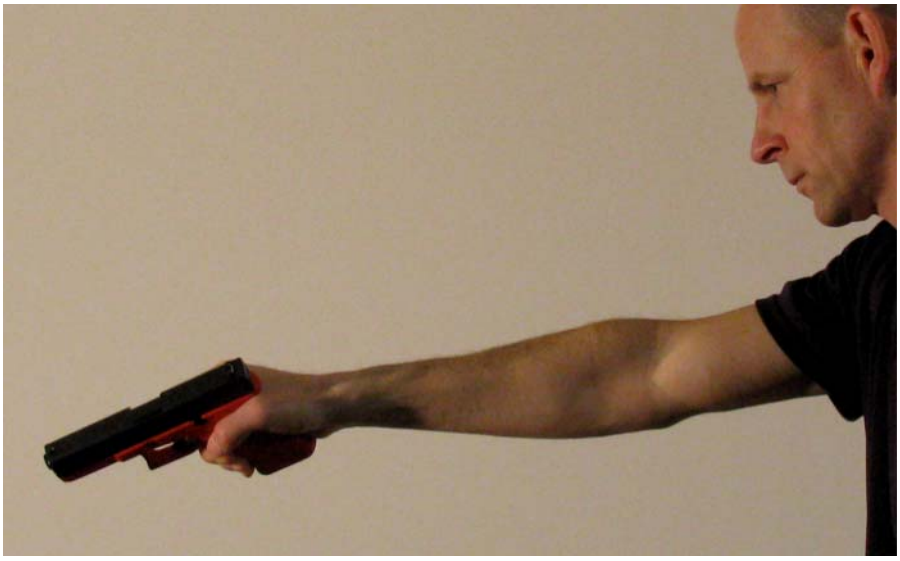
(4) One handed grip, with the arm extended at eye level, but the firearm is canted inward at 45 degrees. All of the inward cants, although unusual for a trained officer, have occurred while an officer is engaged in shooting and turning and his/her elbow rotates outward in conjunction with his/her turning. This inward cant occurs most frequently when officers hold the weapon in one hand and have not been taught how to correctly align and fire when turning, such as might occur in simulation training.

Position 4: Beginning and End

(5) Two handed regular grip, with the arms extended and the weapon declined downward 22 degrees from the horizon.

Position 5: Beginning and End

(6) One handed grip, with the weapon held at arms length and the weapon and arms are declined downward 22 degrees from the horizon and the weapon canted inward at 45 degrees.



Position 6: Beginning and End

(7) Two handed regular grip at eye level with weapon horizontal to the ground at arms length. The shooter starts rotated 45 degrees to his/her right and away from the center of the grid and then rotates counterclockwise 45 degrees toward the target zone while firing the weapon. The shooter was to carry out his or her shot while moving to and through the target zone.

(

Position 7: Beginning

Position 7: End

8) Two handed regular grip, arms extended, with the firearm declined downward 22 degrees from the horizon and the shooter again rotating his/her body 45 degrees to his/her left toward the target zone.

Position 8: Beginning

Position 8: End

(9) One handed grip, arm extended, with the firearm canted inward 45 degrees and the shooter again rotating his/her body 45 degrees toward the target zone.

Position 9: Beginning

Position 9: End

10) One handed grip from a close contact position. In the close contact position the shooter's elbow was tucked in and rearward against the body and the firearm was held just off of the hip and horizontal to the ground.

Position 10: Beginning and End

(11) Two handed regular grip with the firearm inclined upward 45 degrees from the horizon, as though the officer was shooting into the second story of a building. The testing site was at the base of high bluff, and when firing, the officers arm positions were static and measured with the smart level to ensure safe placement of the bullet into the bluff.

Position 11: Beginning and End

All firearm positions and movements studied were discerned from 30 years of investigation of officer-involved shootings by the lead investigator. Each position and movement had been performed by police officers in dynamic, rapidly unfolding life and death shooting situations.

A note must be added here to further clarify the results from some of the test positions so as to better interpret them. Some of the officers involved in this study were unable to correctly perform some of the test conditions (tests 7, 8, & 9) as asked by the researchers. The test conditions called for the shooters to fire while they were in motion not after they had completed the motion. The shooters who did not perform the test conditions correctly did not spin and shoot, instead they spun, stopped, and then shot. Preliminary testing indicates a dramatic change in spent cartridge casing placement when the firearm is fired while being moved rapidly. Therefore, the authors believe the data presented in these tests (7-9) significantly understates the distance and variability of the ejection pattern.

Results

The results of this study demonstrated how unpredictable spent cartridge casing ejection patterns are even when many variables are controlled. A total number of 7,670 bullets were fired from eight different firearms in the course of this study. Spent cartridge casing locations are illustrated through the use of scatter diagrams and pie charts. During the presentation of this information reference is made to quadrants one, two, three, and four. The quadrants are orientated such that quadrant one and two are in front of the zero point and would indicate spent cartridge casings being ejected in front of the study participant, while quadrants three and four would represent the spent cartridge casings being ejected behind the zero point and to the rear of the study participant. A spent cartridge casing found in quadrant one or four would indicate ejection to the right of the zero point, while spent cartridge casings found in quadrant two or three would indicate ejection to the left of the zero point. When a spent cartridge casing position is specified through angular reference a negative degree value indicates a cartridge casing behind the zero point, while a positive degree value indicates a cartridge casing in front of the zero point. Zero to 180 degrees begins to the right of the participant and follows an arch to the left. In both cases the zero reference is located at the zero stake in the center of the grid. See Figure 1 below for example.

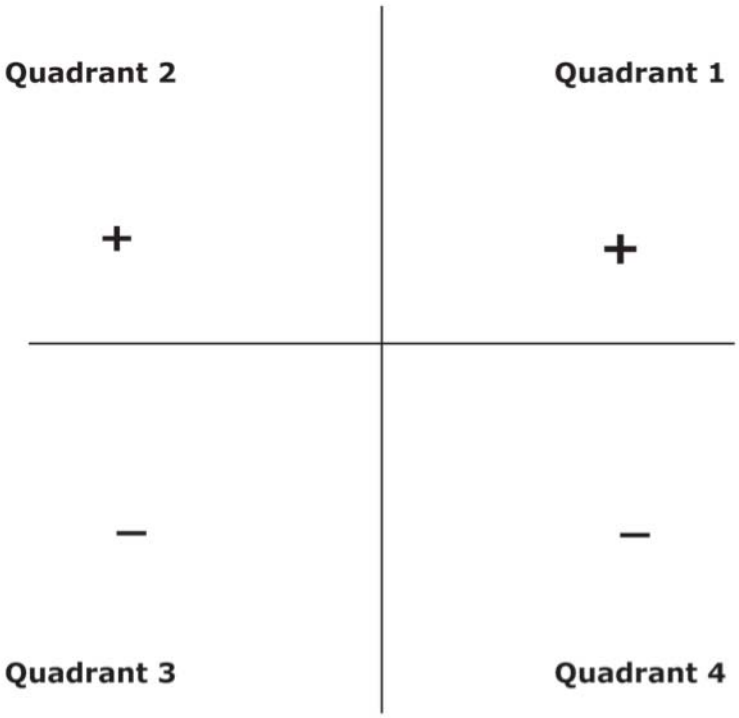


Figure 1: Example of Quadrants

Since all the data obtained from this study is too large to fit in this article the authors have chosen to present specific results in a broad to precise fashion. Significant variables such as firearm position, motion, grip, weapon type, and ammunition will be taken into consideration one-by-one. This one-by-one approach is to illustrate the impact of each individual variable on the spent cartridge casing patterns. First, all 7,670 spent cartridge casing locations will be presented without any other variables being considered. Next, in section two, the impact of firearm position and grip alone will be illustrated while firearm type, ammunition, and weapon motion will be left as an unknown. Then in section three weapon type results will be illustrated, followed by section four, which is firearm motion and finally section five, ammunition type. This is to help demonstrate how unpredictable spent cartridge casing locations are when several variables are not accounted for and are still unpredictable even when these variables are accounted for. The authors' goal in this way of presenting the results is to illustrate how imprecise determining shooter's location is even when several important variables are known and accounted for and not just when variables are unknown.

Further statistical analysis of the tests presented below is contained in a table located after each of the scatter plots. This information is presented in two sections within a single table so that the reader can see both the angles, in degrees, in which the spent cartridge casings flew after being ejected from the weapon and the distance, in inches (and cm), that they traveled from the shooter. First the mean (average), standard deviation, median (the middle number), and mode

(most common number) are given for the angles (degrees) in which the spent cartridge casings flew from the center point where each participant fired his/her firearm. A negative number from 0 to 90 signals the spent cartridge casing flew behind and to the right of the participant; a negative number from 91 to 180 signals the spent cartridge casing flew behind and to the left of the participant. A positive number from 0 to 90 is to the front and right of the participant and 91 to 180 is to the front and left of the participant. Secondly, the mean, standard deviation, median, and mode of the spent cartridge casings for that specific test are given in inches (cm) for each individual quadrant, described above. This tells the reader how far in inches (cm) the spent cartridge casings landed from the center point in any direction. These tables are to help the reader understand more specific areas in which the spent cartridge casings landed for each of the individual tests illustrated below.

All Weapons and Tests

Figure 2 shows the percentage of the spent cartridge casings for all test positions and test firearms inclusive. 73.6% of the spent cartridge casings fell in the 90-degree section to the right and rear of the shooter (Quadrant 4). This confirms what experts cite as the location that spent cartridge casings should land in when ejected from the firearms used in this study. However, this still leaves 26.4% of the spent cartridge casings to be accounted for (Hueske, 2006; Haag, 2006). This means over 2,000 spent cartridge casings landed outside of the area most often cited by experts. It also does not consider that the test quadrant to the right and rear occupies 225 square feet and a specific cartridge casing in that quadrant could be almost anywhere in the 225 square feet.

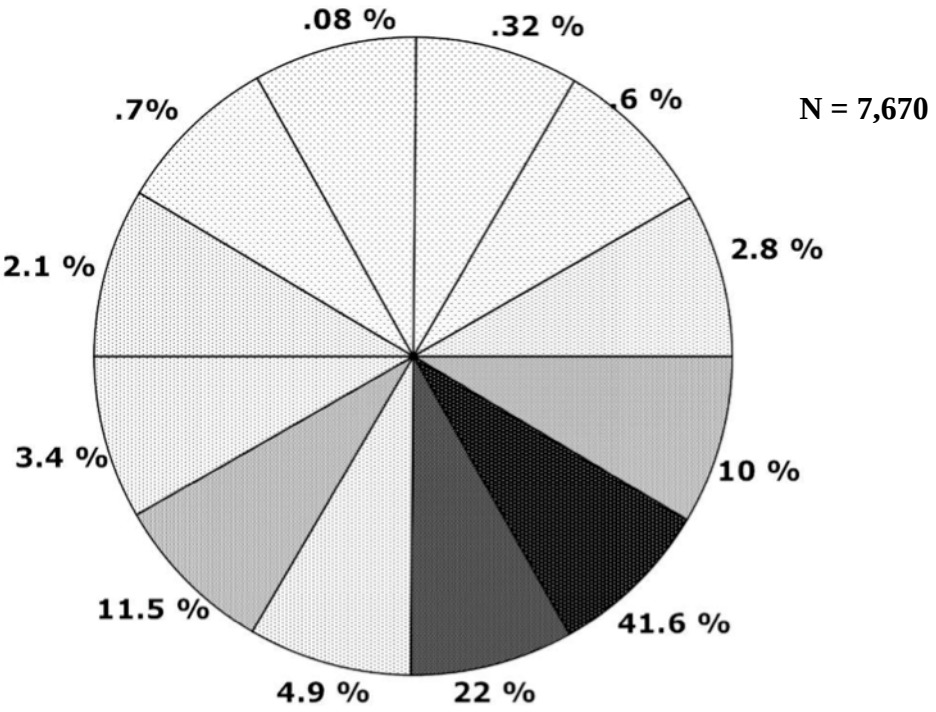


Figure 2: All Weapons/All Tests Pie Chart

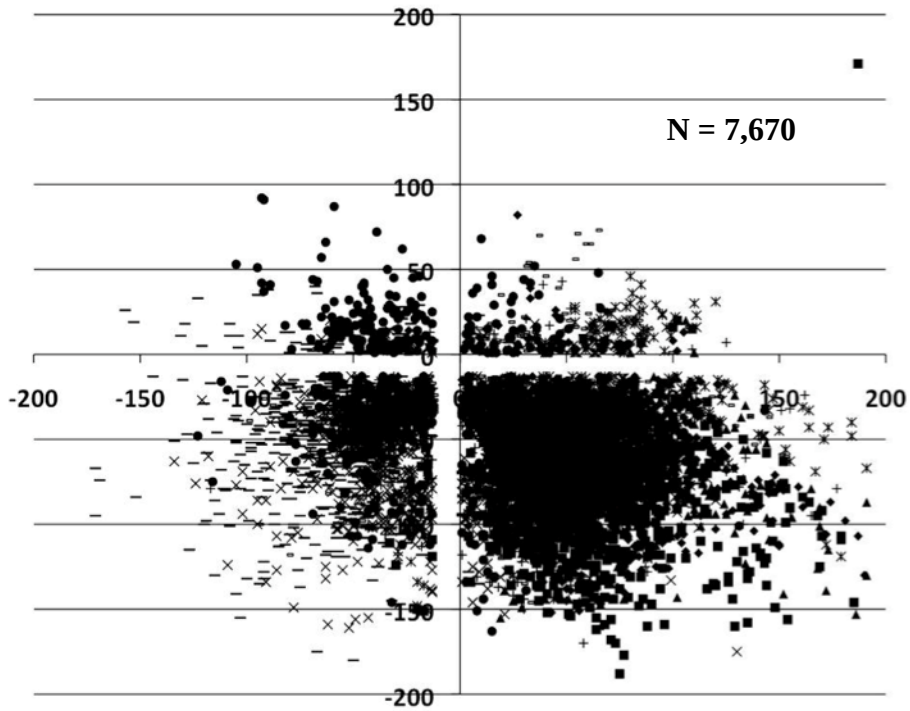


Figure 3: All Weapons/All Tests Scatter Plot

The scatter plot shown in Figure 3 more precisely illustrates the randomness of the landings of spent cartridge casings not only within the entire 360 degrees surrounding the shooter, but also in each individual quadrant. This can be seen in the distance the spent cartridge casings landed from the zero point. The minimum distance the spent cartridge casings traveled from the zero point was 3.61 inches (9.17 cm) while the farthest distance was 253.40 inches (643.64 cm) with an average of 80.93 inches (205.56 cm). The difference from the average distance to the maximum distance is then over 14 feet (4.27 m). Both the fact that over a quarter of all the spent cartridge casings landed outside the area most often cited by experts and the distance the cartridge casings landed from the zero point illustrates how using the placement of a single spent cartridge casing to determine shooter location is not as precise as it may seem.

Table 1: All Weapons/All Tests Statistics

Angles	Degrees	Quadrant	Average (in/cm)	St. Deviation (in/cm)	Minimum (in/cm)	Maximum (in/cm)
Mean	-57.77	**1**	55.17 / 140.13	30.72 / 78.03	3.61 / 9.17	253.4 / 643.64
St. Dev	54.87	**2**	53.58 / 136.09	27.47 / 69.77	13.04 / 33.12	159.14 / 404.22
Median	-54.21	**3**	73.93 / 187.78	32.81 / 83.34	13.45 / 34.16	195.62 / 496.87
Mode	-45	**4**	85.34 / 216.76	32.31 / 82.07	7.81 / 19.84	240.84 / 611.73

Weapon Position and Grip

Researchers have cited both the position the weapon was held and the grip of the weapon during firing as important variables in using spent cartridge casing ejection patterns in a shooting reconstruction (Hueske, 2006; Haag, 2006). The following tests fixed firearm position and accounted for different grips for all the firearms used in this study, but it still showed significant variability in spent cartridge casing locations. For example, the results shown in Figures 3 and 4 show a normal firearms position and grip for trained police officers, while Figures 5 and 6 involved a one-handed grip and irregular firearm position. The results shown in the previously listed figures and tables are the results obtained for all firearms used in the study.

Figure 4 shows the percentage of spent cartridge casings in each 30 degree section for test 1, a two handed correct grip. This is the standard position in which police officers are trained to shoot. Shown in this figure is that 97 % of the spent cartridge casings landed in the three 30-degree sections to the right and rear of the shooter even when eight different semi-automatic weapons were tested. The reader can see that accounting for firearm position and grip but not firearm motion, type, or ammunition further confirms that most spent cartridge casings land to the right and rear of the shooter. However, this also once again leaves some of the spent cartridges casings unaccounted for in another quadrant and again does not consider dispersal within the quadrant as a significant factor.

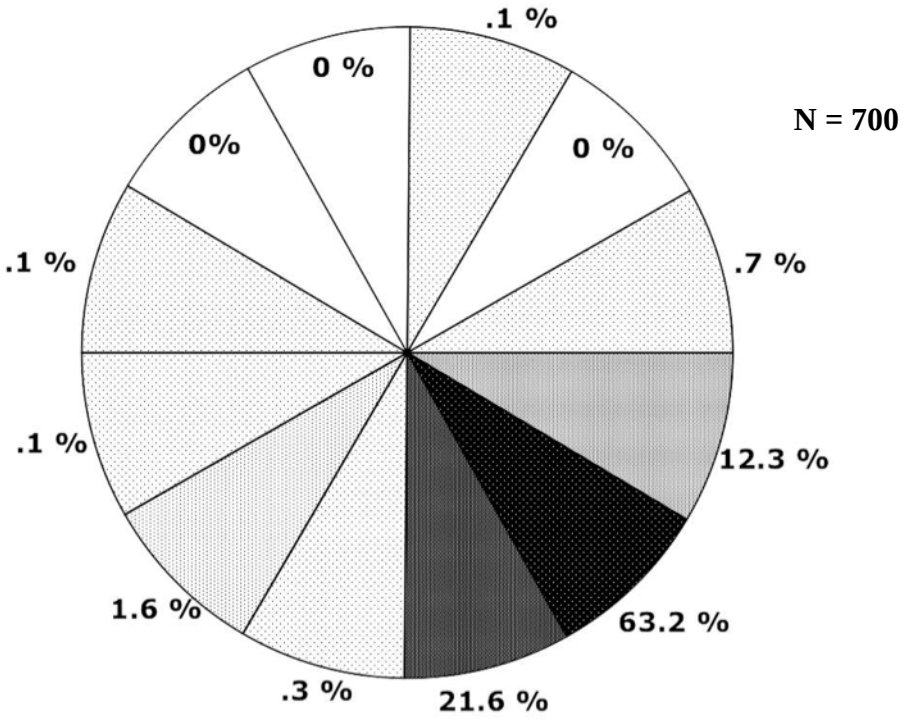


Figure 4: All Weapons Test 1 Pie Chart

The scatter plot (Figure 5) presents a much more compact dispersion of spent cartridge casings than in Figure 2. This confirms that firearm position and grip does contribute to spent cartridge casing ejection patterns for this study. Having both of these variables accounted for gives greater strength to the possibility that a spent cartridge casing ejected from these firearms, held in a tradition fashion, will land to the right and rear of the shooter like other experts say it should. Variability within the individual quadrants, however, still remains large. This can be seen in test one (Table 2) with all firearms present by the minimum, maximum, and average distance the spent cartridge casings traveled from the zero point. The minimum was 22.36 inches (56.79 cm); the maximum distance was 230.22 inches (584.76 cm) with an average of 93.88 inches (238.46 cm).

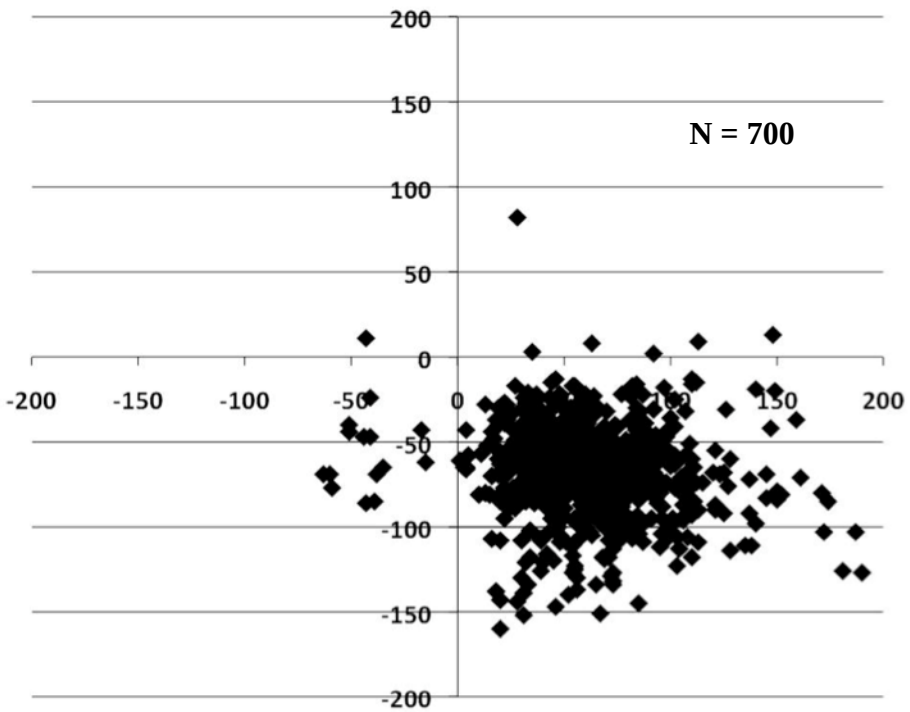


Figure 5: All Weapons Test 1 Scatter Plot

Summary information from test 1 with all firearms can be found in Table 2. Variability is once again illustrated in spent cartridge casing ejection patterns even while controlling for certain variables.

Table 2: All Weapons Test 1 Statistics

Angles	Degrees	Quadrant	Average in. (in/cm)	St. Deviation (in./cm)	Minimum (in./cm)	Maximum (in./cm)
Mean	-48.61	**1**	80.05 / 203.33	32.04 / 81.38	23.19 / 58.9	105.8 / 268.73
St. Dev	21.92	**2**	61 / 154.94	0 / 0	61 / 154.94	61 / 154.94
Median	-48.33	**3**	64.63 / 164.16	19.5 / 49.53	26.63 / 67.64	109.93 / 279.22
Mode	-45	**4**	94.65 / 240.41	31.56 / 80.16	22.36 / 56.79	230.22 / 584.76

Test six involved holding the firearm with a one handed grip pointed 22 degrees downward and cantilevered 45 degrees inward. Changing the firearm position as in this condition drastically changed the spent cartridge casing pattern from that seen in Figure 4 above. In this case, for all firearms, only 29.2% of the spent cartridge casings landed to the rear and right of the shooter and each of the 30-degree sections had some cartridge casings land in them (Figure 6). This illustrated the impact that firearm position and manipulation of the firearm by the shooter has on spent cartridge casing placements.

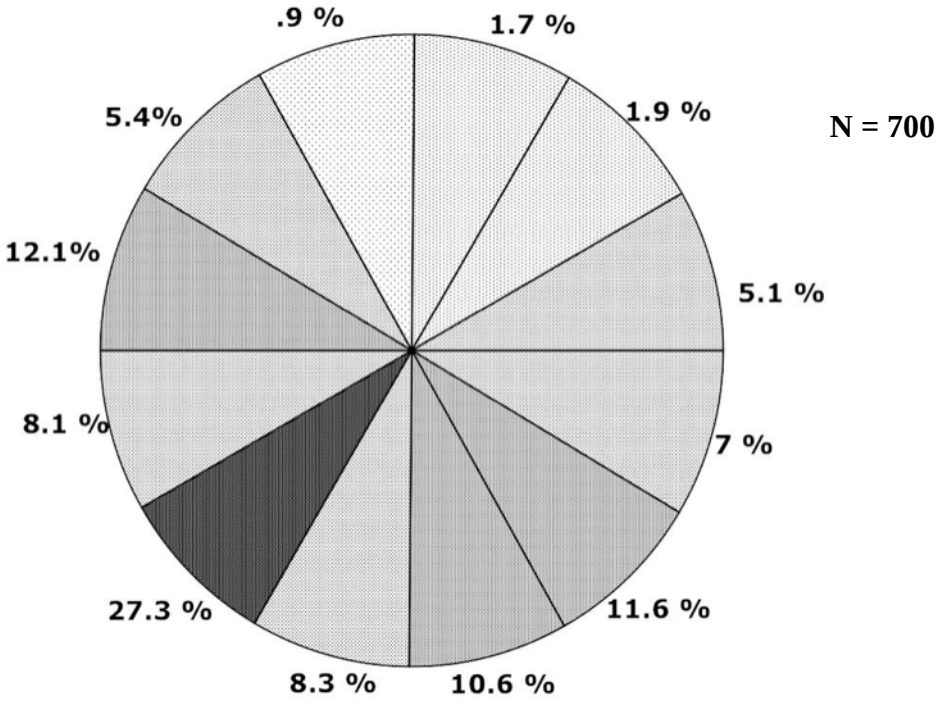


Figure 6: All Weapons Test 6 Pie Chart

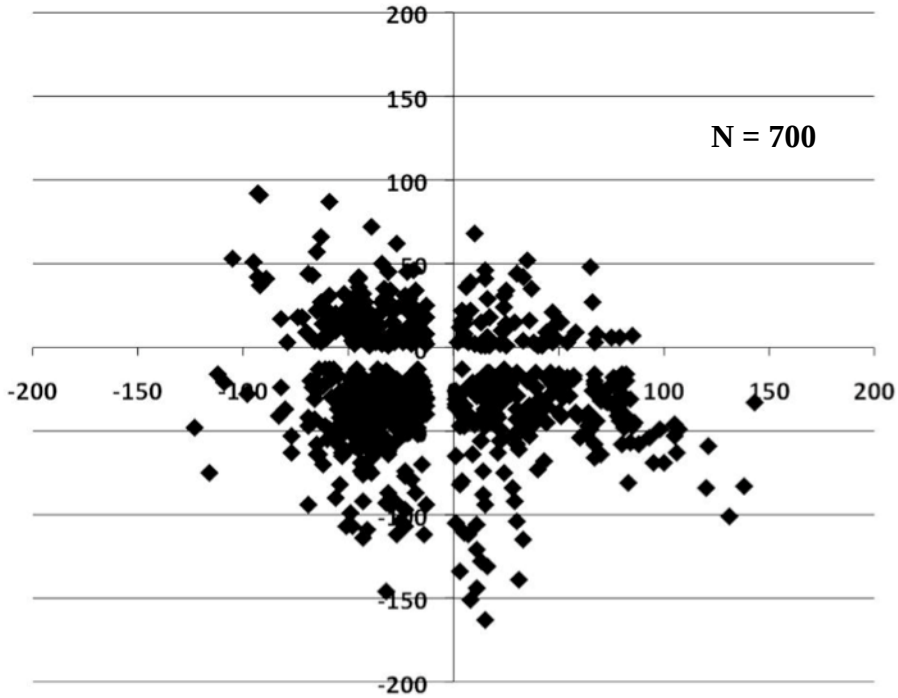


Figure 7: All Weapons Test 6 Scatter Plot

The scatter plot (Figure 7) illustrates the diversity of spent cartridge casing locations in all four quadrants versus a concentration in quadrant four as seen in Figure 4 above. Once again variability in the individual quadrants was found. For this test the spent cartridge casings landed a minimum distance of only 3.61 inches (9.17 cm) and maximum of 165.41 inches (420.14 cm) from the zero point. The rest of the information obtained from test 6 with all firearms is summarized in Table 3 below. As more and more variables are taken into account the reader can see what an impact they can have on the spent cartridge casing patterns. In this section we can observe that just changing the firearm position alone across all the firearm types and ammunition dramatically influenced the spent cartridge casing pattern observed.

Table 3: All Weapons Test 6 Statistics

Angles	Degrees	Quadrant	Average (in/cm)	St. Deviation (in/cm)	Minimum (in/cm)	Maximum (in/cm)
Mean	41.81	**1**	37.44 / 95.1	20.83 / 52.91	3.61 / 9.17	85.29 / 216.64
St. Dev	108.32	**2**	50.88 / 129.24	22.73 / 57.73	13.15 / 33.4	130.82 / 332.28
Median	-69.97	**3**	58.57 / 148.77	22.5 / 57.15	21.4 / 54.36	149.47 / 379.65
Mode	-63.43	**4**	64.97 / 165.02	33.45 / 84.96	13.6 / 34.54	165.41 / 420.14

Firearm Type

Firearm type is another variable that should to be taken into consideration with shooting reconstruction (Hueske, 2006; Haag, 2006). Eight different semi-automatic firearms were used over the course of this study. When limiting experimental variables to only one type of firearm, the Glock 17, and one firearm position, the standard one, the following results for the ejection patterns were found.

Figure 8 illustrates the spent cartridge casing variation found when using only one firearm, one test position, and no firearm movement. It is then expected that this test with a firm correct grip on the firearm and no motion should result in the most compact distribution of spent cartridge casings the reader has seen so far. Our results indicated that almost 50% of the spent cartridge casings landed in one 30-degree section to the right and to the rear of the shooter while 81% (an additional 31%) landed in two 30-degree sections to right and rear. However, 7.5% of the spent cartridge casings landed outside of the quadrant to the right and rear. This is greater than the 3 % (Figures 4 and 5) of the spent cartridge casings ejections that were found outside of quadrant four when firearm type was not accounted for.

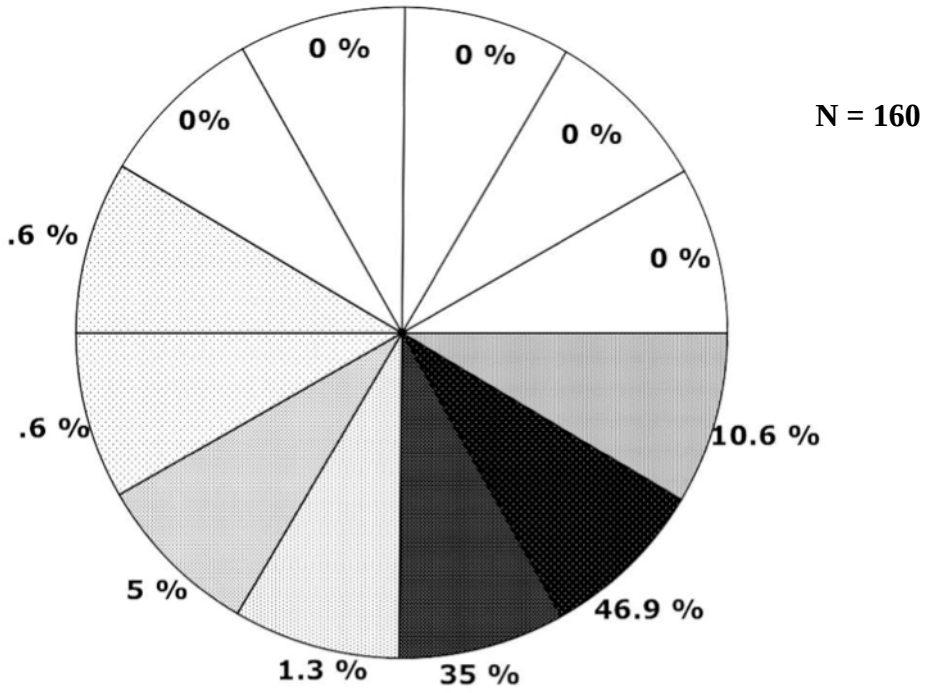


Figure 8: Glock 17 Test 1 Pie Chart

The scatter plot (Figure 9) shows the actual spent cartridge casing locations for the Glock 17. The minimum distance traveled by the spent cartridge casings from the zero point was 22.36 inches (67.64 cm) and the maximum was 157.97 inches (401.24 cm). This is almost two feet (.6 m) from the shooter at a minimum and over thirteen feet (3.96 m) at a maximum. While a rather compact dispersion was found in quadrant four it is important to remember the variability found here in the difference between the minimum and maximum distances when using only one spent cartridge casing to determine shooter location.

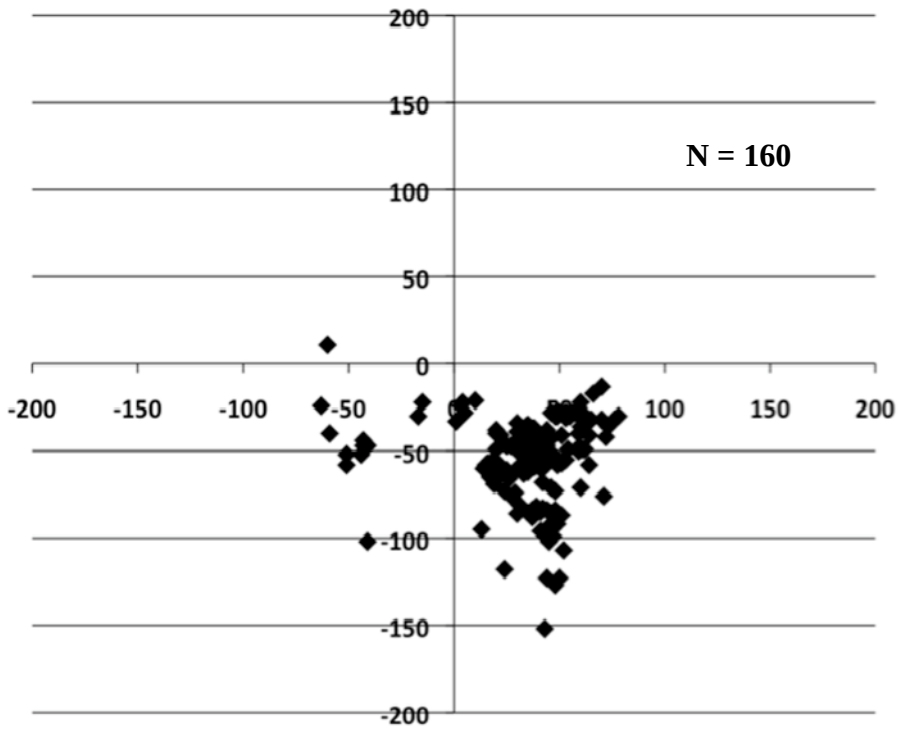


Figure 9: Glock 17 Test 1 Scatter Plot

Table 4: Glock 17 Test 1 Statistics

Angles	Degrees	Quadrant	Average (in/cm)	St. Deviation (in/cm)	Minimum (in/cm)	Maximum (in/cm)
Mean	-57.13	**1**	0 / 0	0 / 0	0 / 0	0 / 0
St. Dev	31.32	**2**	61 / 154.94	0 / 0	61 / 154.94	61 / 154.94
Median	-56.38	**3**	65.05 / 165.23	21.7 / 55.12	26.63 / 67.64	109.93 / 279.22
Mode	-63.43	**4**	71.46 / 181.51	20.99 / 53.31	22.36 / 56.79	157.97 / 401.24

Movement

Movement of the firearm during firing created a very different pattern of spent cartridge casings. Again restricting the study of the distribution pattern to the cartridges ejected from the Glock 17, we found the distribution as shown in Figure 10. This figure represents test eight and illustrates spent cartridge casings ejected from a firearm held with a two-handed grip, pointed downwards 22 degrees, and the shooter going through a 45 degree body rotation with his/her weapon. Spent cartridge casings landed in all but one 30-degree section. Nearly 30 % landed to the left and rear of the shooter. This was very different from test one with the same semi-automatic weapon. From this test, weapon motion is evident to have contributed to the location of spent cartridge casings as the reader can see from comparing Figure 8 with Figure 10.

The spent cartridge casing locations shown in Figure 10 are found in a 360-degree circle about the shooter illustrating the impact of firearm motion on the exact location of spent cartridge casings. Variability within quadrants is also impacted by firearm motion as the reader can see in the distances traveled by the spent cartridge casings; 7.21 inches (18.31 cm) to 143.13 inches (363.55 cm) away from the zero point. This gave an average distance of 44.43 inches (112.85 cm) from the shooter or a difference of over 8 feet (2.44 m) from the maximum distance. As noted elsewhere the pilot studies where the shooters were able to hold the firearm in the test position and shoot at a target while they were moving rapidly produced a much greater scatter of spent cartridge casing to the left of the shooter than was obtained here.

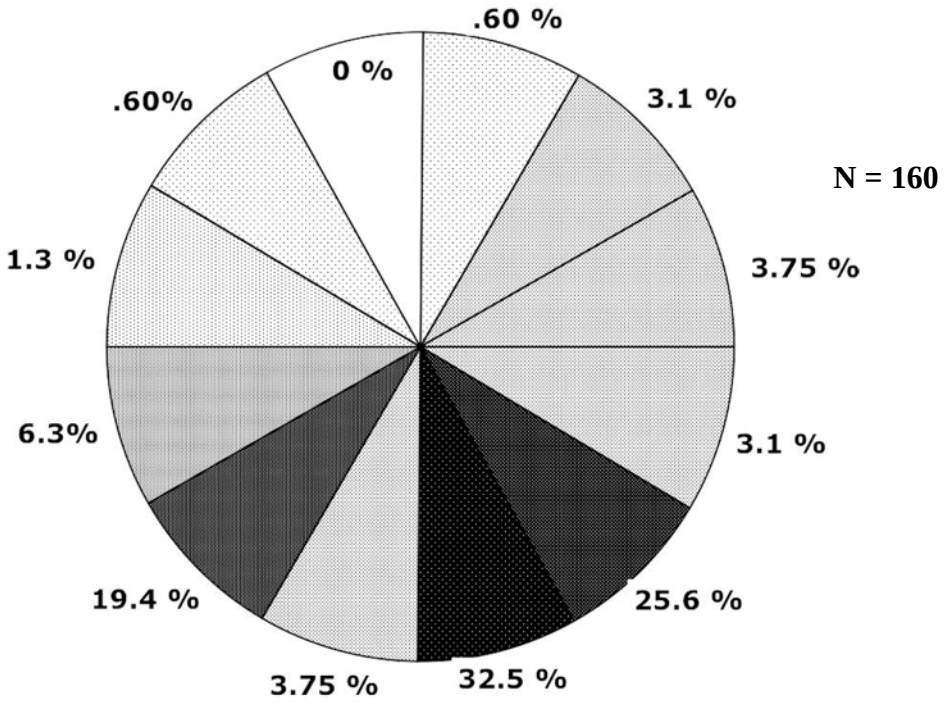


Figure 10: Glock 17 Test 8 Pie Chart

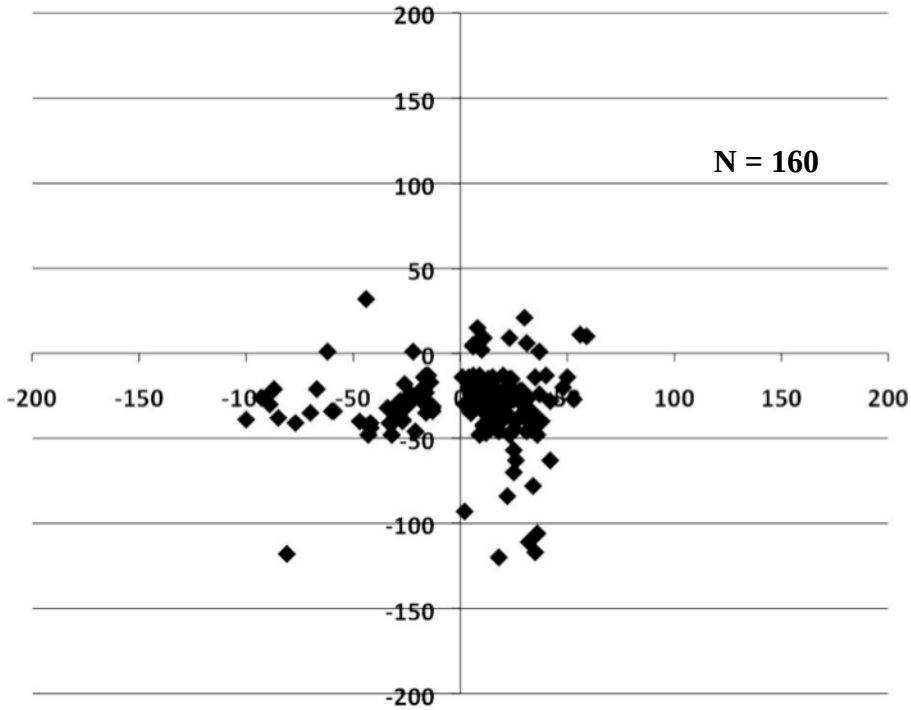


Figure 11: Glock 17 Test 8 Scatter Plot

Table 5: Glock 17 Test 8 Statistics

Angles	Degrees	Quadrant	Average (in/cm)	St. Deviation (in/cm)	Minimum (in/cm)	Maximum (in/cm)
Mean	-70.66	**1**	26.39 / 67.03	18.31 / 46.51	7.21 / 18.31	59.84 / 151.99
St. Dev	57.85	**2**	46.15 / 117.22	21.24 / 53.95	22.02 / 55.93	62.01 / 157.51
Median	-69.11	**3**	52.04 / 132.18	26.03 / 66.12	19.85 / 50.42	143.13 / 363.55
Mode	-63.43	**4**	42.93 / 109.04	21.56 / 54.76	14.04 / 35.66	122.12 / 310.18

Ammunition Type

Ammunition type is yet another variable said to affect spent cartridge casing patterns (Hueske, 2006; Haag, 2006). In this experiment both the Glock 23 and Sig Sauer 229 used 40-caliber ammunition from the same Federal lot. In these tests when the ammunition is held constant but the firearm is altered and later when the manipulation of the firearm is altered, very significant differences were found among the spent cartridge casings. Therefore, using two different weapons (Glock 23 and Sig Sauer 229) both containing the same ammunition from the same Federal lot, the reader can see variability still exists. Even when firearm type, firearm position, firearm movement, grip, and ammunition type are accounted for, significant variability still existed in where spent cartridge casings landed during the study. This is illustrated in

Figures 12 - 13. These figures show that most often the spent cartridge casings land to the right and rear of the shooter with both firearms but there is still a very significant dispersal within the right rear quadrant. In Figures 14 - 15 where a specific movement pattern was added, we still found significant variability in the placement of the spent cartridge casing. The scatter plots which follow show the difference on the variability in spent cartridge casing locations even within the same quadrant when ammunition is held constant.

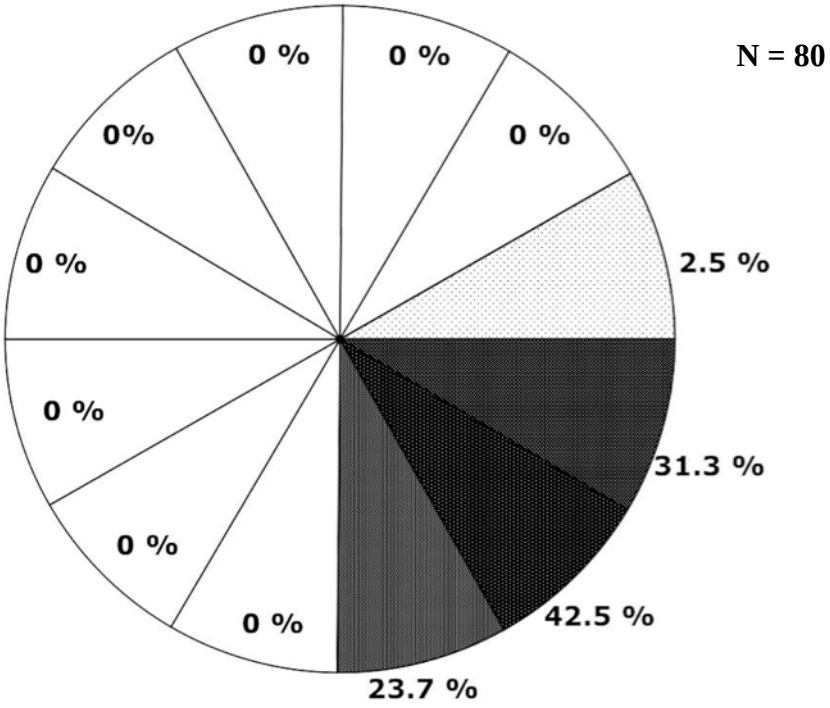


Figure 12: Glock 23 Test 1 Pie Chart

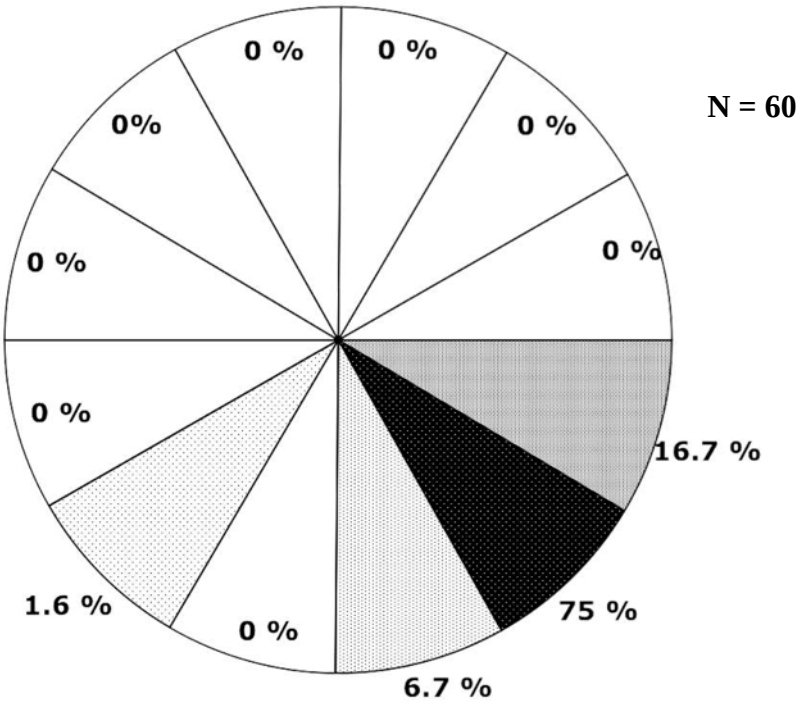


Figure 13: Sig 229 Test 1 Pie Chart

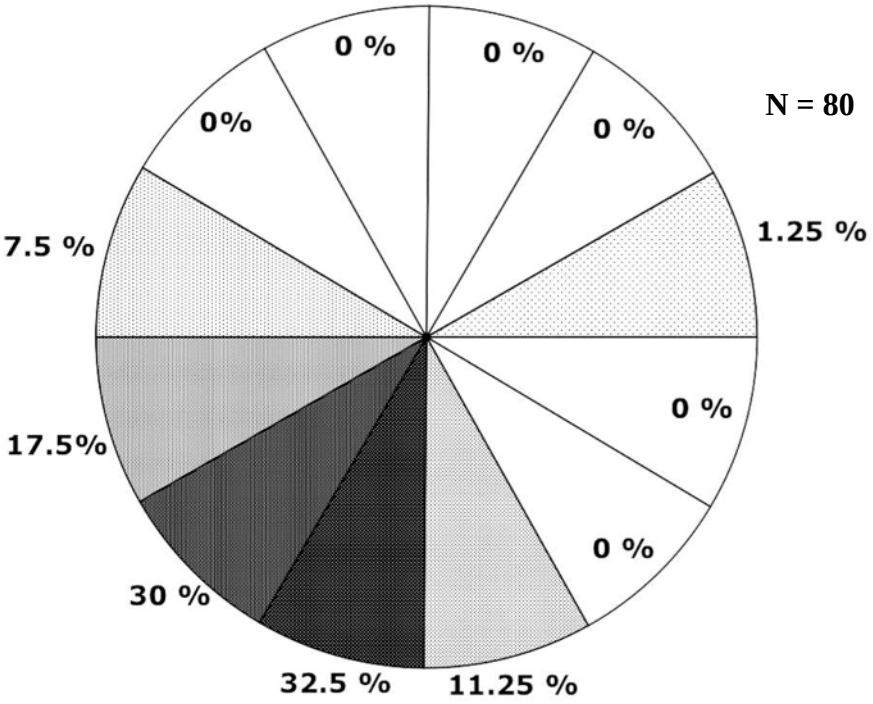


Figure 14: Glock 23 Test 4 Pie Chart

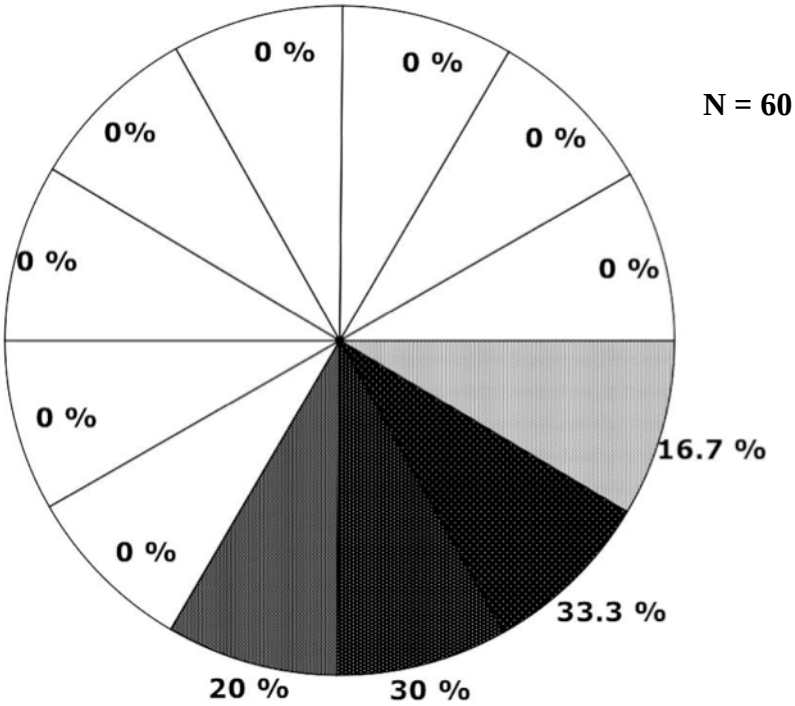


Figure 15: Sig 229 Test 4 Pie Chart

The scatter plots below (Figures 16-19) of the same semi-automatic firearms and test positions as shown in Figures 12 – 15 above, show in detail the dispersion of the spent cartridge casings. The Glock 23 scatter plots show a vertical tendency of spent cartridge casing locations, while the Sig 229 scatter plot indicates a more horizontal trending of spent cartridge casings. In both cases, however, significant variabilty and uncertainty existed about the location of where a spent cartridge casing would come to rest. This again emphasized the imprecision of identifying shooter location based solely on the location of a spent cartridge casing.

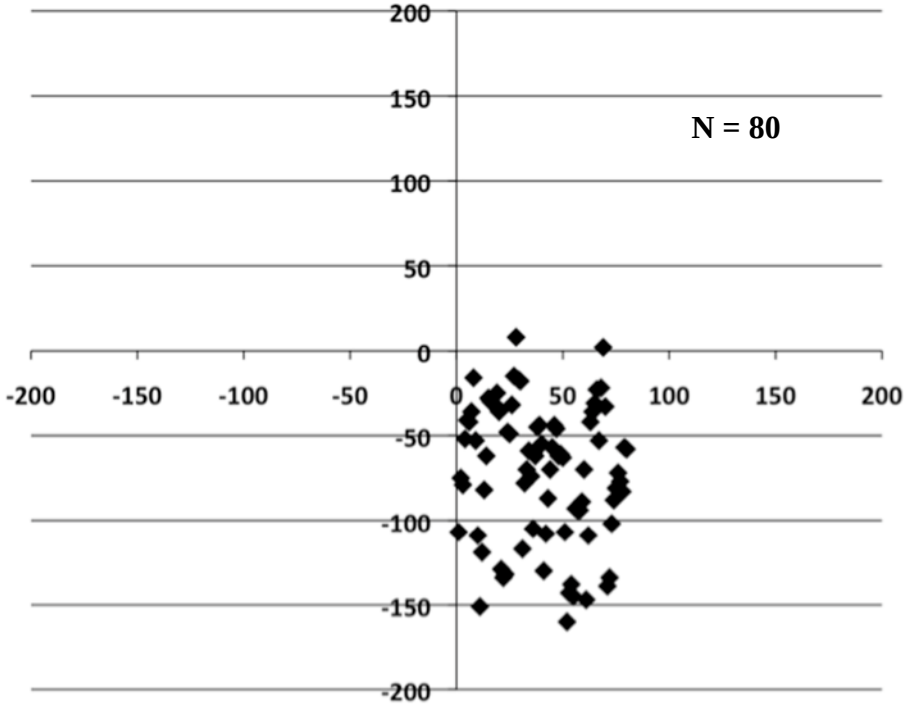


Figure 16: Glock 23 Test 1 Scatter Plot

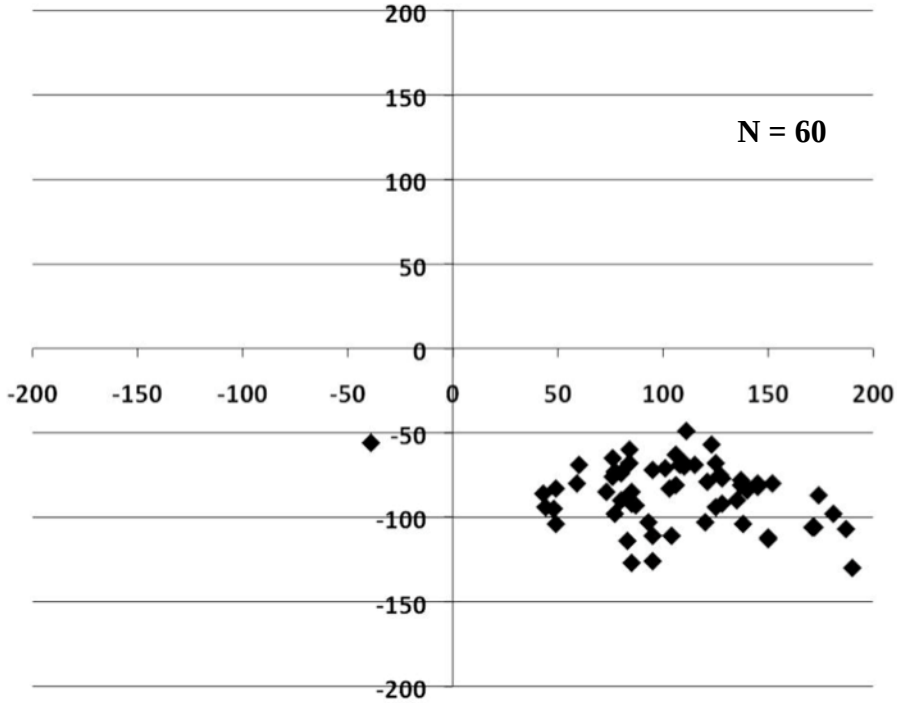


Figure 17: Sig 229 Test 1 Scatter Plot

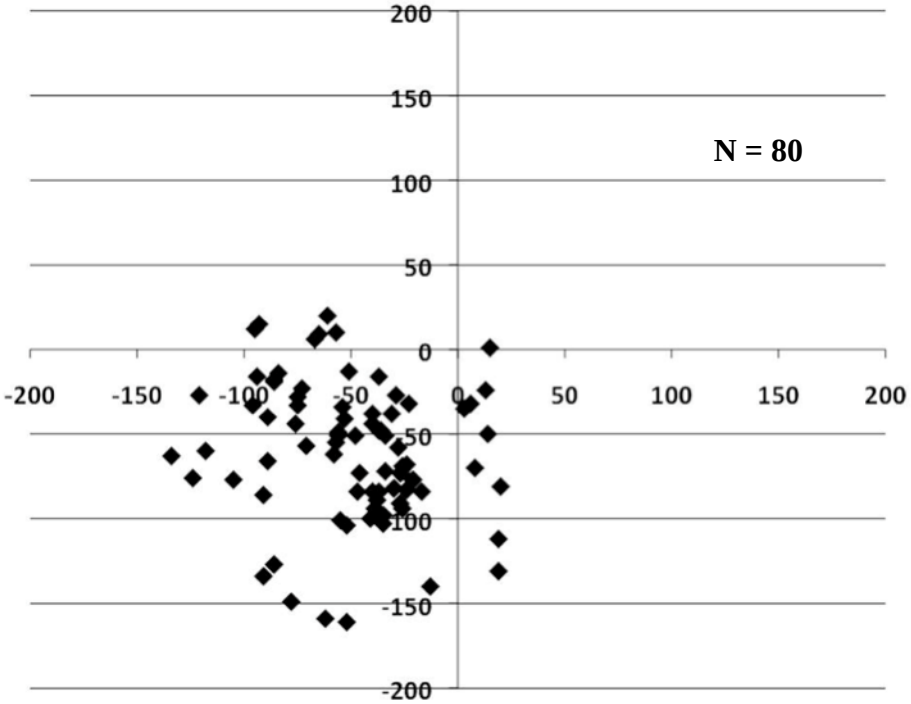


Figure 18: Glock 23 Test 4 Scatter Plot

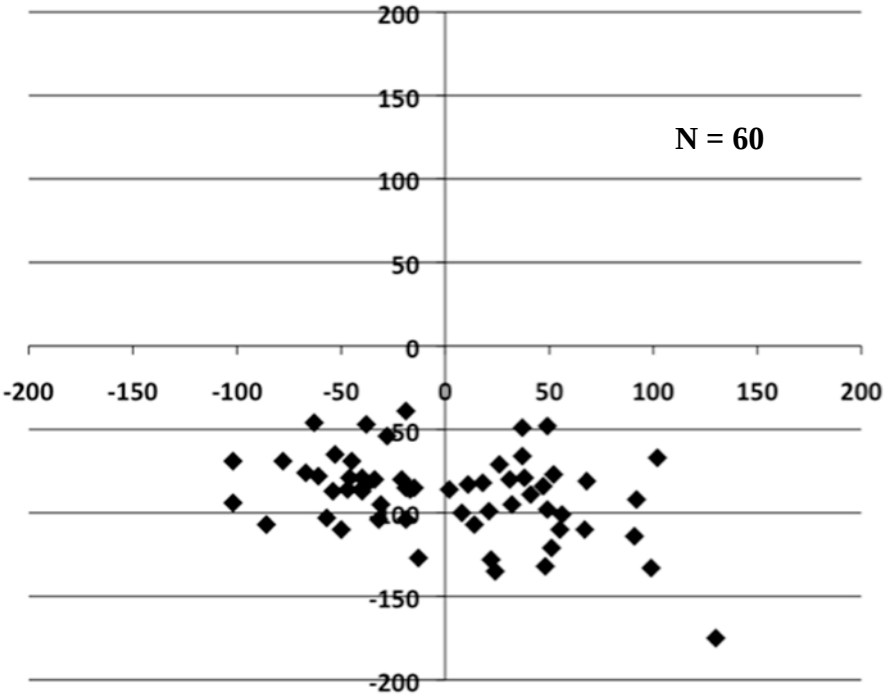


Figure 19: Sig 229 Test 4 Scatter Plot

Not all of the variability in this test can be attributed solely to the ammunition variable. It is thought that even with all of the human factors held constant as conducted in this study, each person will still hold or fire the firearm in his/her own idiosyncratic fashion. Further, there may be variables in the firearm itself, such as the placement and sequence of the bullet in the magazine, that contribute to differences. The only way to really determine the effect of ammunition on spent cartridge casing location is to control for all of the firearm variables and most importantly eliminate all of the human variables by not having humans fire the firearm. As previously noted, ammunition manufacturers inform us there is still a 3% variability when all of these ammunition factors are accounted for. The effects of this variability upon cartridge case ejection is not known but may also contribute to the uncertainty involved in attempting to make determinations from the ejection pattern of a particular handgun and ammunition.

Conclusion

As this study has shown, factors previously listed including firearm design, firearm condition, ammunition type, position firearm is held when fired, movement of the firearm and person during firing, and grip factors such as how, where and how tightly the firearm is held during firing can affect the locations of spent cartridge casings (Hueske, 2006). This study illustrated that even when accounting for the above factors, significant variability occurred in the landing locations of spent cartridge casings. This variability must be considered before efforts are made to establish the location of a shooter based solely on the location of even an undisturbed spent cartridge casing or a group of cartridge casings.

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Force Science Forum

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Selective attention, commonly referred to in law enforcement as tunnel vision and tunnel hearing, plays a very significant role in an officer's perception, performance, and memory in a high stress encounter. An aspect of this phenomenon that the Force Science Research Center (FSRC) at Minnesota State University, Mankato, is interested in researching is the officer's attentional responses and the impact of that on the ability of an officer to effectively multi-task—particularly in a life and death encounter. Clinical investigation has informed us that the emotional response of an officer has a high degree of relevance on the officer's attention and then on the ability of an officer to both engage in life-saving behavior and simultaneously give meaningful and relevant commands in an attempt to control a threatening subject. The observations have also led us to hypothesize that the more an officer perceives that he or she has control of a situation, the more he or she is capable of giving relevant, meaningful commands. The less control he or she perceives that he or she has over a situation and the more threatening the situation is, the less relevant and meaningful the officer's commands are as his or her attention becomes focused on the need to engage in life-saving action to stop the threat. This article is the first in a series that FSRC will present as this phenomenon is explored and the most effective types of responses and the most effective commands for officers in high stress, life-threatening encounters are sought.

This article is the first in a series that FSRC will present as this phenomenon is explored and the most effective types of responses and the most effective commands for officers in high stress, life-threatening encounters are sought.

Command Types Used in Police Encounters

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Police officers regularly encounter situations in which escalating emotion can lead to hostility or violence between law enforcement and potential suspects. These

situations can quickly become dangerous for both the individuals involved as well as bystanders. In order to increase public safety and officer effectiveness, it is necessary to investigate and minimize the factors that contribute to antagonistic encounters between law enforcement and potential suspects. Certain communication styles and tactics may be more effective than others in eliciting immediate compliance and decreasing violence (Thompson, 1983). Likewise, a failure to communicate clearly and concisely has been shown in certain circumstances to exacerbate negative interactions (Forehand & McMahon, 1981). Although police behavior has been researched, an investigation of specific commands used by police has not yet been conducted (Bayley & Bittner, 1984; Bayley & Garofalo, 1989; Johnson, 2004; Reiss, 1971; Thompson, 1983).

In addition to command types, Johnson (2004) has noted that certain communication styles may be more appeasing to potential suspects than others. Johnson also states that citizens who felt treated fairly were more likely to comply with the law. Factors such as respect, tone, and demeanor of an officer's verbal communication are important factors in reducing violence and increasing compliance (see also Reiss, 1971).

In studies evaluating compliance, researchers have consistently found that the clarity or feasibility of commands are important elements in eliciting compliance to demands (Bertsch, 1999). After a literature review of the studies looking at these components, Bertsch categorized commands into eight types. She further broke each type into *alpha* and *beta* command subtypes in order to distinguish between specific, feasible commands (i.e., *alpha*), and vague, unfeasible commands (i.e., *beta*) consistent with Peed, Roberts, and Forehand (1977). Bertsch studied the effects of these 16 command types and subtypes within the context of student compliance in a classroom setting. The command types included interrogation, question, regular, indirect, stop, don't, negative, and other. This identification of command types has not yet extended into the law enforcement literature, which is surprising given the abundance of police forces in various countries and cultures, and the importance placed on compliance with police commands. Bertsch's review and subsequent study showed clear and striking benefits to using concise and specific alpha commands. There has not been a study in the compliance literature to date which has shown any advantage to using nonspecific beta commands in an effort to elicit compliance.

Thompson (1983) investigated communication styles used by police officers. Thompson's communication research focused on the use of an impartial perspective, which was achieved through evaluation of the facts (who, what, when, where, how) and an evaluation of the purpose of each encounter. Thompson also focused on using language appropriate to each individual and to appeal to the emotions, reasoning, and character of potential suspects. Johnson's (2004) study showed significant public support for specific and general aspects of Thompson's verbal judo during traffic stops. However, participant input was not obtained for additional and specific verbal commands. Additionally, Bayley and Bittner (1984) and Bayley and Garofalo (1989) described and evaluated police behavior, which involved both physical and verbal behavior. Specific command types were not investigated, however.

Mastrofski, Snipes, and Supina (1996) investigated a number of components related to compliance in officer-citizen interactions. No major differences in compliance rates were noted by Mastrofski et al. among requests issued by officers for citizens to leave another citizen alone, calm down and stop the disorder, and cease illegal behavior. They also studied the use of authoritativeness or force in both police entry and requests. Police entry refers to the style of the initial verbal approach with the suspect, including friendly/nonthreatening interrogation, command/threat, and force categories. Experimenters found only the force entry tactic to be significantly different in eliciting compliance, actually producing less compliance. Investigators also found that officers exhibiting the most authoritative entry tactics were least likely to gain compliance. Additionally, Mastrofski et al. found no significant differences in compliance among the request categories, including suggestions and requests, persuasion and negotiation, and commands and threats. It was noted, however, that greater police experience was associated with a greater likelihood of making commands and threats and a reduced likelihood of making suggestions and requests.

One element that was investigated in Mastrofski et al.'s (1996) study was defined as *coercive balance of power*, which included elements such as the number of officers present, the use of a weapon, and the sex of the officer. The presence of male officers and higher numbers of officers were less likely to lead to compliance, although only the number of officers was significant. These findings are counterintuitive, and they make a clear case for further investigation.

Mastrofski et al. (1996) also evaluated the type of problem behavior categorized as traffic, minor offense, drugs, and serious. The more serious the offenses in this study, the lower the likelihood of compliance. Researchers also found race to be a factor in compliance with officer requests. Results indicated that White officers were more likely to produce compliance with minority citizens and minority officers were least likely to elicit compliance with White citizens. Additional results suggested that males were more likely to comply than females.

Mastrofski et al.'s (1996) research only included commands which were unambiguous, excluding indirect and beta commands altogether. Current literature lacks research on the use of specific command types based on form and feasibility. No information is yet available on how command type relates to violence, compliance, or latency of response.

The current study will expand upon the research of Mastrofski et al. (1996) by evaluating differences in Bertsch's command types across suspect compliance, latency, violence, and type of crime in law enforcement/suspect exchanges. Due to the negative connotation associated with interrogation in law enforcement, for the purpose of this study, the interrogation command type will be re-termed *interview*.

Method

Data Collection

Data from police interactions were accessed via prerecorded videos, direct observation, or live video recordings on ride-alongs with law enforcement.

Data collected while riding with law enforcement involved two different police departments and nine different officers over the course of 11 rides. A total of four observers participated in ride-alongs during the busiest shifts, between Thursday and Saturday evenings anytime from 3:00 PM to 4:00 AM. Riders observed the law enforcement interactions in person and through dash-mounted cameras. In addition, observers viewed six different recordings of police interactions. These included two dash camera videos, a *Hard Copy* video, a *World's Wildest Police Video*, and two *COPS* videos. Officer commands were recorded as one of eight command types and one of two subtypes. Suspect compliance and latency were also recorded. Additional officer and department information along with circumstantial information were recorded as well. This included the type of crime, possession of a weapon, use of officer force, and the level of violence.

Independent and Dependent Variables

Independent variables included command type and type of crime. A *command* was defined as any verbal communication directed by law enforcement to non-emergency personnel in which a verbal or motor response was appropriate. Commands were divided into eight types and further classified into two subtypes. See Tables 1 and 2 for definitions and for examples of the eight command types and two subtypes.

Table 1. Definitions of the Eight Command Types and Two Subtypes

Command Type	Definition
Regular	Orders that are stated directly
Stop	Instruction to terminate an ongoing behavior generally preceded by the word "stop"
Don't	Instruction to terminate an ongoing behavior or a future behavior generally preceded with the word "don't"
Negative	Instructions to terminate an ongoing behavior which do not begin with the words "stop" or "don't"
Indirect	*Suggestions* (allowing for nonresponse) to respond motorically or verbally that are *not in question form*—The statement only indirectly indicates what response is expected. It requires the recipient of the command to infer what response is expected.
Question	Statement in question form to which a motoric response is expected, even though a verbal response is available but inappropriate
Interview	Statement in question form to which the only appropriate response is verbal
Other	Any command that cannot fit in one of the above categories or a command that may fit in two or more of the categories at the same time
Command Subtype	**Definition**
Alpha	Command in which a motoric or verbal response is appropriate and feasible
Beta	Command in which compliance may be difficult due to vagueness, interruption, or indirectiveness

Table 2. Examples of the Eight Command Types Across Alpha and Beta Subtypes

Command Type	Alpha Examples	Beta Examples
Regular	Put your hands on your head Drop the gun Take your hands out of your pocket Give me your driver's license Get out of the car Get on the ground	Get back Move Give it up Let me see them Chill out Do it now Do the right thing
Stop	Stop shooting Stop talking Stop fighting Stop the car Stop, drop, and roll	Stop that Stop Stop screwing around Stop bothering me Stop it
Don't	Don't leave your vehicle Don't say another word Don't jump Don't shoot Don't move	Don't Don't touch that Don't do that Don't make me mad Don't even think about it
Negative	Quit resisting Quit talking Quit fighting Quit running Quit moving	Quit Quit aggravating me Knock it off Quit that Halt
Indirect	There is nothing we can do. Hitting her won't solve anything. We want to talk to you. All you have to do is comply with our commands. I said freeze. We're not going to kill you. You're threatening me with the gun.	There's nothing to see here. That's all you have to do. We'll give you a hand. I said no. We don't want to do it. If you stop, we'll stop.
Question	Would you step out of the vehicle? Could you put your hands behind your back? Could I have your driver's license? Could you move away from the curb?	Could you move? Could you calm down? Why don't you put it down? Do you want to get tased again?
Interview	What is your name? How old are you?" Do you know how fast you were going? What is your address? Have you been drinking?	What is going on? What is your problem? Do you understand? What were you thinking? What are you going to do?
Other	Why don't you stop yelling and calm down? Don't move or you'll regret it. No, don't do that.	I want you to stop, okay? Stop or I'll shoot Knock it off, or else! You better not expect me to believe that; tell me the truth.

Both the interview and question commands are phrased as a question. These commands are distinguished by the response, however. A verbal response would be appropriate for the interview command whereas it would be possible but inappropriate for the question command. The question command requires a motor response. For example, "What is your name?" requires a verbal response and is an interview command. A motor response is most appropriate to commands such as "Could you please sit down."

The next two command types, regular and indirect, can often be confused. The regular command type is defined as an order that is stated directly. The indirect command type is a suggestion (allowing for nonresponse) to respond motorically or verbally and is not in question form. The indirect command does not state a specific command, but it is classified as a command because a specific response is desired by the issuing individual.

The next three commands—(1) don't, (2) stop, and(3) negative—were combined to form an exclusionary command category. All of these commands are a request to terminate an ongoing behavior, and the don't and stop commands can also be used to avert a future behavior. The differences between these commands lies in the use of the words "don't" and "stop." Don't commands are defined as instructions to terminate an ongoing behavior or a future behavior generally proceeded with the word "don't." Stop commands consist of instruction to terminate an ongoing behavior generally proceeded by the word "stop." Alternatively, negative commands are defined as instructions to terminate an ongoing behavior, which do not begin with the words "don't" or "stop."

The final command type, other, is defined as any command that cannot fit into only one of the above categories or a command that may fit in two or more of the categories at the same time. This command type is most often used when a command fits into more than one of the command types such as "Why don't you stop it."

These eight command types are further divided into two subtypes: (1) *alpha* and (2) *beta*. An alpha command is defined as a command in which a motoric or verbal response is appropriate and feasible. Contrary to this, a beta command is defined as a command in which compliance may be difficult due to vagueness, interruption, or indirectiveness.

Observers could also indicate up to two categories of crimes for each encounter. These crime categories included assault, threat, suicide, narcotics, theft, burglary, arrest warrant, disorderly conduct, and other. Due to limitations of the sample size, only the primary crime was used, and suicide, theft, and arrest warrant were combined.

Assault was defined as physical violence such as domestic assaults, bar fights, sexual assaults, etc. *Threat* included "terrorist," verbal, or physical threats. *Suicide* was defined as a call when someone had committed suicide or was threatening to do so. *Narcotics crimes* included calls related to possessing, selling, making, or intending to sell drugs or drug paraphernalia or being under the influence of narcotics. *Theft* included taking property or merchandise in which there was no break-in and entry and no physical harm to others. This could occur during stealing and shoplifting calls if there was no break-in or harm to others. *Burglary*

was defined as break-in and entry or physical harm to others while stealing. *Arrest warrant* was categorized as a police call in which police were attempting to arrest someone because of a court order to do so. Arrest warrant calls did not include calls during which the officer decided to arrest an individual because of the circumstances of the situation rather than because of a court order. *Disorderly conduct* included any disturbance to others such as public indecency, peeping toms, public intoxication, disturbing the peace, etc. The *other* category included any calls that didn't easily fit into any of these categories.

Dependent variables included level of compliance, latency of response, and level of violence. *Level of compliance* was divided into compliance, forced compliance, and noncompliance: *Compliance* was defined as an individual responding appropriately to an officer's command by means of free will prior to another command by the officer; *Forced compliance* occurred when an individual responded appropriately to an officer's command as the direct result of the officer using physical restraint, a Taser®, or shooting a gun; and *noncompliance* occurred when an individual did not respond appropriately to an officer's command by free will or to the officer's use of physical restraint, a Taser®, or firing of a gun. *Latency of response* was further divided into three levels: (1) *immediate* if compliance occurred within approximately 10 seconds, (2) *delayed* if between 10 and 30 seconds, or (3) *none* if more than 30 seconds.

A *violent encounter* was defined as an encounter between an officer and potential suspect in which the individual posed a threat to the officer in the form of a weapon, extreme agitation, substance intoxication, or physical force. *Nonviolent* was defined as an encounter between an officer and potential suspect in which the individual appeared to pose no threat to the officer.

Training and Interobserver Agreement

All observers received training on the operational definitions and use of coding sheets. Observers were allowed to practice independently on several videos. A reliability check was conducted on one of the five videos, which contained 22.9% of the video commands. Interobserver agreement was 93%. Prior to conducting ride-alongs, each observer was able to reach 100% agreement on the commands given in a video.

Procedure

The primary investigator viewed and coded all six videos. For each new law enforcement encounter, the department and jurisdiction, the officer rank, and use of force were indicated if known. Additionally, the number of individuals giving commands, weapons possessed, the violence of the encounter, and the type of crime committed was recorded. Each command type, the level of compliance obtained, and the latency of any compliant response was noted for each police-suspect interaction.

Results

Command Type and Subtype

Of the 1,801 commands given, a large portion were interview, n = 938, 52.1%; followed by regular, n = 563, 31.3%; indirect, n = 141, 7.8%; other, n = 99, 5.5%; question, n = 45, 2.5%; and the exclusionary commands, n = 15, .8%. *Exclusionary commands* were mostly stop commands, n = 7; followed by negative, n = 6; and don't, n = 2. The majority of the command subtypes were alpha, with a total of 1,488 commands or 82.6%, whereas the total number of beta commands, n = 313, were less than 18%. See Figures 1 and 2 for frequencies of commands.

Figure 1. Frequency of Eight Command Types

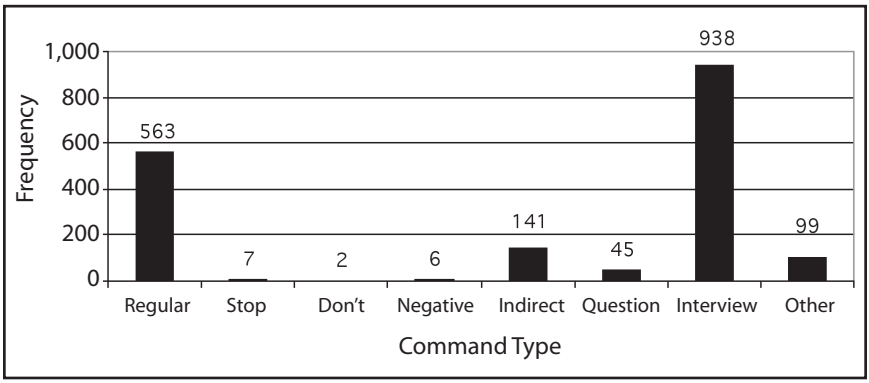
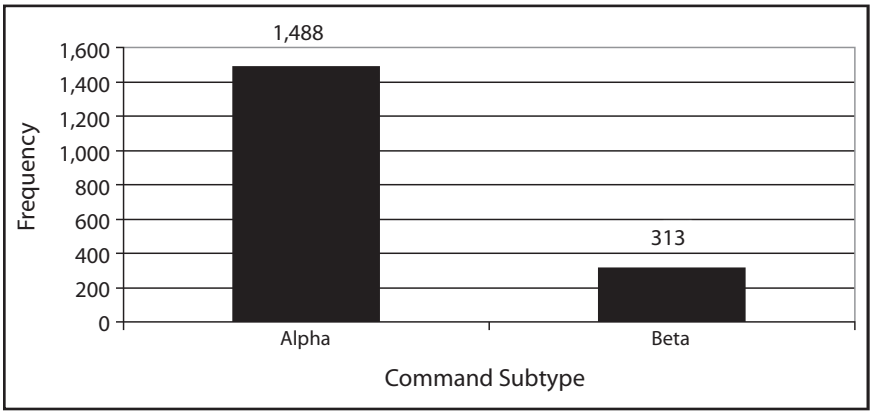


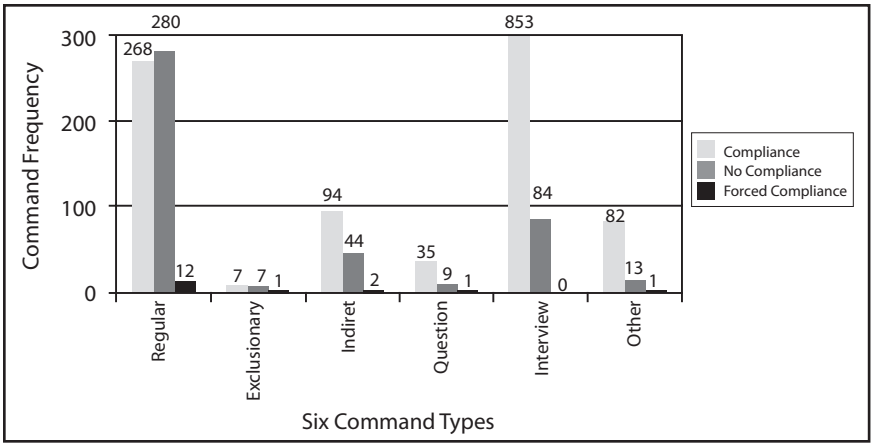
Figure 2. Frequency of Alpha and Beta Command Subtypes



Compliance

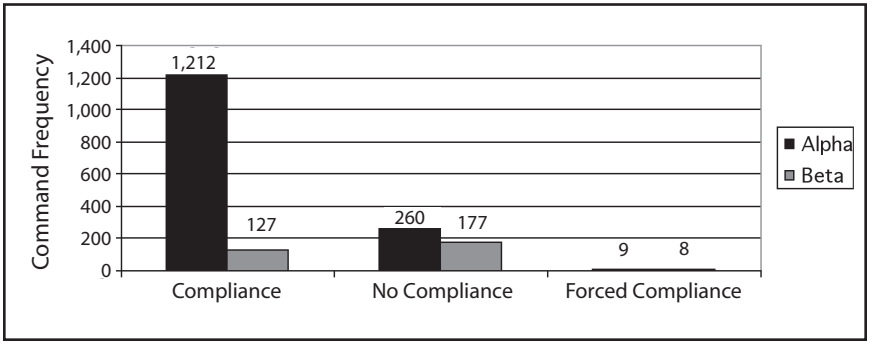
Results indicated that the level of compliance was significantly different across the six command types: $\chi^2_{(10)} = 368.66$, $p < 0.001$. The percentage of compliance per command was greatest for interview commands, 91%; followed by other, 85%; question, 78%; indirect, 68%; exclusionary, 50%; and regular, 48% (see Figure 3).

Figure 3. Compliance Across Six Command Types



Results further indicate that there were significant differences in compliance and noncompliance across alpha and beta commands: $\chi^2_{(2)} = 231.059$, $p < 0.001$. The greatest percentage of compliance per command was found in alpha command subtypes: 82%, compared to beta commands, 41%. The percentage of alpha command subtypes that produced noncompliance was only 18% compared to 57% of the beta commands (see Figure 4).

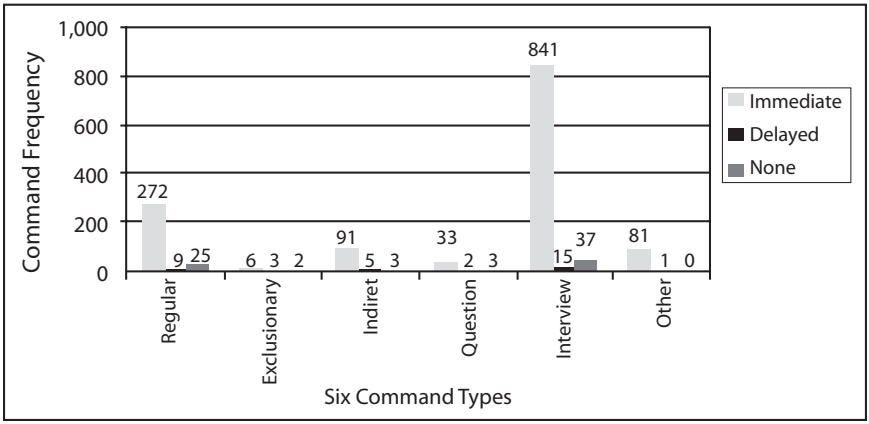
Figure 4. Compliance Across Alpha and Beta Subtypes



Latency

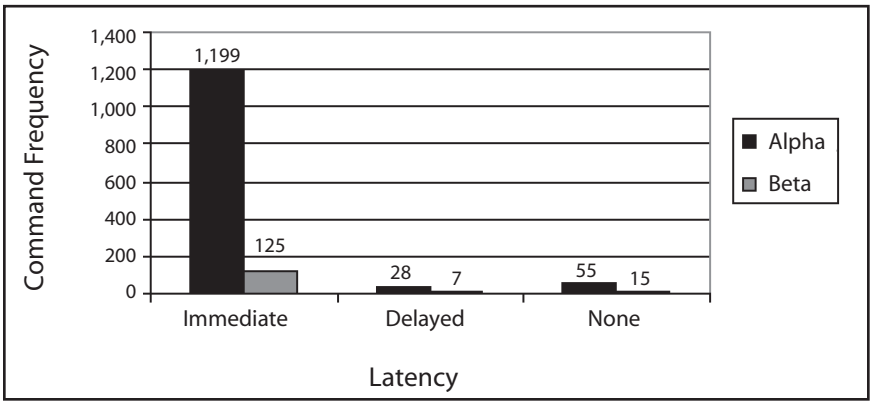
Results indicated a significant difference in latency of compliance across the six command types: $\chi^2_{(10)} = 54.604$, $p < 0.001$. The exclusionary commands produced the smallest percentage of immediate compliance per command, with only 55%; followed by question commands, 87%; and regular, 89%. All other command types produced at least 90% immediate compliance. Exclusionary commands were also found to produce the highest percentage of delayed responses at 27%. All other command types produced 5% or less in delayed responses (see Figure 5).

Figure 5. Latency Across Six Command Types



Results further indicated that there were significant differences in compliance and noncompliance across alpha and beta commands: $\chi^2_{(2)} = 14.02$, $p < 0.001$. Alpha command types produced immediate compliance 94% of the time and delayed compliance 2% of the time. In comparison, beta commands produced immediate compliance 85% of the time and delayed compliance 5% of the time (see Figure 6).

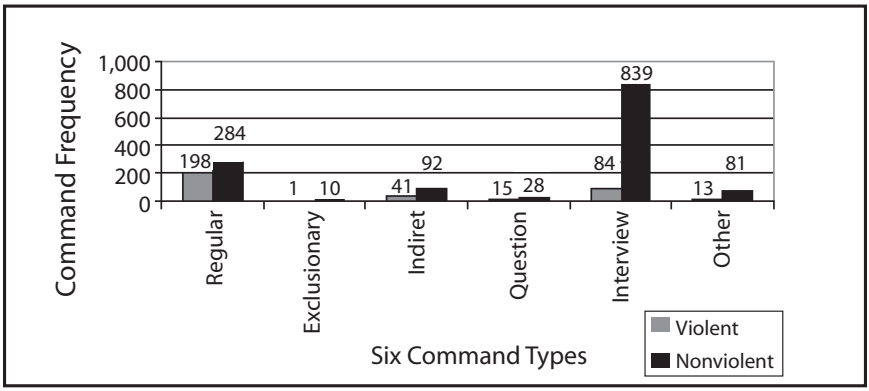
Figure 6. Latency Across Alpha and Beta Subtypes



Violent Versus Nonviolent

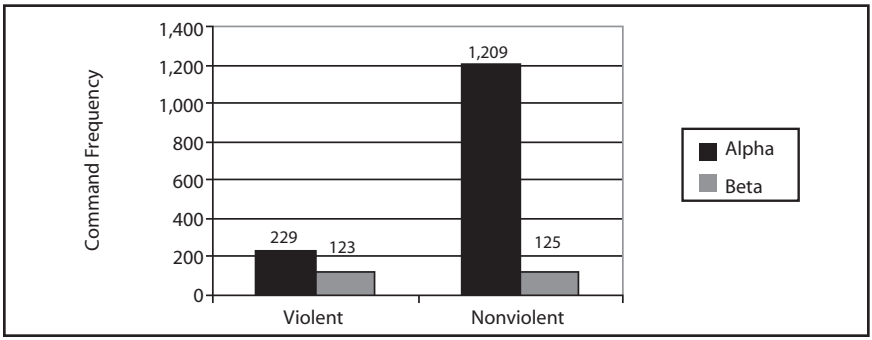
Of the 1,801 commands observed, 352 commands corresponded to a violent encounter and 1,334 to a nonviolent encounter. Results also indicate differences in the use of the six command types in violent versus nonviolent encounters: $\chi^2_{(5)} = 213.398$, $p < 0.001$. The greatest percentage of commands used in violent encounters was regular commands, 41%; followed by question, 35%; indirect, 31%; other, 14%; and interview and exclusionary, 9%. The greatest percentage of commands used in nonviolent encounters was exclusionary and interview, 91%; followed by other, 86%; indirect, 69%; question, 65%; and regular, 59% (see Figure 7).

Figure 7. Frequency of Six Command Types Across Violent and Nonviolent Encounters



Results further indicate that there were significant differences in the use of alpha and beta commands in violent and nonviolent encounters: $\chi^2_{(1)} = 145.179$, $p < 0.001$. The percentage of alpha commands used in violent encounters was 16% compared with 84% used in nonviolent encounters. Beta commands occurred 49.5% of the time in violent encounters and 50.5% of the time in nonviolent encounters (see Figure 8).

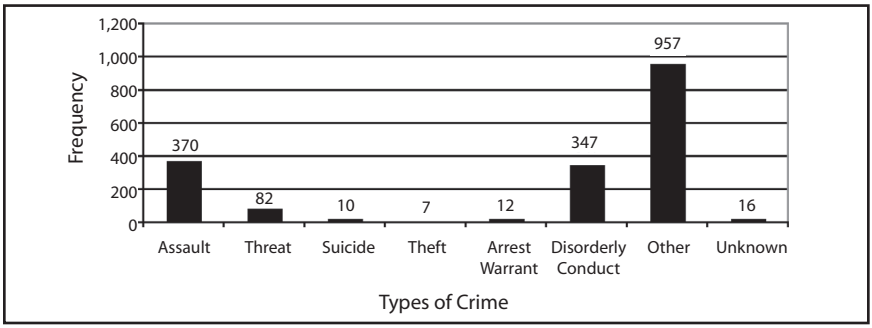
Figure 8. Alpha and Beta Subtypes Across Violent and Nonviolent Encounters



Type of Crime

The crime associated with the most commands was other, 53.1%; followed by assault, 20.5%; disorderly conduct, 19.3%; and threat, 4.6%. All other crimes were each associated with less than 1% of the commands (see Figure 9). Due to the type of statistical analyses and small number of cells containing suicide, theft, and arrest warrant, these three categories were combined to form one category. Thus, the total number of crime categories was reduced from eight to six.

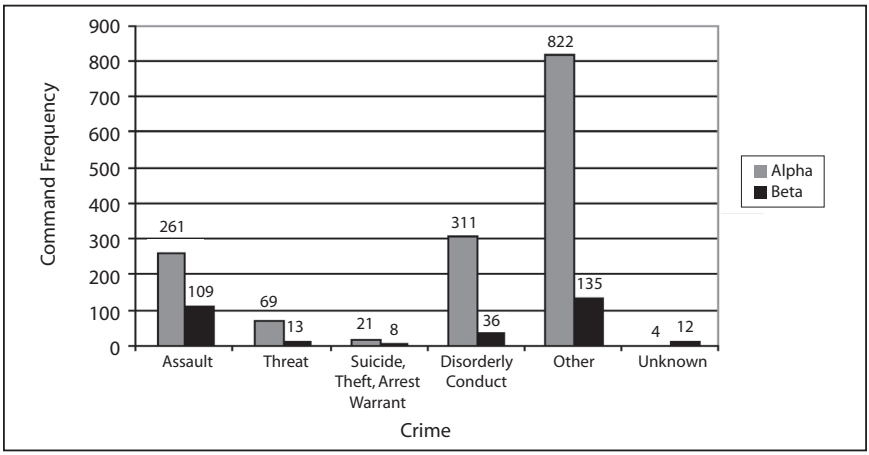
Figure 9. Frequency of Commands Across Crime



Results indicated that there were significant differences in the six types of crime across the six command types: $\chi^2_{(25)} = 109.36$, $p < 0.001$. The use of regular commands occurred most for other crimes, followed by assault, disorderly conduct, and threat crimes. The use of regular commands was less than 1% for each of the additional crimes. Exclusionary commands were used primarily for other crimes, followed by assault, threat, and disorderly conduct crimes. There was no use of exclusionary commands for any other crimes. Indirect commands were highest for other crimes, followed by assault, disorderly conduct, suicide/theft/arrest warrant, and threat crimes. There were no indirect commands used in the additional crime categories. Question commands were used most for disorderly conduct and other commands followed by assault and unknown crimes. No question commands were used in the additional crime categories. Interview commands were found most commonly in other crimes, followed by disorderly conduct, assault, suicide/theft/arrest warrant, and threat crimes. The use of interview commands was less than 1% for unknown crimes. Other command types were greatest for other crimes, followed by disorderly conduct, assault, and suicide/theft/arrest warrant crimes.

Results further indicated that there were significant differences in the use of alpha and beta commands across the six types of crime: $\chi^2_{(5)} = 95.832$, $p < 0.001$. The majority of alpha commands were used in other crimes, 55%; followed by disorderly conduct, 21%; and assault, 17.5%. All other alpha commands were divided by less than 5% in each of the additional crime categories. The majority of beta commands were found in other crimes, 43%; followed by assault, 35%; and disorderly conduct, 11.5%. All other beta commands were divided by less than 5% in each of the additional crime categories (see Figure 10).

Figure 10. Crime Across Alpha and Beta Subtypes



Discussion

There is a lack of research evaluating command categories, defined by command structure and form, on outcomes of police interactions. This study was designed to evaluate differences in the use of command types and subtypes used by police officers in different crimes and with different levels of violence. The effect of different command type and subtype on compliance and latency was also evaluated.

Compliance

Results indicate that a much higher proportion of the alpha commands, 82%, resulted in compliance in comparison to noncompliance. In comparison, the beta commands resulted in compliance 41% of the time and 57% in noncompliance (the remaining 2% were coded as forced compliance). This supports the idea that alpha commands may be more likely to result in compliance than beta commands. The clarity and feasibility of alpha commands may make it more likely that an appropriate response will be made.

Results for the command types indicated that 70% of the stop commands, 50% of the regular commands, 33% of the negative commands, and 31% of indirect commands produced noncompliance. The other four command types produced noncompliance 20% or less of the time. This data calls into question effectiveness of stop, regular, negative, and indirect commands.

Latency

The data indicated that alpha and beta commands produced fairly similar levels of latency (i.e., the time span from commands being issued to commands being complied with), with 94% of alpha commands and 85% of beta commands resulting in immediate compliance. These results provide additional support for the use of alpha commands.

Results further indicated that negative and stop commands ranked lowest in producing immediate compliance. Negative commands resulted in immediate compliance only 40% of the time, and stop commands were only 50% compared to 87% or better from all other command types. Additionally, these two command types scored highest on delayed latency, with stop commands producing delayed latency 25% of the time and negative commands 40% of the time, while all other command types were 5% or less.

Violent Versus Nonviolent Encounters

The results indicated that 84% of the alpha commands occurred during nonviolent police encounters, while 50% of the beta commands occurred during nonviolent encounters. Additionally, only 16% of the alpha commands occurred during violent encounters, while 50% of beta commands occurred during violent encounters. This may provide support for the use of alpha command subtypes to promote nonviolent police encounters and the minimization of beta commands to prevent violent encounters. The use of more specific and feasible requests by law enforcement may lead to fewer violent encounters.

All of the eight command types occurred more often during nonviolent than violent encounters; however, 41% of the regular commands, 35% of the question commands, and 31% of the indirect commands occurred during violent encounters. The higher percentages of these command types in violent encounters supports the idea that these commands may be more likely to lead to violent encounters. The use of more interview, question, negative, or other commands may lead to a reduced number of violent encounters.

Type of Crime

Both alpha and beta subtypes occurred most often in the other crime category. Alpha command types occurred second most frequently in disorderly conduct crimes followed by assault crimes. Beta command types occurred second most frequently in assault crimes followed by disorderly conduct crimes.

With the exception of negative command types, the majority of all the command types occurred in the other crime category. The majority of question commands were used during disorderly conduct crimes. The majority of don't commands occurred during threat crimes. The majority of stop crimes occurred during assault crimes. Also, interview and regular commands were used the most compared to all other commands during assault, disorderly conduct, and other crimes.

The results provide strong support for the use of alpha command types to promote nonviolent encounters and compliance with police requests. There is evidence to suggest that the use of alpha subtypes may facilitate more immediate compliance. It is more difficult to draw conclusions about differences in the use of alpha and beta commands in different crimes, however; it is clear from the results that more research is needed in this area.

The results suggest that regular, question, and indirect commands are being used more frequently in violent encounters. Although causation cannot be determined from this study, the result raises concern. Furthermore, the use of stop and

negative commands may be hindering compliance and reducing the likelihood of individuals ceasing unwanted and sometimes violent behaviors. Although once again causation cannot be determined, the results of this study suggest that officers may actually be prolonging noncompliance by using negative commands. In addition, the regular and indirect commands may also be hindering compliance.

Limitations

It is important to note that several of these results should be analyzed with caution. Of the eight chi square analyses conducted on crime, compliance, latency, and violence for the six command types and two subtypes, four of these analyses had a higher percentage of cells with low expected frequencies. The percentages were 25% for crime across subtype, 27.8% for compliance across six command types, 44.4% for latency across six command types, and 52.1% for crime across six command types.

The other limitation associated with the type of statistical analyses conducted is the inability to look at the interaction between variables. The statistical analyses did not allow for an investigation into the command type and subtype interaction effects on violence, latency, compliance, and crime.

It is also difficult to make interpretations of the crime data since more than 50% of the crimes associated with the commands were categorized as "other." Furthermore, there are only 15 commands categorized as "exclusionary": seven stop, six negative, and two don't commands. The limited data for each of these categories may make it difficult to interpret the findings.

Implications

This study emphasizes the importance of command form and clarity in increasing suspect compliance and increasing the speed of suspect compliance. This study also draws attention to the frequency of different command types across different crimes. The results suggest that less effective commands occur more often in situations where violence is a likely outcome. This might indicate that these commands may play some role in this outcome, or at the very least it suggests that beta and negative commands do not increase either the speed or likelihood of compliance. The opposite is more likely true. This research and future similar research could be used to develop a template of appropriate versus inappropriate commands and responses for certain circumstances. This, in turn, might prove very useful in officer training on the use of efficient commands for communicating with suspects and preventing violent encounters.

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Force and the Fatigue Threshold: The Point of No Return

By Jeffry L. Johnson, J.D., M.P.A.

Contents

• Scientific Explanation
• Fatigue Threshold: The Risk of Total Shutdown
• Impact on Force Encounters
• Typical Scenario
• Reasonable or Excessive?
• Conclusion: More Research Needed
• Biographical Information and Notes

❖ Introduction

Much research and writing has been done in recent years on the physiological factors that come into play when a law enforcement officer uses force. These factors, many of which stem from the "fight or flight" response within the body, will impact not only an officer's perceptions, but also his or her ability to use force effectively. One such factor, unrelated to fight or flight, I have referred to in previous writing as the "*fatigue threshold*." 1

This is a term actually borrowed from the physical sciences. In engineering, it means the stress level at which steel or wood will crack, bend or break. In our usage, the fatigue threshold can be defined as *the sudden physical exhaustion experienced during a force encounter when an officer cannot effectively perform to either control a suspect or defend himself*. 2

An officer only has a short time in an all out fight—in extreme cases less than a minute—to gain control of a suspect before the officer's energy is spent, placing him or her at a dangerous disadvantage. This condition will be experienced despite the added strength

adrenalin provides (which a suspect will also have the advantage of). It is what we more commonly call, "hitting the wall," experiencing a sudden depletion of strength. Modern officers are at an added physical disadvantage due to the personal equipment they carry, specifically, wool uniforms, twenty-pound belts, and motion-constricting, heat-retaining ballistic vests.

❖ Scientific Explanation

The fatigue threshold is not a contrived concept but a physiological phenomenon. Normally when a person is exerting him or herself physically, such as jogging, riding a bike or an elliptical machine, they are performing *aerobic* exercise. The body is generally able to sustain such workouts for long periods of time. This is because it is able to keep a steady flow of oxygen and fuel to the muscles. Aerobic literally means exercise "with oxygen." This can be contrasted to *anaerobic* exercise, which is different in both duration and intensity of the muscular contractions involved. 3

Anaerobic exercise is faster and more intense, like strength, weight training or sprinting. The key difference is that the muscles are contracting so quickly and/or powerfully that oxygen the body is taking in cannot provide enough fuel to sustain it aerobically (a condition known as *hypoxia*). Instead, the body tries to keep up by using glycogen or sugar it produces and processes without the advantage of oxygen to feed the muscles. This is a far less efficient process than aerobic exercise, but when the body is exerting too much explosive muscle movement too quickly, the anaerobic process is the only alternative.

During anaerobic exercise the body uses much more energy than it does aerobically. This is not only because of the intensity, but also because of the types of muscles we primarily use. When we exercise aerobically, i.e., jogging or biking, we primarily use *slow twitch* (ST) muscles, or muscles used for endurance. These muscles "twitch" or contract slower, but are able to maintain steady contractions over longer periods. Contrast this with *fast twitch* (FT) muscles. These are capable of faster, more explosive motion. Their downside? FT muscles burn much more energy than ST muscles.

It is these FT muscles that an officer will be depending on in a fight. Fighting or wrestling with a suspect requires explosive motion (e.g., swinging a baton, blocking, punching, kicking, grasping, clutching, sprinting, etc.), and a high level of intense, forceful contraction or tension (e.g., prying a suspects arms out from under him, keeping him from grabbing the officer or his weapons, holding him down, etc.).

It is worth noting that the comprehensive online encyclopedia, Wikipedia, under its definition of "*aerobic exercise*," specifically notes:

> When overall fitness is an occupational requirement, as it is for athletes, soldiers, and *police* and fire personnel, *aerobic exercise alone may not provide a well-balanced exercise program*. In particular, muscular strength, especially upper-body muscular strength, may be neglected. Also, the metabolic pathways involved in anaerobic metabolism (glycolysis and lactic acid fermentation) that generate energy during high intensity, low duration tasks, such as sprinting, are not exercised at peak aerobic exercise levels. 4

For an officer, arm and upper body strength are critical. Most people—including many cops—aren't generally used to such intense muscle exertion. You can better understand this concept if you've ever tried to wrestle or box. Novices tend to be surprised at how short a time they are able to perform the activity, and how quickly their strength is sapped. Two minutes is a lifetime when you're boxing. Many people will not even be able to lift their arms after much less time than that.

Of course, proper training will improve your body's performance under such conditions, but it's not like running on the treadmill; it's intense, often bone jarring, high impact, task-specific training. It's time consuming and challenging to train for such encounters. But even proper physical training doesn't eliminate the fatigue threshold—it just buys the officer a little more time.

❖ Fatigue Threshold: The Risk of Total Shutdown

Hitting the fatigue threshold is not the same as just being tired; it's the experience of sudden exhaustion to the point that you cannot physically function. Because the body is required to produce energy so quickly to feed the insatiable FT muscles, it correspondingly builds up a waste product faster than it can expel it.

The waste product is lactic acid. *If the body is unable either to keep the muscles fed (through respiration and blood flow) and/or remove the lactic acid during the lactic acid fermentation process (lactic acidosis), the muscle will simply stop contracting—shut down!* Think of an automobile with the engine running. If someone were to stick a banana in the tailpipe (a movie reference comes to mind), cutting off the exhaust's ability to escape the engine, the car would simply stop running. One second it's running, the

next it's stopped…caput…dead!

> *Lactic acid shuts down the muscle in approximately 30 seconds of maximum intensity exercise*, while the time scale of reestablishing pH takes place over approximately 15 minutes when not doing high intensity training. *Consequently, the duration of anaerobic exercise is short.* Because the fast lactic acid buildup prevents the body from exercising longer, the body cannot exercise past its allotment of glycogen and then proceed to fatty acid metabolism. 5

Thirty seconds is not much time to control a resisting suspect. Of course that's on the extreme end of an intense force encounter. That said, an officer will be lucky if he or she has two or three minutes of effective strength in an all out fight. The lactic acid waste simply backs up the anaerobic process so much that the affected muscles stop functioning. In other words, the muscles are literally starved and suffocated; they then become non-responsive. 6 A person hitting the fatigue threshold may also experience symptoms of light-headedness and nausea.

In a healthy person this condition is only temporary. Once the body has time to rest and recover the muscles will work fine (although we've all experienced muscle soreness the day after a particularly intense or new workout, caused by lactic acid residue in the muscles).

Although the condition is temporary, the recovery period takes time—precious minutes an officer can't spare in a fight. There are no time outs when you're fighting a combative felon who would like nothing better than to "take you down." Once that happens, he has total access to all weapons, and can use them as he so pleases. It's a cop's worst nightmare. Imagine suddenly losing all strength. You're barely able to lift your arms, run, or maybe even stand up. You're helpless, yet you have someone on top of you who wants nothing more than to disable you or a victim you're trying to protect. Can you understand why no cop ever wants to be in that position? You'll do anything to avoid it, including using what may otherwise be considered excessive force.

❖ Impact on Force Encounters

The closer an officer gets to his or her personal fatigue threshold, the more dangerous the situation becomes, not only to the officer, but often to the suspect as well. Once the

fatigue threshold is reached or passed without placing a resisting suspect in handcuffs or otherwise restraining him, the officer may easily be overcome, then injured or killed should the suspect(s) be so inclined. How does this translate to use of force incidents?

We will often see officers in this situation using increasing levels of force—force that without explanation may appear excessive—to gain control before they reach their impending fatigue threshold. This point may be reached roughly from thirty seconds to five minutes into a fight, depending upon a number of factors, including:

- Intensity of the physical altercation
- Number of suspects involved
- Number of officers involved
- Officer's physical condition
- Suspect's physical condition
- Environmental conditions (heat, humidity, cold, etc.)
- Officer's personal equipment (heavy belt, vest, wool uniform, etc.)
- Mental/emotional strength of combatants (will to overcome/survive)
- Recovery time or breaks in the altercation

Even though we talk about 1-5 minutes, in an all out fight, don't figure on most people being able to hold out for more than two minutes or so. This issue cannot be over-emphasized; it is an area that has largely been overlooked until now.

❖ Typical Scenario

I recall one particular video that hit YouTube a couple of years ago. It showed two LAPD officers on top of a prone suspect on the street. The short clip was filmed by someone in the crowd with a cell phone camera. The prone suspect was on his back with his arms tight in front of him like a boxer. The officers were holding his arms, apparently struggling with him to get him cuffed. Suddenly one of the officers repeatedly struck the suspect in the face. It didn't look so good on tape for the officers. The clip ended shortly thereafter.

What really happened? This suspect was a known gang member, who had attempted to evade officers in a vehicle pursuit with a stolen car, then in an extended foot pursuit. They finally caught up to him and had him on the ground. But he wouldn't allow them to handcuff him. He locked his arms. The officers were exhausted, breathing very hard. They were also being surrounded by a hostile crowd. My bet is they knew they didn't

have much time to resolve this ordeal. How close were the officers to their fatigue threshold? That's hard to say, but if they were (and maybe even if they weren't), their actions in striking the suspect with distraction blows could have been their only option to control the suspect. 7

It takes a tremendous amount of strength to force a person's hands into handcuffing position if the subject doesn't want to go there. A suspect can easily lock his or her arms together against or under his body. I've witnessed instances where it took four to six officers to force a suspect's hands into cuffing position. Most officers understand—sometimes only instinctively—that they have a limited time frame to control a suspect, particularly if they are working alone, without backup. *And the truth is 66% of all force encounters involve a single officer confronted by one or more suspects*. 8 In these cases, even a suspect who is passively resisting, i.e., not fighting, but refusing to allow himself to be handcuffed and controlled, can easily bring an officer to his or her fatigue threshold.

❖ Reasonable or Excessive?

In the final analysis, the most important reason we need to have a clear understanding of the fatigue threshold is because it changes the dynamics of a force encounter. If an officer knows he or she is about to reach their own fatigue threshold—and most often they will know it's coming—they must act quickly and decisively to control the suspect. *At that point it may even appear to the casual observer that the officer is winning the battle, but the reality is he's about to hit the wall. When that happens, all gains are lost; all advantages evaporate.* So what will the reasonable officer do?

The reasonable officer understands that any suspect who is willing to fight the police with such intensity that he can bring the officer to the limits of his strength is dangerous and cannot be allowed to overcome the officer, gain the upper hand or control the outcome. Particularly if the suspect has a history of violence, has threatened the officer, or possesses a weapon*, it may be necessary for the officer to consider and employ greater levels of force than may otherwise appear objectively reasonable, up to and including deadly force.*

This will never look good on video, but appearances to the untrained eye should never dictate our standard of objective reasonableness. The law requires we place ourselves in the officer's shoes, taking into account his physical condition at the time of the encounter. 9 The fatigue threshold may play a prominent role in such an analysis.

❖ Conclusion: More Research Needed

The fatigue threshold is a relatively new concept. As such, there is a void of empirical data documenting specifics on the extent and character of the problem for law enforcement. However, experience tells us that just because a problem is not comprehensively documented does not mean it does not exist. *We can clearly document the physiological process of the fatigue threshold. Without question, it exists. What we still need to more clearly establish is the scope of its impact.* Hopefully, this article will stimulate deeper professional and academic inquiry into the issue.

The fatigue threshold is an important concept to understand for the sake of our officers, but no less so for the subjects they encounter. An exhausted officer who has reached the limits of his or her physical endurance, yet still has not taken a resisting suspect into custody may often have no other option than that of deadly force. Sometimes the four-pound pull of a trigger is the only force option a threatened, exhausted officer can physically perform.

That's rarely good for the officer and never good for the suspect.

❖ Biographical Information

Jeffry L. Johnson has 28 years experience as a police officer. He is presently a Commander with the Long Beach Police Department, California, assigned as the Commanding Officer of the Training Division. He has been a use of force instructor of both police recruits and advanced officers for 18 years. He has served as a legal expert for the California Commission on Peace Officer Standards and Training (POST), and has participated as a writer for the POST Use of Force and other curriculum.

He is qualified and has testified as a force expert. He is an FBI National Academy graduate, holds a Masters Degree in Public Administration, a Juris Doctor Degree, and has been a member of the California Bar for 20 years. He also serves as a private consultant and trainer on use of force issues. Email: insighttraining@att.net

❖ Notes:

1. *Police Force and the Hollywood Factor*, AELE Monthly Law Journal, 2007 (4) AELE Mo. L. J. 501, Special Articles Section (April 2007); Journal of California Law

Enforcement, Vol. 41, No. 1 (Jan. 2007); PORAC Law Enforcement News, Volume 40, Number 1 (Jan. 2008).

2. This condition is loosely related, but not the same as what has been termed the "Parasympathetic Backlash." See Lt. Col. David Grossman, *On Combat*, p. 15. (2004).
3. Donatelle, Rebecca J., *Health: The Basics*, 6th Ed., San Francisco: Pearson Education, Inc. (2005).
4. "Aerobic Exercise" defined. Wikipedia.org.
5. Rust, Elizabeth, Ph.D., Rahnama, Sahand, "Timing is Everything: Why the Duration and Order of Your Exercise Matters," *MedFitness*, Univ. of Michigan, School of Medicine. www.umich.edu (2005). (emphasis added)
6. Hunter, Sandra, Duchateau, Jacques and Enoka, Roger, *Muscle Fatigue and the Mechanisms of Task Failure*, Exercise Sport Science Review, 32(2), (2004).
7. It would be instructive at this point to engage in a discussion of distraction techniques and their importance as a tool for helping an officer gain control of a suspect, particularly when time is of the essence. However, due to the amount of print it would take to do the subject justice, it will have to wait for another day.
8. *Police Use of Force in America*, International Association of Chiefs of Police, p.47 (2001).
9. "The calculus of reasonableness must embody allowance for the fact that police officers are often forced to make split-second judgments—in circumstances that are tense, uncertain, and rapidly evolving—about the amount of force that is necessary in a particular situation." *Graham v. Connor*, 490 U.S. 386, at 397 (1989).

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Was Suspect's Shooting a "Police Execution"?

Findings From The Force Science® Research Center Helps a Federal Jury Decide

[*** Special note: Be sure to check out 4 dramatic computer animation clips that were used in this case at: http://www.forcesciencenews.com/visuals/carr_video]

Until the Force Science Research Center entered the case, no one knew precisely how Randall Carr ended up killed by a police bullet that tore into his body near his rectum and blew a hole in his heart.

His angry relatives, with Johnnie Cochran's legal team behind them, insisted it had to be a deliberate police execution.

The officers involved vehemently denied that, of course. But they couldn't reconstruct the fatal details of Carr's final moments or explain the seemingly incriminating pattern of wounds documented at autopsy.

With a $5 million federal civil rights lawsuit and the officers' reputations at stake, attorneys for the officers contacted Dr. Bill Lewinski, executive director of the nonprofit FSRC at Minnesota State University-Mankato, in hopes that a scientific analysis of the shooting could shed some light on its dark mysteries.

This much was known about the circumstances that began unfolding about 11 o'clock one autumn night in the Maxwell House Apartments in downtown Oklahoma City:

During an investigation of an assault on the landlord during a rent dispute, 2 officers were questioning the accused tenant, Randall Carr, 38. Carr was acting "very excited and aggressive," and was later found to have evidence of cocaine use in his bloodstream. He declared, "I own this building, I own Oklahoma City and I don't have to pay rent!" Then

he punched one officer in the head, inflicting a cut over his right eye, and kneed the other in the groin, and fled on foot. Multiple units responded.

During a pursuit by foot and car, Carr at one point was whacked at the knee with an expandable baton and sprayed directly in the eyes and nose with OC, but he did not submit. Finally the cop who'd been kneed during the initial call, Ofcr. Jerry Bowen, and a responding sergeant, Randy Castle, cornered Carr in a small, dark churchyard a couple of blocks from his apartment.

With a jagged piece of concrete about twice the size of a softball clutched in his left hand, Carr (who was left handed) tried to scale a spiked fence at one edge of the yard, but he couldn't make it. The officers were yelling at him to get down and to drop the concrete. He dropped off the fence, turned and with his left arm raised started to run directly at Castle, who was about 20 feet away.

Bowen was forward from Castle and to his right. In Bowen's perception, Carr was charging Castle intent on bashing in the sergeant's skull with the concrete chunk.

Both officers opened fire with their Glocks. Eleven rounds were discharged. Seven struck Carr. When the shooting stopped he was slumped against a wooden bench several feet to Castle's left.

Castle had no clear recollection of the 5 shots he fired. He recalled Carr "throwing" the concrete at him at a point. A left-hander like the suspect, Castle instinctively turned away while raising his right hand to protect his head, and fired his rounds blindly back at his assailant with his left hand.

Bowen said he started shooting when Carr crossed his line of fire in the dead run toward Castle. There was about 5 feet between Bowen and the attacker at that moment. He fired a total of 6 rounds. Between the moment he started shooting and an awareness that Carr was "suddenly" no longer upright as a target, he had no relevant memories.

These days, white officers shooting and killing any black suspect guarantees controversy. But in this case, the situation was exacerbated by a disturbing medical examiner's report.

The fatal round, which ballistics determined was fired by Bowen, has entered to the left of Carr's rectum and had followed a path roughly paralleling his spinal column straight to his heart.

Through a local attorney, surviving relatives of Carr (who included a professional football player) contacted Johnnie Cochran's law office and a federal civil suit inevitably materialized, alleging excessive force by the officers and failure to train and supervise by the city. The municipality got out of the case on a motion for summary judgment prior to trial, but the officers remained as defendants.

At the heart of the plaintiffs' case was an inflammatory premise: Such a fatal bullet pathway could have occurred only if Carr was already down on his hands and knees, butt in the air and no longer a threat, when the killing shot was fired. Bowen must have advanced on the suspect and pulled the trigger from behind him to create the resulting wound channel. In effect, the fatal round was an unjustified execution.

Bill Lewinski says he approached this volatile situation with no preconceived notions. "Mentally I kept myself neutral to how it would come out, good or bad," he says. "I was interested just in understanding what happened."

Besides the fatal round, Carr had been shot in the left hip, the left waistline, the right calf, the left wrist, the left thigh and the inside right thigh. The autopsy report clearly established each wound channel, confirming the trajectory on which each slug had penetrated into the offender's body. All but one had struck him from the rear. However, the sequencing of the shots, whose gun some of the rounds came from (those that were through and through), and what time span the shooting covered–all were among the case's many unknowns.

As one of the nation's foremost authorities on reaction times and shooting dynamics, Lewinski felt that documenting the missing elements would be critical to understanding how the shooting actually unfolded and determining whether the plaintiffs' allegations of wrongdoing might, in fact, be true.

He started by taking Ofcr. Bowen and Sgt. Castle to Oklahoma City PD's firearms range. They'd told him that in an effort to stop the onrushing Carr they had fired as fast as they could pull the trigger that fateful night. He asked them to do that again–repeatedly–while they were videotaped by Lewinski and one of FSRC's National Advisory Board members, Parris Ward.

Ward, who heads the firm Biodynamics Engineering, is a prominent computer animator whose vivid reconstructions of police shootings and other controversial events are frequently introduced as pivotal evidence in high-profile court cases.

The videotapes offered gross time stamps of the officers shooting. But back in his lab in Pacific Palisades, CA, Ward's ultra-sophisticated equipment was able to break down the sample firings into hundredths of a second. That revealed that the officers had been able to shoot in a range of .233 to .268 of a second per round.

Now Lewinski, working with Ward and his precision equipment, set about the laborious task of calculating the sequence and timing of every round that had struck Carr.

Lewinski figured that the round which entered Carr's left side at waist level had to have been the initial round fired by Bowen and the first of the fusillade to hit the running suspect. "This would could only have come from one officer at one point in the action," Lewinski says.

Almost simultaneous to that round, according to investigators' reports, Carr had stumbled and had "thrown" the concrete at Castle, who was then less than 5 feet away. The chunk hit Castle's left shoulder.

At about the point Carr had reached in his line of travel when all this happened there was a depression in the ground that accommodated a drain grate. In the dark and malevolently focused on rushing Castle, Carr would not likely have seen this hole. If his left foot had gone down in it he would certainly have stumbled, his raised left hand would likely have involuntarily released the concrete and–most important, Lewinski knew from his extensive study of physical dynamics–his body would have thrust sharply forward and then twisted to the right as he tried unsuccessfully to regain his balance and his right leg collapsed from the sudden, unexpected shift of his body weight. Bowen's shots coming from the left would have contributed to this motion.

Turning right and then falling face down toward the ground would have positioned him so that most of Bowen's 5 shots that connected–including the troublesome fatal round–would have hit him from the rear, without Bowen advancing significantly toward him.

Painstakingly, Lewinski and Ward gradually reconstructed this probable timing and sequence:

0.000 second: Bowen's first shot to Carr's left hip (timing baseline).

0.233 second: Bowen's second round, to the left waistline, slightly to the rear

0.500 second: Bowen's third round, to the left buttock (the fatal shot)

0.600 second: Castle's first round, a miss

0.733 second: Bowen's fourth round, to the right rear calf

0.867 second: Castle's second round, to the left wrist

0.967 second: Bowen's fifth round, to the left rear thigh

1.133 seconds: Castle's third round, to the inner right thigh

1.200 seconds: Bowen's sixth (last) round, a miss to the suspect's right

1.400 seconds: Castle's fourth round, a miss

1.600 seconds: Castle's fifth round, a miss (last round fired).

"This sequence of rounds, matched to bullet trajectories and times, when put all together makes a sensible scenario of what occurred," Lewinski says. "Things can only happen in a certain way, and based on the science of the situation, we are confident this is the way."

In confirming the incredible speed in which police shootings can go down, incidentally, this is a classic case: 11 rounds fired by these 2 officers in just 1.6 seconds, start to finish.

*** NOTE: To see Parris Ward's 4 dramatic animation clips recreating this shooting, go to:
http://www.forcesciencenews.com/visuals/carr_video/

Versions for all 4 clips are available in both high- and low-resolution versions and can be played in both QuickTime and Windows Media Player.

When the lawsuit went to trial in U.S. District Court last November, Ward's elegant and gripping color animation of the shooting and Lewinski's detailed explanation of the science behind it were highlights of the officers' defense presented by attorneys Robert Manchester (brother of the famed historian William Manchester) and Susan Knight (wife of an Oklahoma peace officer). The jury was shown the conflict recreated in time-coded slow motion, in freeze-frames and in actual time, from a variety of angles.

The key element was the placement of Bowen's fatal round early in the sequence. Without that being plausibly positioned and explained, the plaintiff's spectre of a final, fatal "execution" shot might have seem much more credible.

Johnnie Cochran, who had been expected to head the plaintiff's case, failed to show, reportedly because of health problems. An associate from Hawaii replaced him.

This attorney tried to convince the jury that Ward's animation was unrealistic. During cross examination, he had Lewinski get down on the courtroom floor, with his butt thrust toward the jury, and try to assume the position that he claimed Carr had been in when he took the fatal round. Lewinski could not do so–because, as he patiently explained, this was a dynamic posture that occurred ever so briefly while the suspect was falling.

The plaintiffs presented their own animated version of the shooting. But it was built backward from the alleged "execution shot," which the plaintiffs claimed was fired after Carr had come to rest against the bench. In critiquing this scenario, Lewinski explained in detail why it was illogical and inaccurate and not based on sound principles. "They ignored science for the purpose of constructing a story that fit their conception of the shooting," he says.

Among other things, Lewinski also testified about FSRC research that documents why the officers could not have instantly stopped shooting once Carr started to fall and was no longer an imminent threat. (This research is detailed in an article for The Police Marksman magazine titled "Time to Start Shooting, Time to Stop Shooting" and can be accessed through the FSRC website at this URL
http://forcescience.org/articles/tempestudy.pdf

A member of FSRC's Technical Advisory Board, Dr. Paul Michel, an optometrist from Littleton, CO, also testified for the defense. He explained the ambient light levels that

would have existed in the courtyard and how the darkened conditions would have affected the officers' ability to immediately perceive details of the action.

Two other defense experts have recently been added to FSRC's Technical Board. They are Greg Karim, a retired Oklahoma City cop now heading a regional ballistics lab in Austin, TX, who testified about shell-casing ejection patterns and other firearms-related technical material, and Joe Callanan, a former Los Angeles County (CA) Sheriff's officer now with Specialized Training Consultants in Morro Bay, CA, who reviewed the police tactics used in trying to deal with Carr.

On Nov. 22, after days of testimony and arguments, the jury returned its verdict. Four long years after the shooting occurred, the officers were finally exonerated. The plaintiffs were granted nothing, and there was no reimbursement for the substantial funds the plaintiffs' attorneys had put forth to prepare for trial.

This case, incidentally, is the third in which Lewinski has helped to successfully defend officers against Johnnie Cochran's legal armada.

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The camera doesn't lie, right? Wel-l-l-l-l-l-l……..

Brief, dark, and grainy, the video image is a punch to the gut.

A California sheriff's deputy trying to detain a subject who's on the ground after a high-speed chase says to him, *"Get up! Get up!"* The man says, "Ok, I'm gonna get up," and starts to rise. Without another word, the deputy shoots him, 3 times in quick succession.

With millions of others, you probably became a vicarious eye-witness when the scene was telecast over and over world-wide. Be honest. The man complied with an officer's command, and the shooting was not an unintentional discharge. Didn't it look like a slam-dunk case of egregious abuse of force?

Late last month [6/28/07], after less than 4 hours' deliberation following a trial that lasted over a month, a jury acquitted the deputy, Ivory Webb Jr., of attempted voluntary manslaughter and firearms assault. The charges could have sent him to prison for 18 years. For people who knew nothing more about the case than what they'd seen on TV or the Internet, the verdict seemed a puzzlement, if not an outrageous miscarriage of justice.

But jurors said the tale of the video took on a whole different flavor when considered in context with circumstances that were little known publicly until Webb's trial.

Dr. Bill Lewinski, executive director of the Force Science Research Center at Minnesota State University-Mankato, was part of the defense team. He was brought into the case "to explain the human factors behind the shooting," based on his expertise as a behavioral scientist and on FSRC's unique studies of lethal-force dynamics.

In a recent interview with Force Science News, Lewinski reprised his courtroom testimony and his insider's knowledge of the pressure-cooker confrontation that embroiled Ivory Webb and resulted in his becoming the first LEO ever charged criminally for an on-duty shooting in the history of San Bernardino County.

“It was important to paint a picture of what happened from Webb’s perspective,” Lewinski says. “The video was so vivid, so seemingly clear-cut, that people didn’t properly factor in what led up to the shooting.”

The Players. Ivory Webb was 46 years old at the time of the shooting, a former college football player (Rose Bowl ’82), the son of a retired California police chief, and a veteran of nearly 10 years with the San Bernardino County Sheriff’s Department. Most of his career had been spent as a jail officer. Although he’d been on the street for over 4 years, “he had never been the primary officer on a felony vehicle stop,” Lewinski says. “He performed pretty much as a backup officer.”

The subjects he confronted at the shooting scene were Luis Escobedo, 22, who had a rap sheet from previous run-ins with police and would later be arrested for CCW, and Elio Carrion, 21, an Air Force senior airman and security officer.

The Chase. On the last weekend night in January, 2006, Luis Escobedo and Elio Carrion were at a late-night barbeque in Montclair, east of Los Angeles, celebrating Carrion’s recent return from a 6-month stint in Iraq. They’d been “heavily” consuming beer and tequila when they decided to take a fellow partygoer’s Corvette for a spin. Both had blood alcohol levels of more than double the state’s legal limit.

Escobedo took the wheel (although he had no driver’s license) and on a “lightly trafficked industrial road” near some railroad tracks, he opened up the sleek muscle car to see how fast it would go. Soon they passed a San Bernardino deputy who gave pursuit but couldn’t keep up.

Webb, returning to patrol from another call, heard radio traffic about the chase and moments later saw the Corvette “coming directly at me. If I hadn’t swerved into the other lane, they would have smashed right into me.”

Webb barreled after them and soon was driving over 100 mph to keep up. The Corvette screeched around a corner, caromed off curbs, and at one point “spun around and came directly at me a second time.” Before colliding, it suddenly smoked into a U-turn and wove wildly from one side of the street to another, then crashed into a cinder block wall facing opposing traffic and “hung up there.” The chase had ended in the municipality of Chino.

When Webb pulled up, the vehicle was shaking as the occupants tried to force the doors open, he said. The trunk lid had popped up from the impact, blocking the view from behind. He nosed in slightly toward the right rear of the Corvette and stepped out of his patrol car.

The Confrontation. “Considering that they’d played chicken with him twice and had shown no regard for human safety with their reckless speeding, Webb reasonably assessed the car’s occupants as really dangerous,” Lewinski says. “He had his full

uniform on, his overheads were flashing, and he had his gun and flashlight out, so there was no mistaking his authority.

"Carrion began to exit the vehicle and took a step in the direction of Webb's patrol car. Webb ordered him to show his hands clearly. Carrion didn't. Webb ordered him to get down. Carrion didn't. Inside the vehicle, Escobedo kept reaching his hands into areas Webb could not see." The deputy's commands to both subjects were repeated in a stream, with no compliance. In his frustration and concern, Webb ratcheted up his language with liberal infusions of profanity.

At trial a retired LASD lieutenant testified as a tactical expert for the prosecution and condemned Webb for not remaining "calm and assertive," as officers are trained to do. But Lewinski took Webb's words out of the context of antiseptic Monday morning quarterbacking and put them in the context of his on-the-spot fears.

The chase had led the deputy into an unfamiliar section of Chino and, essentially, "he was lost," Lewinski says. He knew the street he was on but in the blur of the pursuit he'd had a hard time tracking the cross streets. Several times he named the nearest intersection incorrectly when radioing for help. Deputies trying to reach him sometimes cited directions and their own locations erroneously, too.

The two suspects could overhear the radio jabber. "Webb knew that they knew his back up couldn't find him and that he was all alone with two drunken young men who were not complying with any of his orders," Lewinski says.

The pair was physically separated, so Webb constantly had to shift his focus and his flashlight from one to the other to keep tabs on their actions. And they kept trying verbally to intimidate him, Lewinski explains. "Carrion at one point told the deputy, 'I've spent more time than you in the fuckin' police, in the fuckin' military.'

"Webb recognized all this from his jail experience as a common tactic among gangbangers: separate, keep up a barrage of chatter to distract, then attack. Webb ordered them to shut up, but they didn't."

At a point when Carrion had gotten within his reactionary gap, Webb kicked him to take him to the ground. (The prosecution's expert would claim later that police are not trained to kick suspects because it puts them off-balance. But Lewinski points out that in fact kicks and leg strikes are common staples in contemporary defensive tactics.) On the ground, Carrion was propped up on his arms, "controlled to some degree" but not proned out like Webb wanted.

The grinding crash of the speeding Corvette against the wall and the flashing lights and all the yelling that followed had alerted a used car salesman living across the street that something worth filming was going down. He grabbed his Sony digital zoom camera and started recording after Carrion climbed out of the car.

This man, a Cuban refugee, was wanted on old felony warrants for aggravated assault in Florida. His past would surface after his sensational footage saturated the airwaves.

But for now, his camera was about to capture what photographers call "the money shot."

The Shooting. When the video was first reviewed and broadcast, the figures of Webb and Carrion could be grossly seen on the darkened street, the deputy with his gun out standing over the semi-grounded suspect. But subtleties were hard to distinguish. The audio track, too, was tough to make out, although what could be heard sounded discouragingly incriminating.

Carrion: We're here on your side. We mean you no harm.

Webb: OK, get up! (inaudible) Get up!

Carrion: OK, I'm just gonna get up.

Carrion starts to move up. Three shots ring out from Webb's .45. Carrion is hit in the left shoulder, the left thigh, and the left ribs. He's critically wounded but survives.

The digital recording was "enhanced" by an FBI laboratory to reveal more visual detail. Through ultra-sophisticated technology of David Notowitz, a video expert engaged by Webb's attorneys, it was then enhanced even further, to the point that images were recovered from a section of the recording that seemingly had been completely whited out by the amateur cameraman ineptly fiddling with the controls.

Webb had experienced difficulty articulating precisely what happened just before he started shooting. In Lewinski's opinion, he suffered memory problems that are not uncommon after high-intensity officer-involved shootings. "But when the enhanced footage was slowed down and time coded so we could study the action fragment by fragment, I became convinced he was reacting instinctively to a legitimate perceived threat."

As Carrion braces on his hands, resistant to going fully to the ground, he first can be seen jabbing a hand up toward Webb's gun. The weapon is well within his grasp, but he quickly lowers his hand without attempting a grab.

Then the video confirms that he twice reaches his hand inside his black Raiders jacket. Carrion would claim on the witness stand that he was just pointing to his chest. "But the enhanced image shows his hand buried in the jacket up to the knuckles," Lewinski says. "It was definitely inside."

Less than a second later, Webb jerks his gun barrel up slightly as if motioning with it as he commands, "Get up! Get up!"

"He's talking to the hand, focusing on it," Lewinski says. "What I sincerely believe he

was thinking was, 'Get your *hand* up,' meaning get it away from where you may have a weapon hidden and out where I can see it. But the words came out different than his thought.

"Some of our studies have shown that when officers feel they are in control of a situation, they tend to give clear and relevant commands. But when they feel out of control, their commands often deteriorate. For Ivory Webb, that was an enormously stressful situation and there was nothing he felt in control of.

"Under stress and time compression, people commonly experience slips between thought and speech." En Route to the trial, for example, Lewinski asked a harried airline ticket agent for directions to a travelers' lounge. "Down there," she said—and pointed *up*. Even the prosecutor while cross-examining Lewinski misspoke in referencing something, and apologized for it. "It's easy to do, isn't it?" Lewinski softly replied.

Lewinski cited a case of an officer who, facing a suspect with a knife, repeatedly shouted "Show me your hands!" even though both hands were visible. The officer was trying to say "Drop the knife" but "resorted to familiar commands from his training under stress," Lewinski explained.

In the uncertain and rapidly evolving circumstances on the street in Chino, Carrion reaching into his jacket had "extremely threatening implications," Lewinski says. "He turned out not to be armed, but Webb couldn't know that. For the first time in the encounter, Carrion obeyed the command he heard. He began to rise up and a little forward, like starting to lunge. Webb had already made the decision to fire, thinking his life was in jeopardy, and pulled the trigger."

A tactics expert who volunteered for the defense, Sgt. Kenton Ferrin of Inglewood (CA) PD, said he would have shot under the same circumstances. Webb "thought he was going to die," Ferrin testified.

The prosecutor's expert, however, asserted that each of Webb's shots was a deliberate decision, bolstering the contention that the deputy in effect had committed a cold, calculating execution. But Lewinski pointed out that the time-coded video enhancement showed there was just 6/10 of a second between each round. He explained that FSRC's time-and-motion studies had proven that in that tight sequencing, with both the officer and the subject moving slightly, there's no possibility of conscious decision-making prompting each shot. "At that point, after the first round, it was just an instinctive process."

"The purpose of Dr. Lewinski's testimony," says Webb's attorney Michael Schwartz of the Santa Monica law firm Silver, Hadden, Silver, Wexler and Levine, "was to help the jury see that behavior the prosecution considered grounds for suspicion and criminal action could, in fact, be understood as common human behavior in circumstances of extreme stress."

The Outcome. The first poll inside the jury room was 11 for acquittal, 1 for conviction. The dissenter soon changed his mind. When the verdict was announced, Ivory Webb burst into tears and praised God.

That was just the first of the legal challenges he faces. Elio Carrion and his family have asked federal authorities to bring criminal charges against Webb, and a civil suit has of course been filed.

Meanwhile, with cell phone cameras and camcorders proliferating, a profusion of controversial police actions seems destined in days ahead to be seen and judged by millions who understand little about them.

After the Webb verdict, a reporter for the Associated Press interviewed Eugene O'Donnell, a former cop and prosecutor who now teaches police studies at John Jay College of Criminal Justice in New York City.

"Videos are drenched with caveats," O'Donnell cautioned. "One thing we've learned about videos is that there are often missing pieces."

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New study explores threats posed by prone suspects

One of the most dangerous positions a suspect can assume on the ground is prone with his hands tucked under his body, either at chest or waist level. What's hidden in those hands? And if it's a gun, how fast can he twist and shoot if you're approaching him?

This month [1/09], the Force Science Research Center, in cooperation with Indiana University and the Northeast Wisconsin Technical College, will launch the first study of its kind in an effort to clearly define your risk and, hopefully, identify your best approach tactics in dealing with this common street problem.

The results may also help explain to civilians why officers sometimes react with what may seem like exceptional violence when trying to control a downed offender whose hands are concealed beneath him.

"When a prone suspect resists showing his hands when an officer orders him to or attempts to pry them out, officers become very suspicious and fearful about what his motive is. And justifiably so," says FSRC's executive director, Dr. Bill Lewinski. "FBI research has shown that suspects with concealed weapons most often carry them to the front of their bodies. So, when prone, they may have easy access to a weapon or already be holding one.

"Until the hands are controlled, officers are very vulnerable in this circumstance, and they often use a fairly high level of force to gain control of the hands because of their concern. They may deliver strikes with batons or flashlights that to naïve civilians watching a video clip on TV may look like malicious outbreaks of rage and vindictiveness."

Since its beginning more than 4 years ago, FSRC has conducted a series of ground-breaking time-and-motion studies, documenting the amazing speed with which suspects can attack from a variety of positions—turning and shooting while running, drawing and shooting while seated in a vehicle, and so on.

“The prone study is an important extension of this sequence,” Lewinski explains, “and is expected to further pinpoint the formidable reactionary curve that officers are behind when attempting to prevent or respond to potentially lethal assaults.”

Several months ago Lewinski conducted some rough preliminary testing on prone action times at the FSRC lab at Minnesota State University-Mankato. Role-playing a prone, armed offender with hands tucked under his body, he repeatedly turned to present and fire a gun as if shooting at a contact officer approaching him from the feet or side. A time-coded video camera recorded his movements. You can view a short video clip of the movement here: **http://www.forcescience.org/video.html**

The average time it took him to make his threatening moves was “about one-third of a second,” Lewinski says. “This speed would likely be faster than an average cover officer could react and shoot to stop the threat, even if the officer had his gun pointed, his finger on the trigger, and had already made the decision to shoot. In other words, the officer would stand little chance of being able to shoot first.”

This convinced Lewinski that the subject was worth a much more in-depth investigation.

The core research will begin Jan. 5 at Northeast Wisconsin Technical College in Green Bay, with the assistance there of Erik Walters, public safety training technician.

Four cameras positioned at different angles will film 7 volunteer role-players with different body types moving in a variety of ways to present a gun from under their body and shoot at an approaching officer. “The subjects will be young—reflecting the age demographics of offenders most likely to assault police officers—and agile,” Lewinski says. “Agility may play more of a role with suspects who are prone than with those in other shooting postures.”

Three of the cameras will be high-speed video units purchased by NWTC with a State of Wisconsin grant to assist with FSRC research. Walters used one of these to record the preliminary tests at Mankato.

The fourth camera is a sophisticated SportsCam, used by high-level athletics coaches and researchers in biomechanics, recently purchased by the Ergonomics Laboratory at Indiana University in Bloomington. This unit can film in color at speeds up to 500 frames per second.

FSRC learned of this equipment through a graduate student, Madeleine Gonin, originally from South Africa, who works in the IU Ergonomics Lab and is pursuing a PhD in human performance and ergonomics. Her master’s, however, is in safety management, with a focus on workplace violence. “There’s a high level of crime in South Africa, and I want to help find strategies for reducing it,” she told Force Science News.

An accomplished martial artist, she became an instructor in the Rape Aggression Defense system after arriving on campus, and through that involvement developed friendships with IU campus police and officers with Bloomington P.D.

As a subject for her PhD dissertation, “I was looking for a program that fitted in with violence prevention,” she says. “Some of the officers I knew suggested I get in touch

with the Force Science Research Center." She hopes to base her dissertation on the prone action-time research.

Gonin will be in Green Bay, along with Charles Pearce, project director at the IU Ergonomics Lab. To supplement what's filmed there, they will photograph more subjects making more threatening movements on the Indiana campus, using student volunteers, including participants in a cadet program run by the university police department.

Using the Lab's advanced technology, under supervision of director Dr. John Shea, a professor in IU's Department of Kinesiology and Gonin's academic advisor, the researchers intend to convert the photographic images into animated figures.

With cutting-edge software and a link to an immense databank of human forms, they can adjust the figures to as many different height, weight, and strength specifications as they like, and measure the movement times of each in the various action patterns.

"Without a doubt," says Lewinski, "this will be the most thorough and complex analysis of human movement ever performed for law enforcement research."

The initial goal is to nail down action times precisely—just how fast can a prone suspect present a deadly threat. "People tend to underestimate how quickly a human being can actually move," says Gonin. "They also tend to underestimate how slowly officers react when they are under stress and narrowly focused."

Beyond those measurements, the researchers will also be searching for early indicators that could telegraph that a suspect is initiating a dangerous movement. Ideally, this analysis will identify certain cues officers could watch for in prone-suspect situations. "We don't know if we'll be able to find these cues, but we're going to look for them," Lewinski says.

And finally, there may be findings that could affect training and tactics. Does approaching straight-on from a prone suspect's feet, for example, offer the best protective edge against sudden threatening movement, as Lewinski suspects may be the case?

Lewinski estimates it will be a year or more before a final analysis is available, but IU's involvement in the project represents an important breakthrough beyond the critical street knowledge that may result.

"One of our major goals at Force Science is to stimulate interest at universities and other influential institutions in doing research that is of value to line officers," he says. "There has been a huge hole in research into issues that can help street officers perform with improved skill and safety. This is a step toward filling that gap. What a great way to start the New Year!"

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Rest and memory: New findings support delaying interviews after an OIS

There's now more evidence that waiting "a day or 2" after a shooting before interviewing an involved officer will likely produce more accurate and complete recall than insisting on immediate questioning.

That conclusion is reported by Dr. Ed Geiselman, a UCLA psychology professor and a faculty member for the Force Science Analysis certification course, after assessing the findings from a series of experiments about memory.

"It's generally presumed that memory is best mined when it is freshest," Geiselman told *Force Science News* recently, "and before it can be 'contaminated' by input from other sources, rationalization, mood change, change of setting, and the normal deterioration over time."

But Geiselman decided to re-examine this premise after Dr. Bill Lewinski, executive director of the Force Science Institute, mentioned to him that when a department insists on formally interviewing an involved officer before releasing him or her after a shooting, the officer sometimes has been awake for 24 to 36 hours or more when questioned.

Geiselman dug back into data he'd collected several years ago during 3 research projects involving some 600 eyewitnesses. In these experiments, civilians were unexpectedly exposed to what they thought was an authentic, sudden assault involving live actors (the incident was actually staged) or they variously viewed videotape of a real or simulated robbery or purse snatching.

Later the subjects' abilities to verbally describe participants, identify them from photo lineups, and to recount as much as they could of the action from start to finish ("free recall") were tested.

Just before the tests, the subjects completed a detailed questionnaire. One of its "many

items" was: "How well rested are you right now?" They were asked to rate themselves on a scale of 1 to 5, from "not at all rested" to "very well rested."

It was these answers, which he previously had not considered in isolation and had not reported, that Geiselman now focused on as he re-analyzed the data.

"I found a very strong correlation between rest and memory," he says. "In each test, the people who reported being well rested did significantly better than those who weren't. Their verbal descriptions were more detailed and more accurate, their lineup IDs were more reliable, and their narratives of the action they had witnessed were far more thorough and correct."

And these were results just from relatively low-stressed, passive observers. "You would expect police officers who've been physically and emotionally involved in a high-stress, life-threatening encounter to experience an even more pronounced effect on their memory from fatigue or rest," Geiselman says.

"Clearly the findings are consistent with the idea that allowing an officer to rest before being interviewed is an important consideration. Rest likely plays a causal role in how well you are able to remember."

Other researchers have found an additional negative connection between lack of rest and damaged memory. "Recent research suggests that sleep deprivation may contribute to the generation of false memories," Geiselman notes in an article on his findings that appears in the current edition (vol. 28, issue 2, 2010) of the *American Journal of Forensic Psychology*.

"We're not talking about deliberate lies," he says, "but about involuntary distortions caused by biochemical reactions in the brain to sleep loss that cause you to remember things differently than what really happened. In short—more sleep deprivation, more errors."

Considering all factors, "waiting a day or 2 for an officer to be better rested before being interviewed extensively about a shooting should not be problematic," Geiselman suggests. "Any lost memory during that time period should be recoverable because the officer will be in better condition emotionally, physiologically, and cognitively to participate."

It is believed that deep sleep "plays an important role in the consolidation of memories," thereby making recall "more complete," Geiselman writes. "The brain does a lot of work while you are sleeping."

Lewinski, among others, has recommended that officers be allowed 2 sleep cycles—perhaps even longer in some cases—before having to write a formal statement or submit to an interview about any life-threatening event.

"If an officer is tired, his ability to extract memory is impaired, while the quality of memory is enhanced by sleep," he explains. "Rest not only helps an officer respond better, providing more information more accurately, but also helps him be more in tune with the interview. He can better avoid distractions and better understand what is being asked and what his answers should be to be relevant and comprehensive.

"Rest also, of course, allows for some emotional decompression. The stress of the incident has some time to fade before the officer has to relive that stress in the interview."

The challenge, Lewinski and Geiselman agree, may be in getting sufficient rest even when given waiting time to do so. OIS researcher Dr. David Klinger, himself an ex-cop, has pointed out that 46% of officers involved in shootings experience difficulty sleeping within the first 24 hours afterwards. For about one-third, sleep problems persist even after 1 week.

Even if some fatigue remains, Geiselman says, recall will be maximized if officers are questioned by investigators employing cognitive interviewing techniques. This "highly recommended" approach, Geiselman explains, incorporates methods "for reconstructing and reinstating the sensory and emotional context that existed at the time" of the shooting and for "enhancing memory retrieval following some forgetting."

Cognitive interviewing also has been "found to circumvent certain post-event, contaminating influences," thereby helping to "counter any negative effects on memory caused by delay," he says.

In the future, Geiselman hopes to launch experiments that concentrate specifically on rest and memory. "We need to systematically manipulate the length and nature of rest after a critical incident and see how recall is affected. Then we should be able to pinpoint more precisely what level of rest seems most productive.

"Meanwhile, the expression 'let me sleep on it' appears to have validity as it applies to memory recall performance."

For a copy of Dr. Geiselman's report, "Rest and Eyewitness Memory Recall," from the American Journal of Forensic Psychology*, email him at:* geiselma@psych.ucla.edu*. His book,* Memory-Enhancing Techniques for Investigative Interviewing: The Cognitive Interview, *co-authored with Dr. Ron Fisher, is available through Amazon.com.*

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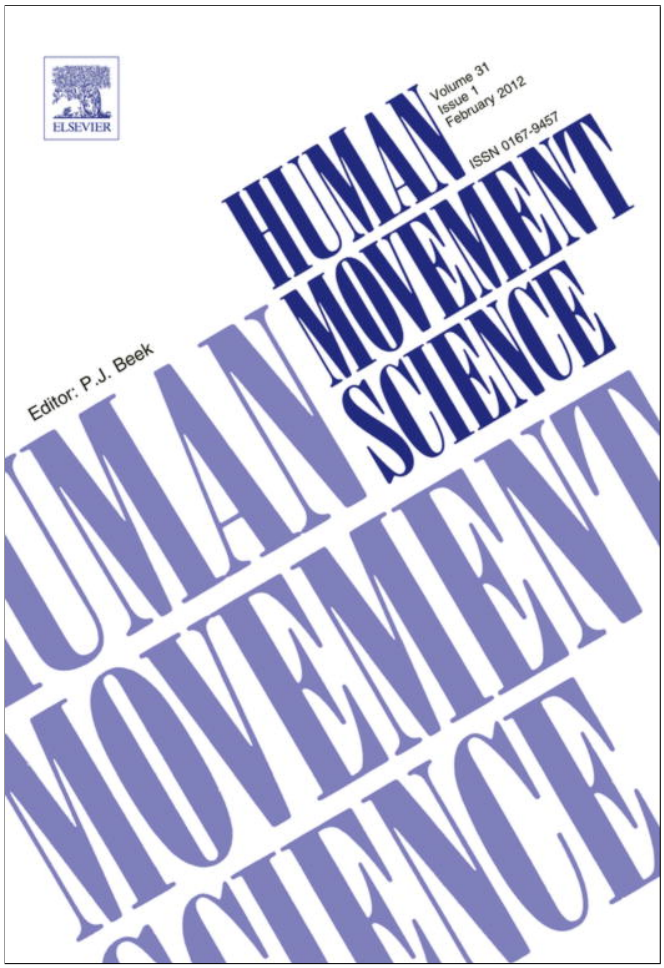

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Performing under pressure: Gaze control, decision making and shooting performance of elite and rookie police officers

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ABSTRACT

Gaze of elite (E) and rookie (R) officers were analyzed as they faced a potentially lethal encounter that required use of a handgun, or inhibition of the shot when a cell phone was drawn. The E shot more accurately than the R (E 74.60%; R 53.80%) and made fewer decisions errors in the cell condition when 18.50% of E and 61.50% of R fired at the assailant. E and R did not differ in duration of the draw/aim/fire phases, but the R's motor onsets were later, during the final second compared to the E's final 2.5 s. Across the final six fixations the E increased the percent of fixations on the assailant's weapon/cell to 71% and to 86% on hits, compared to a high of 34% for the R. Before firing, the R made a rapid saccade to their own weapon on 84% of trials leading to a failure to fixate the assailant on 50% of trials as they fired. Compared to the R, the E had a longer quiet eye duration on the assailant's weapon/cell prior to firing. The results provide new insights into officer weapon focus, firearms training and the role of optimal gaze control when under extreme pressure.

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1. Introduction

The ability to perform under extreme pressure is a quality sought by all, whether in the military, law enforcement, emergency medicine or sport. Why are some able to maintain their focus and make

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the right decision under the most trying of circumstances, while others fail in a similar situation? The human's ability to deal with life and death situations is not well understood in science, due to the inherent difficulties associated with simulating extreme events, of testing individuals at the poles of expertise, and of harnessing technology that can provide relevant information in compressed and physically challenging time frames. Yet the prevalence of force on force encounters is growing on our streets as more and more officers are faced with serious crimes involving firearms (Barclay, Tavares, Kenny, Siddique, & Wilby, 2003). Officer involved shootings lead to a costly process where lives are lost, careers ruined and billions of taxpayer dollars spent on investigation and litigation costs (Dumke, 2009; Klinger, 2006). Highly trained special weapons attack officers (SWAT) handle a greater number of serious incidents than non-SWAT officers yet they make fewer errors (Williams & Westhall, 2003). We therefore determined the gaze, decision making and shooting performance of highly trained elite officers who had extensive experience with violent encounters and rookies who were nearing the completion of their training program in an *in situ* encounter where an "assailant" suddenly either drew a weapon from under his coat, spun rapidly and fired, or pulled out a cell phone instead.

Control of the gaze plays a major role in models of visuo-motor control (Corbetta, Patel, & Shulman, 2008; Land, 2009). Corbetta et al. (2008) explain that the gaze is controlled by a neural network that includes a "dominant ventral frontoparietal network that interrupts and resets ongoing activity and a dorsal frontoparietal network specialised for selecting and linking stimuli and responses" (p. 306). Feeding spatial information into both networks is the gaze system which directs attention to important objects or events within a scene in real time and in the service of ongoing perceptual, cognitive, and behavioral activity (Henderson, 2003). Currently most firearms training programs teach officers to focus their gaze on two locations, first on the sights of their gun, and secondly on the target before pulling the trigger (Hendrick, Paradis, & Hornick, 2008; Morrison & Vila, 1998). This gaze strategy works very well in training with rookies achieving high accuracy scores before graduation but once on the street and faced with a violent firearms encounter they shoot poorly, averaging between 10 and 60% accuracy (Morrison & Vila, 1998; Oudejans, 2008).

Eye movements studies show that the type of gaze control rookies are taught in firearms training differs from that used by elite athletes who perform in the pistol, rifle and shotgun sporting events. Ripoll, Papin, Guezennec, Verdy, and Philip (1985) recorded the gaze of elite and near-elite Olympic pistol shooters as they fired at a fixed target. The near-elite shooters first fixated the sights on the pistol and then aligned the sights of their gun to the target resulting in a final fixation that was shorter in duration than that of the elite shooters who fixated the target first and never let their gaze deviate from the target as they raised their pistol and aligned the sights relative to one stable line of gaze. This resulted in a longer final fixation duration and higher accuracy.

Similar results were found by Vickers and Williams (2007) who tested Olympic biathlon rifle shooters under low and high levels of pressure and physiological arousal. The athletes took standing shots at a target after exercising on a bike ergometer at individually prescribed power output *(PO)* from 55% to 100% of their maximum power output. Performance pressure was manipulated by testing them in a low pressure condition where they were told that the purpose of the testing was to give them information about their fixation on the target, while in the high-pressure condition they were told their shooting percentages would be used in Olympic team selections. Although the athletes did not differ in levels of anxiety, heart rate and rate of perceived exertion when under high pressure, those who choked at the highest workload (accuracy <30%) reduced the duration of their final fixation, or quiet eye, on the target while those who did not choke (accuracy >80%) increased their quiet eye duration above any level found during the low or high pressure. In effect, the use of a long duration quiet eye seemed to reduce the normally debilitating effects of high anxiety, pressure and physiological stress. Similar quiet eye findings have been found for elite athletes performing in long distance rifle shooting (Janelle et al., 2000) and the three shotgun events of skeet, trap, and double trap (Causer, Bennett, Holmes, Janelle, & Williams, 2010).

The QE was defined by Vickers (1996, 2007) as the final fixation or tracking gaze that is located on a specific location or object in the performance space within three degrees of visual angle for a minimum of 100 ms prior to the onset of a critical movement. The quiet eye has been shown to underlie higher levels of skill and/or performance in a wide range of skills, including golf (Vickers, 1992, 2004, 2007; Vine, Moore, & Wilson, 2011); basketball (de Oliveira, Oudejans, & Beek, 2008; Harle & Vickers,

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2001; Vickers, 1996; Vine & Wilson, 2011); rifle and shot gun shooting (Causer et al., 2010; Janelle et al., 2000; Vickers & Williams, 2007); billiards (Williams, Singer, & Frehlich, 2002) and ice hockey goaltending (Panchuk & Vickers, 2006, 2009). Participants who have been tested in high pressure situations have a higher frequency of gaze, more fixations of shorter duration (Behan & Wilson, 2008; Janelle, 2002; Williams, Vickers, & Rodrigues, 2002; Wilson, Vine, & Wood, 2009), as well as a reduced ability to detect information in the periphery (Janelle, Singer, & Williams, 1999). Janelle et al. (2000) also found progressive quieting of the left hemisphere of elite marksmen before the trigger pull and quiet eye durations that were significantly longer for the elite shooters than for non-elite. In a recent meta-analysis Mann, Williams, and Ward (2007) found that a longer quiet eye duration was one of three predictors of perceptual-motor expertise, along with specific fixation locations and a low frequency of fixations. In every motor task there appears to be a crucial moment when the individual must fixate or track specific task information and this must occur before a critical final movement is made.

Most QE studies have been carried out in sport tasks where the participants were familiar with the conditions of performance. In the current study the officers were not aware of the scenario, but instead were faced with an unknown "assailant" in a strange room and events they could not predict in advance. As such, the situation was similar to that found during the commission of crime, where the intentions of the perpetrator are most often unknown until the last few seconds. A number of studies have shown that the gaze of eye witnesses to a crime is drawn to only one location – the weapon being used by the perpetrator (Hendrick et al., 2008; Hope & Wright, 2007; Hulse & Memon, 2006; Kassin, Tubb, Hosch, & Memon, 2001; Pickel, 1999; Stanny & Johnson, 2000; Steblay, 1992). Weapon focus refers to "the concentration of a crime witness's attention on a weapon, and the resultant reduction in ability to remember other details of the crime" (Loftus, Loftus, & Messo, 1987, p. 55). While weapon focus is considered a robust finding, applicable to both lay-persons and police officers, some reservations have been expressed due to there being no empirical support during an actual live encounter (for example, Turtle, Read, Lindsay, & Brimacomb, 2008). The gaze of officers has also not been determined during a situation where they must fulfil the dual role of a witness to a crime and that of an officer who must draw, aim and fire accurately under extreme pressure, or alternatively inhibit its use when a benign object such as a cell phone is pulled from a pocket in a manner similar to when a gun is drawn.

Weapon focus studies have largely been carried out using video simulations, yet there is growing evidence that the gaze differs in simulated environments from that found in real world *situations* where performers are able to physically perform the motor skills being investigated. Müller and Abernethy (2006) and Mann, Abernethy, and Farrow (2010) have shown that cricket batsmen step earlier and track the ball longer against a live bowler than when addressing video simulations of pitches. Dicks, Button, and Davids (2010) found similar results in a soccer goaltending penalty kick study which used five experimental conditions – a video simulation of kicks with verbal and joystick responses, and on the field responses against a kicker using verbal, step and normal interceptive responses. Not only did the goalkeepers make more saves in the *in situ* condition, but they focused on fewer locations and had earlier reaction times and faster movement times. Van der Kamp, Rivas, van Doorn, and Savelsbergh (2008), Mann et al. (2010) and Dicks et al. (2010) have commented that when simulators are used, critical elements are often removed leading to activation of only the ventral system, while in the *in situ* setting both ventral and dorsal processing occurs. The ventral system is the slower of the two systems and facilitates the reorienting of attention and cognitive processing, whereas the dorsal system is designed to control fast actions that are controlled automatically (Corbetta et al., 2008; Milner & Goodale, 1995, 2008). Elite performers use both systems, switching back and forth as needed, whereas novices may rely too much on one or the other depending on how they are assessed. When simulators are used the dorsal and ventral systems may become de-coupled as there is no real consequences or immediacy built into the task, while during *in situ* situations the specificity of action is maintained and perception–action coupling occurs which more accurately reflects the true nature of the visuo-motor system as it has been trained to function. Since video simulators are used extensively in police training, there is an added importance of a study where the gaze and motor responses of officers are assessed under conditions that are very similar to those encountered in the field.

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In summary, it is not known if officers involved in a lethal firearms encounter control their gaze as taught in training, or as found for elite athletes in the shooting sports, or as described by the weapon focus literature. We therefore determined the gaze and shooting performance of elite and rookie officers during a gun condition where shots were always fired, and a cell condition where all aspects of the scenario were the same but a cell phone was drawn instead of a gun. Shooting performance was assessed using shot accuracy (%), location of shots (%) and shot speed (ms). Decision making was determined during the cell condition using the percentage of officers who inhibited both shots. Overall performance (low, high) took into account combined measures of shot accuracy, shot speed and shots inhibited. The officers motor phase durations (ms) were determined for the first seven seconds (prepare, unholster) and last seven seconds (assess, draw, hold, aim/fire), while the assailant's phase durations (ms) were determined during the final seven seconds: (confront, pivot, aim/fire). Fixation variables were fixation location (%), fixation duration (ms), QE duration (ms) and final saccade location (%).

During the initial part of the encounter, we expected both the elite and rookie officers to employ a weapon focus fixating locations on the assailant where a weapon could be hidden. If the weapon's focus literature holds true the officers should fixate the weapon being used, or the cell phone, with other areas being secondary. As the assailant pivoted, aimed and fired (or appeared to) we therefore expected the elite officers to maintain a longer duration QE on the assailant's weapon or cell prior to firing or inhibiting the shot, while the rookies QE period would be briefer and to locations that were more varied. Consequently, we expected the elite officers to shoot with greater accuracy during the gun condition and make fewer decision errors during the cell condition, while the rookies would exhibit less control over their gaze leading to lower shooting accuracy and more decision errors.

2. Methods

2.1. Participants

24 officers volunteered for the study, 11 elite (E) male members of an Emergency Response Team and 13 rookies (R) from the same department, 6 males and 7 females. The E officers had extensive field experience dealing with firearms incidents through-out their career, while the R were at the end of their training program. The E were significantly older, $F(1, 22) = 7.11$, $p < .01$, $\eta_p^2 = .24$ ($M = 38.82$ yrs ± 4.60 yrs) than the R ($M = 30.54$ yrs ± 6.55 yrs). The shooting eye of the officers was predominately right (E 9/11; R 9/13), as was their shooting hand (E 10/11; R 13/13). Shooting performance results were available for all 24 officers, but coupled gaze and motor data were available for 18 officers (elite, male $n = 8$; rookie, $n = 10$, 6 males, 4 females). Gaze data were not available for six officers due to squinting as they fired, or tilting the head laterally causing loss of scene by the eye tracker. Testing occurred within a police training academy over a period of two weeks under the supervision of trained safety personnel. All officers gave their informed consent prior to participating and ethics approval was received prior to testing.

2.2. Materials and procedures

The vision-in-action (VIA) system (Vickers, 1996, 2007) was used to record the coupled gaze and motor behaviors of the officers. The Mobile Eye is a light (76 g) monocular eye-tracking system that uses corneal reflection to measure eye-line-of-gaze with respect to the field of view (accuracy of ±1° visual angle and precision of 0.5°). Three frames of VIA data (A–C) are shown in Fig. 1, as recorded during the final two seconds. Image 1 of each frame (A–C) was recorded by the cameras on the eye tracker worn by the officer. The small circle shows the location of the officer's gaze and the larger circle indicates normal pupil recognition. Image 2 was recorded by an external camera that simultaneously captured the officer's shooting movements. Audio of the assailant and officer's shots was determined using a central microphone connected to a Shure SCM 268 mixer. Precise synchronization of images 1 and 2 and the audio output occurred post-data collection using Final Cut Pro (Apple Corporation).

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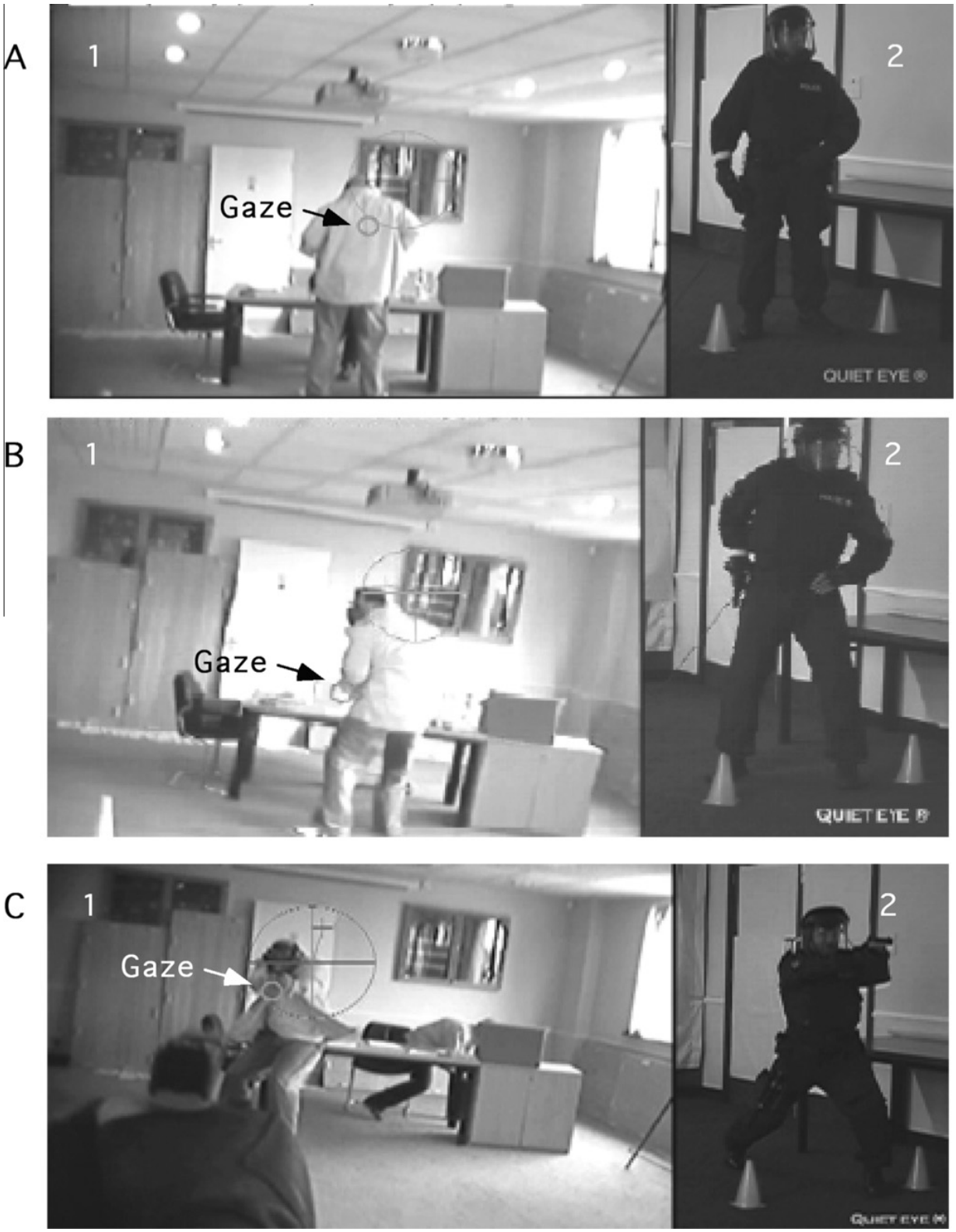

Fig. 1. Three frames of coupled gaze and motor data collected during the final 2 seconds of the encounter.

2.3. The Scenario

The scripted scenario was designed to simulate situations common in law enforcement where officers are faced with a rapidly unfolding event in which critical cues are visible for only a short period of

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time and where they have to make a decision under extreme time pressure to fire their handgun or inhibit the shot. The scenario was about one minute in length and consisted of an entrance phase of seven seconds, a middle phase of about 45 s and a final attack phase of seven seconds. The assailant entered from a side door and approached a receptionist who was seated at a desk 7 m from the officer who stood on duty guarding the entrance to a government office (see Fig. 1). Upon reaching the desk he turned his back to the officer and complained to the receptionist that he had been unjustly jailed for the past three days. He requested a meeting with an official so that he could get his passport back. The receptionist was polite, but not helpful, leading the man to become increasingly agitated. During the final seven seconds the scenario escalated with the assailant slamming his hands on the table and angrily raising his voice. Suddenly, with two seconds remaining he pulled a handgun (or cell phone) from under his coat with his right hand, executed a rapid reverse pivot and shot at the officer, or brandished the cell phone in such a way he appeared to shoot. There was no hesitation in his movements as he aimed and fired from a distance of about 5 m. The scenario was designed so there was a very brief window of time at the very beginning and at the end when critical cues were available that could be fixated only at that time. The assailant's coat was open during the first three seconds as he entered the room and it was only during the final two seconds that the gun or cell phone was visible prior to firing. These points of time were therefore critically important and in many respects simulated conditions found on the street when events unfold rapidly and critical information is available for only a brief period of time. Four and five seconds were added, respectively, after each of these critical moments to also allow for an analysis of fixations while the assailant stood with the weapon hidden, resulting in an equal seven seconds at the beginning and seven second at the end of the scenario that was analyzed. Prior to the study, both the assailant and receptionist worked with an acting coach who trained them to maintain the same timing and mannerisms throughout. The man who played the assailant was a police lieutenant who had extensive handgun and role playing experience. The receptionist worked in law enforcement and had taken part previously in scenarios for research purposes.

2.4. Procedures

The officer and assailant were fitted with protective gear and a standard Glock handgun loaded with one Simunition shell by a safety officer. All had used a similar weapon in training. The eye tracker was fitted and calibrated to a nine-point grid, followed by a second calibration to locations on the receptionist's desk. Before the first trial the assailant was located out of sight in a side room. Prior to beginning, each officer was read the following instructions in order to ensure the same information was delivered:

"Your task today is to provide security for a government entrance. Behind you are the doors you must guard. We have intelligence information that an armed encounter will happen on your location today. You are to handle the threat using only your handgun. Recognizing the first shot is the most important, you are limited to only one shot – your magazine is loaded with one round. You may not step outside this designated area; you may not move forward of the red cones".

The two conditions were then performed consisting of five gun trials and two cell trials. Trial one was always a gun trial, while the cell trials were randomly assigned from trials two to seven. A recorder kept track of shot accuracy (hit, miss) and the location of shots (head, upper body/arms, lower body/legs, missed). The data as shown in Fig. 1 were monitored throughout using a firewire connection thus ensuring accuracy of the calibration. When necessary re-calibration was carried out by having the officer fixate objects on the desk. Data collection took approximately 45 min.

2.5. Officer and assailant motor phases

Motor phases were coded for the first seven seconds and final seven seconds using the Quiet Eye Solutions v2 (QES v2) software, a software package that synchronizes the gaze, motor and audio data. During the first seven seconds, two officer phases were identified (prepare, unholster). The prepare phase occurred from the first frame as the assailant entered the room until the officer's hand moved to his or her gun. The unholster phase continued from the hand on the gun until 7000 ms had elapsed. During the final seven seconds, four officer phases were determined (assess, draw, hold, aim/fire) and

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three assailant phases (confront, pivot, aim/fire). The officer's assess phase began 7000 ms before the end of the trial until the first frame showing the officer's gun being drawn upward from the holster; the draw occurred from the upward movement of the hand to maximum flexion of the elbow; the hold phase occurred from maximum flexion of the elbow until the frame showing extension of the gun toward the assailant; the aim/fire phase occurred from the frame showing extension of the gun arm toward the assailant until the shot was fired (audio of shot), or during the cell trials when the gun slowed and was maximally extended. The assailant's confront phase began 7000 ms before the end of the trial and lasted until the frame showing the first movement of the shooting hand/arm upward to draw the gun or cell phone from under the coat; the pivot phase occurred from the first movement of the shooting arm/elbow until the gun or cell was first visible; the phase occurred from the gun/cell first being visible until the a shot was fired, or the hand with the cell phone was maximally extended. The trigger pull was estimated from previous studies as occurring a constant 100 ms prior to the shots being recorded by the audio (Bumgarner, Lewinski, Hudson, & Sapp, 2006; Tobin & Fackler, 1997).

2.6. Coding officer fixations

The officers fixations were coded during the first seven seconds and during the final seven seconds using the QES v2 software. Since the goal during the first seven seconds was to determine how soon the E and R fixated potential weapon locations and for how long, the fixations were ordered sequentially from first to last in the trial using a sort function of QES v2. During the final seven seconds fixations were sorted in reverse order (last to first). By ordering the fixations from last to first it was possible to determine the sequence and duration of locations fixated prior to the shot and their importance in performance. This procedure has been used previously in studies where a culminating action occurred at the end of the trial, such as stepping over a barrier (Patla & Vickers, 1997), stopping a shot in ice hockey goaltending (Panchuk & Vickers, 2009), or firing a gun (Vickers & Williams, 2007). Fixations and saccades were coded using definitions from previous studies (Vickers, 1996, 2007; Vickers & Williams, 2007). A fixation occurred when the gaze was held stable on a location for a minimum of 100 ms within two degrees of visual angle (the width of the cursor in Fig. 1). Four fixation locations were identified: assailant weapon/cell, assailant non-weapon, officer weapon and off the assailant. Weapon/cell sub-locations included the assailant's gun, hand/elbow, arm, inside coat, chest, right pocket, belt). Non-weapon sub-locations included the assailant's non-gun hand/arm, back, head, face, shoulders, legs, non-gun pocket. Fixations on the officer's gun included the Glock pistol and shooting hand. Off the assailant occurred when a fixation was more than two degrees off the assailants body, or on the receptionist, or any other location in the room. Saccades were coded when the eyes moved rapidly from one fixated location to another with a minimum duration of 66.66 ms (2 frames). Code-recode reliability was established using two independent coders. Intra-class correlations in excess of .90 were established for the all phases and quiet eye duration using procedures from Thomas and Nelson (2001).

2.7. Statistical analysis

Shooting accuracy (%) was determined in the gun trials using a one way (expertise, E, R) factorial ANOVA. Percent of officers who successfully inhibited the shots during the cell condition was analyzed using a one way (expertise, E, R) factorial ANOVA. Overall shooting performance took into account measures of shooting accuracy, shot speed and decision making and was analyzed using Chi square procedures. Officer and assailant motor phase durations and onsets were analyzed using an Expertise × Phase × Condition ANOVA, with repeated measures on the last two factors. Percent of fixations during the first seven seconds was determined using an Expertise (E, R) × Fix Sequence (Fix 1–10) × Location (assailant weapon/cell, assailant non-weapon, off the assailant) ANOVA, with repeated measures on the last two factors. During the final seven seconds, percent fixations was analyzed using an Expertise (E, R) × Fix Sequence (Fix 1–6) × Location (assailant weapon/cell, assailant non-weapon, off-assailant, officer weapon) ANOVA, with repeated measures on the last two factors. Fixation durations were analyzed using an Expertise (E, R) × Fixation Sequence (1–6) and Performance (high, low) × Fixation Sequence (1–6) ANOVA, with repeated measures on the last factor. QE duration was

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determined using an Expertise (E, R) × Location (assailant weapon/cell, officer weapon) factorial ANOVA. Greenhouse-Geisser epsilon was used to control for violations of sphericity in the repeated measures designs and adjusted *p*-values are reported where necessary. The effect sizes were calculated using partial eta squared (η_p^2). Significance level was set at $p < .05$ for all tests.

3. Results

3.1. Shooting accuracy

A significant difference was found due to expertise, $F(1, 22) = 8.23$, $p < .009$, $\eta_p^2 = .27$. The E hit the assailant on 74.54% ± 5.44 of shots compared to 53.85% ± 4.74 for the R.

3.2. Decision making

Significant difference were found due to expertise, $F(1, 22) = 5.22$, $p < .03$, $\eta_p^2 = .14$. During the cell condition, 18.18% ± 12.19% of the E officers (2 of 11) fired at the assailant compared to 61.54% ± 14.04% of the R (8 of 13).

3.3. Firing speed

The E fired before the assailant on 92.50% of trials compared to 42.22% for the R. They were also faster than the assailant by an average of 179.05 ms (36.84 ± 6.06) and the R were slower than the E by an average of 13.26 ms. Four shots ended in a draw (2 E; 2 R). The E hit the assailant in the upper torso (62.07%), the arms/hands (31.03%) and legs (6.90%). Respective percentages for the R were upper torso (48.39%), arms/hands (35.48%), legs (6.45%) and head (9.67%).

3.4. Overall performance

Overall performance (high, low) was determined by combining measures of shooting accuracy, shot speed and decision making. High performance trials occurred when all three of the following criteria were met per trial: on gun trials the shot was accurate; on gun trials accurate shots occurred before the assailant's shot, and on cell trials the shot was inhibited. Low performance trials occurred when the shot missed, the shot occurred after the assailant's shot and on cell trials a shot was fired. Failing to draw during a gun trial was a low performance characteristic (4 R trials). The E group recorded a significantly more high performance trials than the R, $X2$ (1, $N = 255$) = 6.63, $p < .0009$, $\phi = .51$. On 75.00% of trials the E officers met the criteria of high performance compared to 52.86% of trials for the R.

3.5. Percent fixations during first seven seconds

During the first seven seconds three trials were analyzed per officer (the first hit, the first miss, and the first cell trial). No significant differences were found in fixation frequency or duration due to condition, but significant differences were found in location due to expertise, $F(1, 270) = 9.19$, $p < .008$, $\eta_p^2 = .38$, location, $F(2, 270) = 25.14$, $p < .0001$, $\eta_p^2 = .63$, and the interaction of Expertise × Location, $F(2, 270) = 5.60$, $p < .009$, $\eta_p^2 = .16$. Fig. 2 shows that the E fixated more locations where a weapon could be concealed ($M = 50.29\% \pm 3.53$) than the R ($M = 30.62\% \pm 2.89$), while the R looked more to non-weapon locations ($M = 51.13 \pm 3.35$; E $M = 42.11 \pm 3.53$), or off the assailant ($M = 18.07$, $SE \pm 2.43$; $M + 7.59 \pm 2.26$). Frequency distributions were determined for the sub-locations. The E looked inside the assailant's coat more than the rookies during the brief time this was possible (E = 9.44; R = 3.18). E and R were similar in percent fixations to the assailant's face (E = 11.165; R = 13.43), which was visible only as the assailant entered the room. They were also similar in the percent of fixations on the receptionist (E = 5.15%, R = 5.65%).

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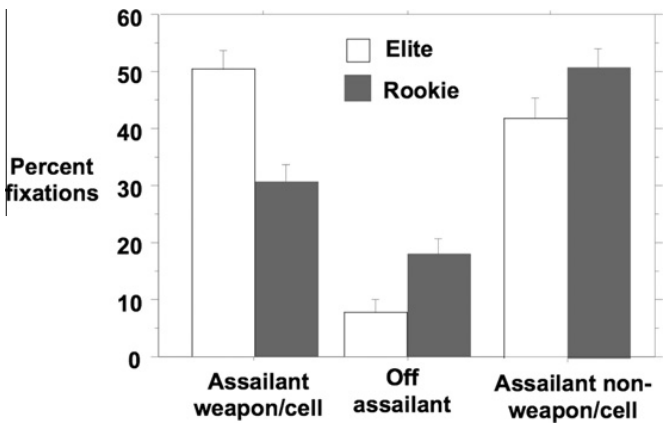

Fig. 2. Percent of elite and rookie fixations to the assailant's weapon/cell, off the assailant and on assailant non-weapon locations.

3.6. Officer's phase duration (ms) during first seven seconds

Of interest was how soon the officer's moved their hand to unholster their gun as this signaled the officer's awareness of an escalating situation. Significant differences were found for phase, $F(1, 50) = 4.46$, $p < .04$, $\eta_p^2 = .08$, and the interaction of Expertise × Phase, $F(1, 50) = 49.41$, $p < .0001$, $\eta_p^2 = .50$. The E officers unholstered within 1774.75 ms ± 3056 ms of the assailant entering the room, while the R did not unholster until 6275 ms ± 1529 ms had elapsed.

3.7. Assailant's phase durations during final seven seconds

Since all officers faced the same assailant, it was important to determine if his movement durations were similar against the E and R. No significant differences were found due to expertise, $p > .05$, or the interactions of Expertise × Condition, $p > .05$ or Expertise × Condition × Phase, $p > .05$, but significant differences were found for phase, $F(1, 122) = 43.78$, $p < .0001$, $\eta_p^2 = .26$, and the interaction of expertise by phase, $F(1, 122) = 13.76$, $p < .0003$, $\eta_p^2 = .10$. Table 1 shows that against the E, the assailant's pivot and aim/fire phase durations were, respectively, $M = 995.21$ ms ± 459.21 ms and $M = 579.81$ ms ± 100.93 ms. Corresponding values against the rookies were $M = 919.56$ ms ± 483.13 ms and $M = 887.16$ ms ± 313.89 ms. This meant that the assailant's pivot phase was similar against E and R, but he slowed his aim/fire phase against the R. Review of the video data showed this occurred on trials when the R were having great difficulty and the assailant slowed his shot to give them more time to aim and fire.

3.8. Officer's phase durations and onsets during final seven seconds

No significant differences were found in phase durations due to condition $p > .05$, or the interactions of Expertise × Condition $p > .05$, or Expertise × Condition × Phase $p > .05$, but significant differences were found for expertise, $F(1, 244) = 10.42$, $p < .002$, $\eta_p^2 = .08$, phase, $F(2, 244) = 6.88$, $p < .001$, $\eta_p^2 = .08$, and the interactions of expertise by phase, $F(2, 244) = 11.09$, $p < .0001$, $\eta_p^2 = .01$. Table 2 shows that the E draw, hold and aim/fire durations were $M = 180.34$ ms ± 88.79 ms, 1016.02 ms ±

Table 1
Mean duration (ms, SE) of the assailant's pivot and aim/fire against the elite and rookie officers.

Phase	Against elite		Against rookie		*F* value	*p*
	M	SE	*M*	SE		
Pivot	995.21	61.38	919.56	57.74	.79	.38
Aim/fire	579.81	13.46	887.16	37.14	49.54	.0001

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Table 2
Mean duration (ms, SE) of the elite and rookie draw, hold and aim/fire phases.

Phase	Elite		Rookie		*F* value	*p*
	M	SE	*M*	SE		
Draw	180.34	11.86	226.70	179.62	21.47	.08
Hold	1016.02	264.17	96.71	75.64	13.44	.0004
Aim/fire	611.47	55.94	567.63	287.48	34.36	.483

1976.83 ms and 611.43 ms ± 418.64 ms, respectively. Corresponding means for the R were 226.70 ms ± 179.62 ms, 96.67 ms ± 632.88 ms and 567.63 ms ± 287.49 ms. Contrast of means was significant for the hold phase only, $F(1) = 39.61$, $p < .0001$, the R having shorter durations.

Significant differences were found in the officer's phase onsets due to expertise, $F(1, 372) = 19.31$, $p < .0001$, $\eta_p^2 = .13$, phase, $F(3, 372) = 63.79$, $p < .0001$, $\eta_p^2 = .34$ and the interaction of expertise by phase, $F(1, 372) = 15.186$, $p < .0001$, $\eta_p^2 = .11$. The R were later drawing, holding, aiming and firing than the E (see Fig. 3). Onsets (with SE) for the E were $M = 4628.45$ ms ± 333.68 ms, 4808.89 ms ± 342.19 ms, 5826.75 ms ± 217.58 ms and 6866.61 ms ± 16.03 ms, respectively. Corresponding means for the R were 6037.61 ms ± 97.95 ms, 6263.33 ms ± 99.19 ms, 6360.47 ms ± 40.09 ms and 6928.13 ms ± 15.79 ms.

3.9. Fixation analysis: Final seven seconds

A total of 15 fixations were found per officer during the final seven seconds. Onset, offset and duration were analyzed separately using an Expertise (E, R) × Condition (gun, cell) factorial ANOVA and no significant differences were found until the final six fixations which occurred during the final two seconds when the events shown in Fig. 1 (A-C) occurred. Image A shows the assailant's raised elbow which signaled the beginning of the attack, image B the moment the gun or cell first became visible and image C the moment the shots were fired by the officer and assailant.

Percent of fixations during the final two seconds differed due to expertise, $F(1, 240) = 5.00$, $p < .04$, $\eta_p^2 = .24$, location, $F(3, 240) = 54.58$, $p < .0001$, $\eta_p^2 = .77$, and interactions of Location × Fixation Sequence, $F(15, 240) = 18.87$, $p < .0001$, $\eta_p^2 = 54$. and Location × Expertise × Fixation Sequence, $F(15, 240) = 3.811$, $p < .0001$, $\eta_p^2 = .19$. Each fixation location was then analyzed separately in order to isolate expertise differences by location during the final sequence of six fixations.

Percent fixations on the assailant's weapon/cell (Fig. 4A) differed due to expertise, $F(1, 96) = 9.91$, $p < .002$, $\eta_p^2 = .09$, fix sequence, $F(5, 96) = 5.93$, $p < .0001$, $\eta_p^2 = .24$, and the interaction of Expertise × Fix Sequence, $F(5, 96) = 3.56$, $p < .005$, $\eta_p^2 = .16$. Across the six fixations, the E increased fixations to the assailants weapon or cell from 18% to 71%, compared to 18% to 34% for the R. Contrast of means indicated E and R differed during fixation five, $F(1) = 9.03$, $p < .003$, and fixation six, $F(1) = 13.52$, $p < .0004$.

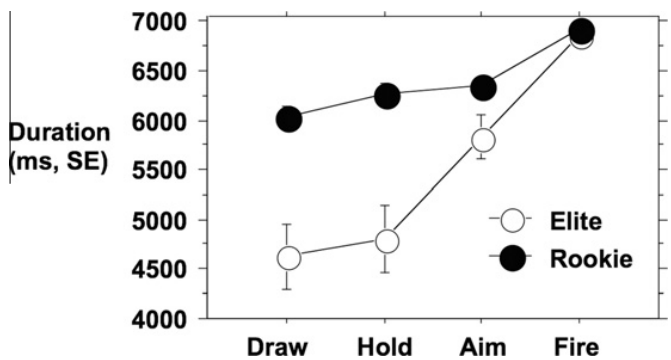

Fig. 3. Onset (ms) of the elite and rookie officers draw, aim and fire phases differed, with the rookie officers being later in all four phases.

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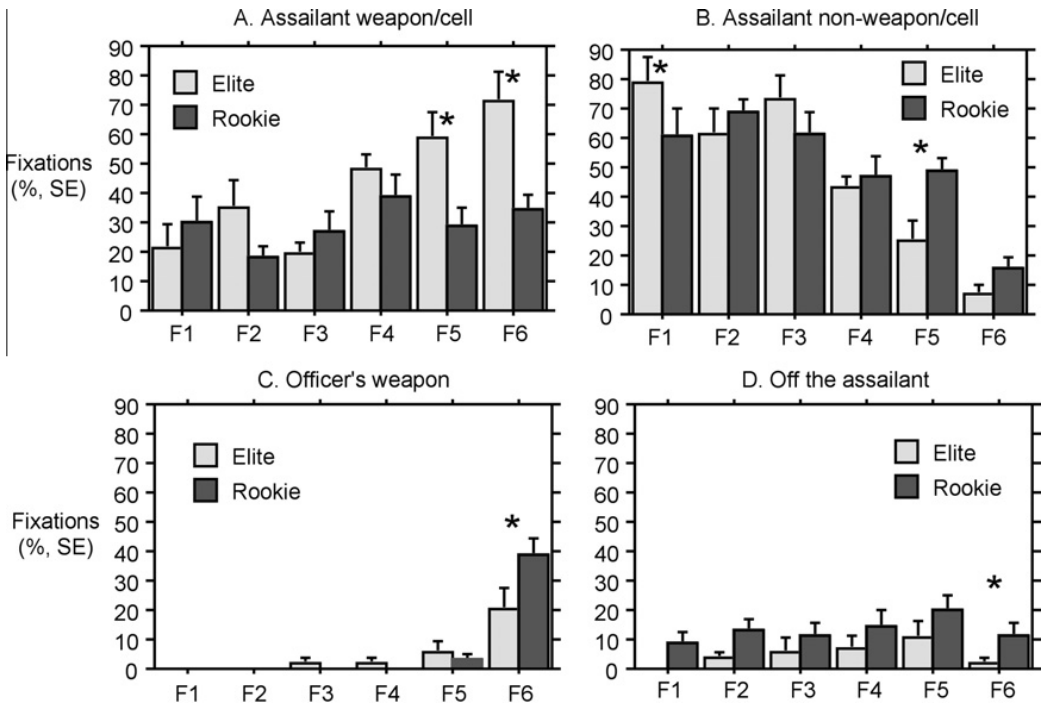

Fig. 4. Percent fixations by location (assailant weapon/cell; assailant non-weapon/cell, officers weapon, off target) of the elite and rookie officers during the final six fixations of the encounter.

Fixations on non-weapon locations (Fig. 4B) differed due to fix sequence, F(5, 96) = 24.45, $p < .0001$, $\eta_p^2 = .56$, and the interaction of Expertise × Fix Sequence, $F(5, 96) = 2.66$, $p < .03$, $\eta_p^2 = .12$. The E decreased fixations to non-weapon locations from 78% to 7% compared to 62% to 16% for the R. Means comparisons showed the E and R differed during fixation one, $F(1) = 3.82$, $p < .05$, and fixation five, $F(1) = 6.50$, $p < .01$.

Fixations on the officer's own weapon (Fig. 4C) differed due to fix sequence, $F(5, 96) = 28.23$, $p < .0001$, $\eta_p^2 = .60$, and the interaction of Expertise × Fix Sequence, $F(5, 96) = 3.66$, $p < .005$, $\eta_p^2 = .16$. The R increased the percent of fixations to their own weapon to 39% on fixation 6 compared to 20% for the E. Means contrast indicated E and R differed during fixation six, $F(1) = 19.11$, $p < .0001$.

Fixations off the assailant (Fig. 4D) differed due to expertise, $F(1, 96) = 11.83$, $p < .0009$, $\eta_p^2 = .11$. During all six fixations more R fixations ($M = 13.21 \pm 14.09$) were off target more than the E ($M = 4.76 \pm 10.35$).

3.10. Expertise and performance differences in fixation duration

The final six fixation durations were analyzed and significant differences found for fixation sequence, $F(5, 715) = 3.15$, $p < .008$, $\eta_p^2 = .02$; the effect for expertise neared significance, $F(1, 715) = 3.29$, $p < .069$, $\eta_p^2 = .01$. Fig. 5 shows the E maintained a mean duration of 275–350 ms across fixations, while the rookies took longer during fixations one and two (475–425 ms) and then had shorter durations during fixations five and six (250 ms). Contrast of means showed E and R differed in fixation duration on the officer's weapon, $F(1) = 20.38$, $p < .0004$.

The analysis of performance (high, low) fix sequence (fix 1–6) found significant differences due to fixation sequence, $F(5, 715) = 4.48$, $p < .0005$, $\eta_p^2 = .03$, and the interaction of Fixation Sequence × Performance, $F(5, 715) = 2.42$, $p < .03$, $\eta_p^2 = 02$. Fixations one and two occurred as the assailant drew and executed the pivot, fixations four and five occurred as the gun or cell first became visible and fixation 6 as the shots were fired or inhibited. Fig. 6 shows that during the low performance trials, fixations one and two were longer and were followed by shorter fixations four and five, while the opposite occurred during the high performance trials. The results show that, irrespective of expertise, if too much time was taken to fixate locations as the assailant began his pivot (f1 and f2) this was then followed by very

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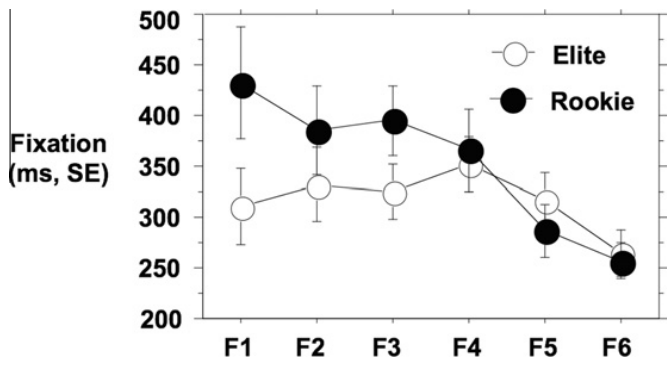

Fig. 5. Duration (ms, SE) of final six fixations of the elite and rookie officers.

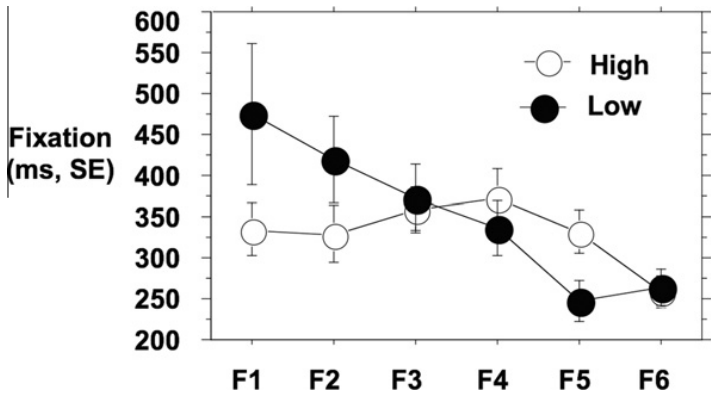

Fig. 6. Durations (ms, SE) of the final six fixations during low and high performance trials.

brief fixations on the gun or cell when these first became visible. Contrast of means was significant for fixation one, $F(1) = 6.03$, $p < .01$, and fixation five, $F(1) = 4.69$, $p < .03$.

3.11. Percent of final saccades by location

Interconnecting fixations five and six was a final saccade. Significant differences were found for location, $F(2, 34) = 9.86$, $p < .0004$, $\eta_p^2 = .37$, and the interaction of Expertise × Location, $F(2, 34) = 11.78$, $p < .0001$, $\eta_p^2 = .41$ (see Fig. 7). E percent saccades on the assailant weapon, non-weapon and, officer's own weapon were, respectively, M = 44.07% ± 9.90%, 23.89% ± 8.8% and 32.04% ± 11.24%,. Corresponding percentages for the R were 4.00% ± 2.66%, 12.00% ± 6.80% and 84.00% ± 6.50%. Overall, 84% of the R groups final saccades were to their own weapon compared to 32% for the E.

3.12. Quiet eye duration

Normally the QE is located on only one location, but since both the assailant's weapon and the officer's weapon were fixated during fixation six it was important to determine how long both locations were fixated before the trigger pull. Since it takes at least 350 ms for an officer to aim and fire accurately at a target (Bumgarner et al., 2006; Tobin & Fackler, 1997) a viable QE should be close to this value on one location or another. QE duration was analyzed using an Expertise (E, R) × Location (assailant's weapon/cell, officer weapon) factorial ANOVA. Significant differences were found due to location, $F(1, 98) = 10.63$, $p < .0002$, $\eta_p^2 = .10$, and the interaction of expertise by location, $F(1, 98) = 6.61$, $p < .01$, $\eta_p^2 = .06$, as shown in Fig. 8. The E group had a longer mean duration on the assailant's weapon/cell (318.33 ms ± 27.72 ms) and shorter on their own weapon (121.00 ms ± 14.41 ms). Comparable QE durations for the R were $M = 265.33$ ms ± 33.50 ms on the assailant's weapon/cell

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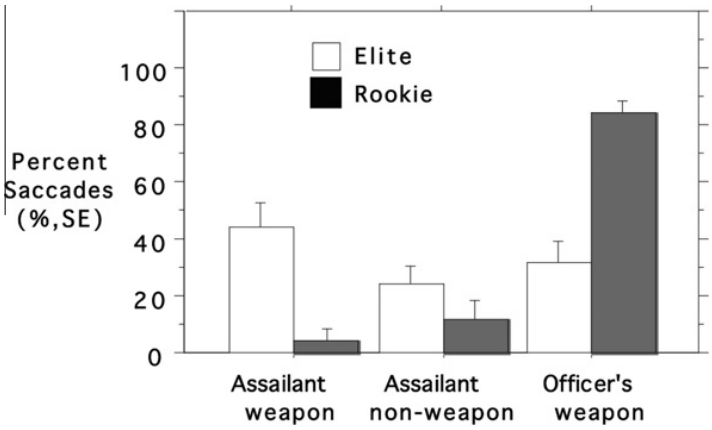

Fig. 7. Percent of final saccades of the elite and rookie officers on the assailant's weapon/cell locations, assailant non-weapon/cell locations and the officer's own weapon.

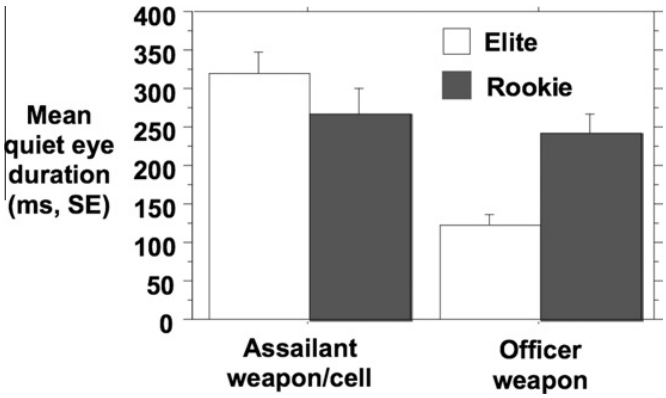

Fig. 8. Quiet eye duration of elite and rookie officers to the assailant's weapon/cell and to their own weapon.

and M = 242.04 ms ± 11.28 ms on their own weapon. Contrast of means showed the E and R differed in durations to their own weapon, $F(1) = 4.87$, $p < .03$.

3.13. Discussion

At the outset we expected the elite officers to shoot with greater accuracy during the gun condition and make fewer decision errors during the cell condition, while the rookies would exhibit less control over their gaze resulting in lower shooting accuracy and more decision errors. These expectations were met on the three combined measures of shooting performance accuracy, shot speed, and decision making during the cell trials. The E officer's met the criteria for high performance on 75.0% of all trials compared to 52.9% for the R. Most noticeable was the high percentage of R (61.5%) who made a decision error and fired during the cell condition, compared to 18.2% for the E. These differences in performance could not be attributed to differences in the duration of the motor phases, as E and R did not differ in the time it took them to draw, aim and fire. However, the R performed all three actions in the last second compared to the last 2.5 s for the E (see Fig. 3). The E's significantly earlier motor onsets were indicative of their greater anticipation and prior programming which contributed to their firing before the assailant and R on most trials. The E's significantly earlier draw, aim and fire phases were also preceded in the first seven seconds of the trial by significantly more fixations on locations where a weapon could be hidden and to unholstering almost immediately, while the R had a lower percentage of fixations on non-weapon locations and off target and did not prepare their weapon to draw and fire until the assailant was near to the end of his attack.

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Our expectation that both the E and R officers would employ a weapon focus during the first seven seconds of the trial was upheld, but for the E only, who focused a higher percentage of their fixations on locations where a gun could be hidden, while the R looked more at non-weapon locations or to locations outside the immediate location of the assailant. E and R did not differ in the percentage of fixations on the assailant's face which was visible for only three seconds as he entered, or on the receptionist. Fixation durations averaged about 500 ms per location, therefore both E and R had enough time to identify both individuals.

During the final two seconds we also found differences in weapon focus that have not been reported in the literature previously. During the final six fixations the E increased the percent of fixations on the assailant's weapon/cell from 18% to 71%. During hits this percentage increased the duration to 86% revealing a remarkable degree of focus and concentration under fire. The R did not show the same funneling of their gaze on the assailant's weapon or cell, but instead allocated 39% of their final fixations to their own gun and only 34% to the assailant's weapon/cell. Most disruptive for the rookies was a saccade to their own weapon prior to the final fixation on 84% of trials, compared to 23% for the E. Since during saccades information is suppressed (Bridgeman, Hendry, & Start, 1975) these results show that on a high percent of trials the rookie's ability to maintain their focus on the assailant was seriously compromised. Indeed, on 50% of trials they took their gaze off the assailant completely as they fired (see Fig. 4). The rookies shift of gaze from the assailant to their own weapon suggests a vital re-allocation of attentional resources, which given the time pressures of the encounter, was unsuccessful in a high percentage of trials.

Fixations durations also differed for E and R as the assailant drew and began to pivot spinning rapidly toward them over a distance of about 2 m, moving laterally from the officer's left to right. This presented the officers with a rapidly moving target which the E fixated using a series of six fixations that ranged between 250–350 ms. This sequence of fixations allowed the E to quickly read the significance of the assailant's raised elbow and pivot, which signaled the onset of the attack (see Fig 4A) and anticipated the appearance of the gun or cell. Often the E shifted their gaze to the location of the gun or cell phone before it first became visible (see Fig. 4B), giving them more time to make the decision to aim and fire, or alternatively suppress the shot. The R also had six fixations during the final two seconds, but the first two were too long to enable them to keep up with the spinning lateral action of the gunman. They appeared to take too long to process the significance of the raised elbow and pivot making them late in fixating the gun or cell when they first became visible. This combined with the costs of programming a saccade on 84% of trials signaled a re-orienting of their attention to a second goal – that of fixating the sights on their own gun which was successful in only 39% of trials. Corbetta et al. (2008) provided fMRI evidence showing the re-orienting of attention is a time consuming process as the ventral system is activated requiring cognitive processing, whereas the dorsal system is faster and allows actions to be controlled continuously and automatically. Combined with the rookies late shift of gaze to their own gun as they drew, aimed and fired, this meant the rookies whole visuomotor system was pressured to the breaking point leading to lower accuracy in the gun condition and poor decision making in the cell trials.

The elite officer's final QE duration averaged 318 ms, which was barely within the time limits needed to accurately fire a handgun (Bumgarner et al., 2006; Tobin & Fackler, 1997), while that of the rookies was even lower, average 262 ms. The E's longer QE duration was therefore similar to elite athletes in the shooting sports in being longer during high performance, while the R behaved like lower skilled athletes taking less time to fixate the intended target. The longer duration of the E group supports previous QE studies showing the visuo-motor system needs a long duration of external task information to perform well. These results therefore join a growing number of studies that show a long duration QE on a critical locations prior to a final action is an important factor in the ability to perform under pressure (Behan & Wilson, 2008; Janelle, 2002; Mann et al., 2007; Murray and Janelle, 2003; Vickers, 2009; Williams et al., 2002).

Since the type of training a person initially receives often dictates how well they perform in the future (Schmidt & Lee, 2005; Vickers, 2007) our results suggest that firearms training should change from a process that inadvertently teaches novices to fixate the sights of their own weapon first and the target second, to a type of training that establishes the line of gaze on the target from the outset, followed by alignment of the sights of the weapon to the line of gaze. This change in gaze control would

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lead to a longer QE duration on the target prior to pulling the trigger and should contribute to better decision making and performance. If these changes in firearm's training were implemented then the gaze control of novice officers should be similar to that of elite athletes and elite officers from the first day of training, thereby increasing the likelihood that they would be able to maintain visual control over any situation they encountered. This, in turn, should decrease errors in decision making and improve shooting accuracy and may help reduce the tremendous costs that ensue after all officer involved shootings (Dumke, 2009; Klinger, 2006).

Finally, our results also suggest that officer's would benefit from training under conditions where the levels of pressure and anxiety are high. Recent studies have established the efficacy of this type of training for police officers (Nieuwenhuys & Oudejans, 2010; Oudejans, 2008; Oudejans & Pijpers, 2009, 2010). Not only did handgun performance improve compared to traditional forms of training, but practicing under conditions of high anxiety reduced choking and enhanced decision making under extreme pressure.

3.14. Limitations and Conclusions

While the current study sheds light on the control of the gaze during a lethal force on force encounter it has some limitations. First, the number of officers tested was low ($N = 24$). A greater number of officers need to be tested under a variety of conditions. Second, the officers tested may have been trained in specific ways that affected the results. For example, many forces do not allow or recommend the "hold" position used by so many of the E in this study. Third, while all other measures were precisely measured we did not assess the onset of trigger time but estimated it from previous research studies. Fourth, the results of the current study may be context or task specific and not apply to a greater range of police skills. More research will be needed to determine whether the gaze control strategies carry over into other situations that police officers encounter. Fifth, we did not interview the officers after the encounter therefore we do not know how much agreement there would be between their gaze control and what they verbally may have reported later on. Gaze control studies where the officers are interviewed before and after an i*n situ* encounter would provide objective information. Six, our results suggest that both elite and rookie officer's may be limited in the extent to which they act as eye witnesses once they begin the process of drawing, aiming and firing their weapon. Since the E maintained a weapon focus on the assailant's gun or cell during the final seconds of the encounter they may have a reduced ability to identify faces and report on events that occurred outside of this narrow field of view. And rookie officers who attempt to fixate the sights on their gun prior to firing may not be able to report on the presence or absence of a weapon during the final seconds due to their use of a disruptive saccade that suppresses vision followed by very brief fixations on their own weapon a high percent of trials. More research is needed to determine if this is the case. Studies of this nature may also shed light on the veracity of eye witness testimony and determine the congruence between what is actually fixated during an encounter and what is reported later on. Finally, our results show that officer's who have extensive training and experience as tactical team members have a superior ability to control their gaze and optimally focus their attention when under extreme stress thus leading to fewer decision errors in the line of duty. Whether this superior ability is present prior to training or emerges as a result of training cannot be answered by this study and requires further research.

In conclusion, we show that at the beginning of a deadly firearms encounter, elite officers fixate locations where a weapon is hidden significantly more than rookies, and do this earlier and for longer durations. Elite and rookie officers did not differ in the time it took to draw, aim and fire but the elite officers performed all three of these actions earlier. In contrast, the rookies were very late performing all three actions, indicating critical deficiencies in anticipation, cue detection, gaze control and decision making when under pressure. When the attack occurred (or appeared to occur) the rookies shifted their gaze to their own weapon in a failed attempt to sight their own weapon, while the elite officers never lost sight of the assailant's moving weapon (or cell phone) before pulling the trigger. We therefore conclude that the significant differences in accuracy and decision making observed between the elite and rookie officers were due as much, if not more, to deficits in the gaze control and focus of attention of the rookies as to any limitations in their physical ability to handle the firearm.

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Acknowledgments

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.humov.2011.04.004.

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U.S. Supreme Court

Graham v. Connor, 490 U.S. 386 (1989)

Graham v. Connor

No. 87-6571

Argued February 21, 1989

Decided May 15, 1989

490 U.S. 386

CERTIORARI TO THE UDNITED STATES COURT OF APPEALS FOR

THE FOURTH CIRCUIT

Syllabus

Petitioner Graham, a diabetic, asked his friend, Berry, to drive him to a convenience store to purchase orange juice to counteract the onset of an insulin reaction. Upon entering the store and seeing the number of people ahead of him, Graham hurried out and asked Berry to drive him to a friend's house instead. Respondent Connor, a city police officer, became suspicious after seeing Graham hastily enter and leave the store, followed Berry's car, and made an investigative stop, ordering the pair to wait while he found out what had happened in the store. Respondent backup police officers arrived on the scene, handcuffed Graham, and ignored or rebuffed attempts to explain and treat Graham's condition. During the encounter, Graham sustained multiple injuries. He was released when Conner learned that nothing had happened in the store. Graham filed suit in the District Court under 42 U.S.C. § 1983 against respondents, alleging that they had used excessive force in making the stop, in violation of "rights secured to him under the Fourteenth Amendment to the United States Constitution and 42 U.S.C. § 1983." The District Court granted respondents' motion for a directed verdict at the close of Graham's evidence, applying a four-factor test for determining when excessive use of force gives rise to a § 1983 cause of action, which inquires, *inter alia,* whether the force was applied in a good faith effort to maintain and restore discipline or maliciously and sadistically for the very purpose of causing harm. *Johnson v. Glick,* 481 F.2d 1028. The Court of Appeals affirmed, endorsing this test as generally applicable to all claims of constitutionally excessive force brought against government officials, rejecting Graham's argument that it was error to require him to prove that the allegedly excessive force was applied maliciously and sadistically to cause harm, and holding that a reasonable jury applying the *Johnson v. Glick* test to his evidence could not find that the force applied was constitutionally excessive.

Held: All claims that law enforcement officials have used excessive force -- deadly or not -- in the course of an arrest, investigatory stop, or other "seizure" of a free citizen are properly analyzed under the Fourth Amendment's "objective reasonableness" standard, rather than under a substantive due process standard. Pp. 490 U. S. 392-399.

(a) The notion that all excessive force claims brought under § 1983 are governed by a single generic standard is rejected. Instead, courts must identify the specific constitutional right allegedly infringed by the challenged application of force, and then judge the claim by reference to the specific constitutional standard which governs that right. Pp. 490 U. S. 393-394.

(b) Claims that law enforcement officials have used excessive force in the course of an arrest, investigatory stop, or other "seizure" of a free citizen are most properly characterized as invoking the protections of the Fourth Amendment, which guarantees citizens the right "to be secure in their persons . . . against unreasonable seizures," and must be judged by reference to the Fourth Amendment's "reasonableness" standard. Pp. 490 U. S. 394-395.

(c) The Fourth Amendment "reasonableness" inquiry is whether the officers' actions are "objectively reasonable" in light of the facts and circumstances confronting them, without regard to their underlying intent or motivation. The "reasonableness" of a particular use of force must be judged from the perspective of a reasonable officer on the scene, and its calculus must embody an allowance for the fact that police officers are often forced to make split-second decisions about the amount of force necessary in a particular situation. Pp. 490 U. S. 396-397.

(d) The *Johnson v. Glick test* applied by the courts below is incompatible with a proper Fourth Amendment analysis. The suggestion that the test's "malicious and sadistic" inquiry is merely another way of describing conduct that is objectively unreasonable under the circumstances is rejected. Also rejected is the conclusion that, because individual officers' subjective motivations are of central importance in deciding whether force used against a convicted prisoner violates the Eighth Amendment, it cannot be reversible error to inquire into them in deciding whether force used against a suspect or arrestee violates the Fourth Amendment. The Eighth Amendment terms "cruel" and "punishment" clearly suggest some inquiry into subjective state of mind, whereas the Fourth Amendment term "unreasonable" does not. Moreover, the less protective Eighth Amendment standard applies only after the State has complied with the constitutional guarantees traditionally associated with criminal prosecutions. Pp. 490 U. S. 397-399.

827 F.2d 945, vacated and remanded.

REHNQUIST, C.J., delivered the opinion of the Court, in which WHITE, STEVENS, O'CONNOR, SCALIA, and KENNEDY, JJ., joined. BLACKMUN, J., filed an opinion concurring in part and concurring in the judgment, in which BRENNAN and MARSHALL, JJ., joined, *post,* p. 490 U. S. 399.

Page 490 U. S. 388

CHIEF JUSTICE REHNQUIST delivered the opinion of the Court.

This case requires us to decide what constitutional standard governs a free citizen's claim that law enforcement officials used excessive force in the course of making an arrest, investigatory stop, or other "seizure" of his person. We hold that such claims are properly analyzed under the Fourth Amendment's "objective reasonableness" standard, rather than under a substantive due process standard.

In this action under 42 U.S.C. § 1983, petitioner Dethorne Graham seeks to recover damages for injuries allegedly sustained when law enforcement officers used physical force against him during the course of an investigatory stop. Because the case comes to us from a decision of the Court of Appeals affirming the entry of a directed verdict for respondents, we take the evidence hereafter noted in the light most favorable to petitioner. On November 12, 1984, Graham, a diabetic, felt the onset of an insulin reaction. He asked a friend, William Berry, to drive him to a nearby convenience store so he could purchase some orange juice to counteract the reaction. Berry agreed, but when Graham entered the store, he saw a number of people ahead of him in the checkout

Page 490 U. S. 389

line. Concerned about the delay, he hurried out of the store and asked Berry to drive him to a friend's house instead.

Respondent Connor, an officer of the Charlotte, North Carolina, Police Department, saw Graham hastily enter and leave the store. The officer became suspicious that something was amiss, and followed Berry's car. About one-half mile from the store, he made an investigative stop. Although Berry told Connor that Graham was simply suffering from a "sugar reaction," the officer ordered Berry and Graham to wait while he found out what, if anything, had happened at the convenience store. When Officer Connor returned to his patrol car to call for backup assistance, Graham got out of the car, ran around it twice, and finally sat down on the curb, where he passed out briefly.

In the ensuing confusion, a number of other Charlotte police officers arrived on the scene in response to Officer Connor's request for backup. One of the officers rolled Graham over on the sidewalk and cuffed his hands tightly behind his back, ignoring Berry's pleas to get him some sugar. Another officer said:

"I've seen a lot of people with sugar diabetes that never acted like this. Ain't nothing wrong with the M.F. but drunk. Lock the S.B. up."

App. 42. Several officers then lifted Graham up from behind, carried him over to Berry's car, and placed him face down on its hood. Regaining consciousness, Graham asked the officers to check in his wallet for a diabetic decal that he carried. In response, one of the officers told him to "shut up" and shoved his face down against the hood of the car. Four officers grabbed Graham and threw him headfirst into the police car. A friend of Graham's brought some orange juice to the car, but the officers

refused to let him have it. Finally, Officer Connor received a report that Graham had done nothing wrong at the convenience store, and the officers drove him home and released him.

Page 490 U. S. 390

At some point during his encounter with the police, Graham sustained a broken foot, cuts on his wrists, a bruised forehead, and an injured shoulder; he also claims to have developed a loud ringing in his right ear that continues to this day. He commenced this action under 42 U.S.C. § 1983 against the individual officers involved in the incident, all of whom are respondents here, [Footnote 1] alleging that they had used excessive force in making the investigatory stop, in violation of "rights secured to him under the Fourteenth Amendment to the United States Constitution and 42 U.S.C. § 1983." Complaint ¦ 10, App. 5. [Footnote 2] The case was tried before a jury. At the close of petitioner's evidence, respondents moved for a directed verdict. In ruling on that motion, the District Court considered the following four factors, which it identified as "[t]he factors to be considered in determining when the excessive use of force gives rise to a cause of action under § 1983": (1) the need for the application of force; (2) the relationship between that need and the amount of force that was used; (3) the extent of the injury inflicted; and (4) "[w]hether the force was applied in a good faith effort to maintain and restore discipline or maliciously and sadistically for the very purpose of causing harm." 644 F.Supp. 246, 248 (WDNC 1986). Finding that the amount of force used by the officers was "appropriate under the circumstances," that "[t]here was no discernible injury inflicted," and that the force used "was not applied maliciously or sadistically for the very purpose of causing harm," but in "a good faith effort to maintain or restore order in the face of a potentially explosive

Page 490 U. S. 391

situation," *id.* at 248-249, the District Court granted respondents' motion for a directed verdict.

A divided panel of the Court of Appeals for the Fourth Circuit affirmed. 827 F.2d 945 (1987). The majority ruled first that the District Court had applied the correct legal standard in assessing petitioner's excessive force claim. *Id.* at 948-949. Without attempting to identify the specific constitutional provision under which that claim arose, [Footnote 3] the majority endorsed the four-factor test applied by the District Court as generally applicable to all claims of "constitutionally excessive force" brought against governmental officials. *Id.* at 948. The majority rejected petitioner's argument, based on Circuit precedent, [Footnote 4] that it was error to require him to prove that the allegedly excessive force used against him was applied "maliciously and sadistically for the very purpose of causing harm." [Footnote 5] *Ibid.* Finally, the majority held that a reasonable jury applying the four-part test it had just endorsed

Page 490 U. S. 392

to petitioner's evidence "could not find that the force applied was constitutionally excessive." *Id.* at 949-950. The dissenting judge argued that this Court's decisions in *Terry v. Ohio,* 392 U. S. 1 (1968), and *Tennessee v. Garner,* 471 U. S. 1 (1985), required that excessive force claims arising out of

investigatory stops be analyzed under the Fourth Amendment's "objective reasonableness" standard. 827 F.2d 950-952. We granted certiorari, 488 U.S. 816 (1988), and now reverse.

Fifteen years ago, in *Johnson v. Glick,* 481 F.2d 1028 (CA2), *cert. denied,* 414 U.S. 1033 (1973), the Court of Appeals for the Second Circuit addressed a § 1983 damages claim filed by a pretrial detainee who claimed that a guard had assaulted him without justification. In evaluating the detainee's claim, Judge Friendly applied neither the Fourth Amendment nor the Eighth, the two most textually obvious sources of constitutional protection against physically abusive governmental conduct. [Footnote 6] Instead, he looked to "substantive due process," holding that,

"quite apart from any 'specific' of the Bill of Rights, application of undue force by

Page 490 U. S. 393

law enforcement officers deprives a suspect of liberty without due process of law."

481 F.2d 1032. As support for this proposition, he relied upon our decision in *Rochin v. California,* 342 U. S. 165 (1952), which used the Due Process Clause to void a state criminal conviction based on evidence obtained by pumping the defendant's stomach. 481 F.2d 1032-1033. If a police officer's use of force which "shocks the conscience" could justify setting aside a criminal conviction, Judge Friendly reasoned, a correctional officer's use of similarly excessive force must give rise to a due process violation actionable under § 1983. *Ibid.* Judge Friendly went on to set forth four factors to guide courts in determining "whether the constitutional line has been crossed" by a particular use of force -- the same four factors relied upon by the courts below in this case. *Id.* at 1033.

In the years following *Johnson v. Glick,* the vast majority of lower federal courts have applied its four-part "substantive due process" test indiscriminately to all excessive force claims lodged against law enforcement and prison officials under § 1983, without considering whether the particular application of force might implicate a more specific constitutional right governed by a different standard. [Footnote 7] Indeed, many courts have seemed to assume, as did the courts below in this case, that there is a generic "right" to be free from excessive force, grounded not in any particular constitutional provision, but rather in "basic principles of § 1983 jurisprudence." [Footnote 8]

We reject this notion that all excessive force claims brought under § 1983 are governed by a single generic standard. As we have said many times, § 1983 "is not itself a

Page 490 U. S. 394

source of substantive rights," but merely provides "a method for vindicating federal rights elsewhere conferred." *Baker v. McCollan,* 443 U. S. 137, 443 U. S. 144, n. 3 (1979). In addressing an excessive force claim brought under § 1983, analysis begins by identifying the specific constitutional right allegedly infringed by the challenged application of force. *See id.* at 443 U. S. 140 ("The first inquiry in any § 1983 suit" is "to isolate the precise constitutional violation with which [the defendant] is

charged"). [Footnote 9] In most instances, that will be either the Fourth Amendment's prohibition against unreasonable seizures of the person or the Eighth Amendment's ban on cruel and unusual punishments, which are the two primary sources of constitutional protection against physically abusive governmental conduct. The validity of the claim must then be judged by reference to the specific constitutional standard which governs that right, rather than to some generalized "excessive force" standard. *See Tennessee v. Garner, supra,* at 471 U. S. 7-22 (claim of excessive force to effect arrest analyzed under a Fourth Amendment standard); *Whitley v. Albers,* 475 U. S. 312, 475 U. S. 318-326 (1986) (claim of excessive force to subdue convicted prisoner analyzed under an Eighth Amendment standard).

Where, as here, the excessive force claim arises in the context of an arrest or investigatory stop of a free citizen, it is most properly characterized as one invoking the protections of the Fourth Amendment, which guarantees citizens the right "to be secure in their persons . . . against unreasonable . . . seizures" of the person. This much is clear from our decision in *Tennessee v. Garner, supra.* In *Garner,* we addressed a claim that the use of deadly force to apprehend a fleeing suspect who did not appear to be armed or otherwise dangerous violated the suspect's constitutional rights, notwithstanding the existence of probable cause to arrest.

Page 490 U. S. 395

Though the complaint alleged violations of both the Fourth Amendment and the Due Process Clause, *see* 471 U.S. at 471 U. S. 5, we analyzed the constitutionality of the challenged application of force solely by reference to the Fourth Amendment's prohibition against unreasonable seizures of the person, holding that the "reasonableness" of a particular seizure depends not only on when it is made, but also on how it is carried out. *Id.* at 471 U. S. 7-8. Today we make explicit what was implicit in *Garner's* analysis, and hold that all claims that law enforcement officers have used excessive force -- deadly or not -- in the course of an arrest, investigatory stop, or other "seizure" of a free citizen should be analyzed under the Fourth Amendment and its "reasonableness" standard, rather than under a "substantive due process" approach. Because the Fourth Amendment provides an explicit textual source of constitutional protection against this sort of physically intrusive governmental conduct, that Amendment, not the more generalized notion of "substantive due process," must be the guide for analyzing these claims. [Footnote 10]

Page 490 U. S. 396

Determining whether the force used to effect a particular seizure is "reasonable" under the Fourth Amendment requires a careful balancing of "*the nature and quality of the intrusion on the individual's Fourth Amendment interests'" against the countervailing governmental interests at stake. Id. at 471 U. S. 8, quoting United States v. Place, 462 U. S. 696, 462 U. S. 703 (1983). Our Fourth Amendment jurisprudence has long recognized that the right to make an arrest or investigatory stop necessarily carries with it the right to use some degree of physical coercion or threat thereof to effect it. See Terry v. Ohio, 392 U.S. at 392 U. S. 22-27. Because "[t]he test of reasonableness under the Fourth Amendment is not capable of precise definition or mechanical application," Bell v. Wolfish, 441 U. S.*

520, 441 U. S. 559 (1979), however, its proper application requires careful attention to the facts and circumstances of each particular case, including the severity of the crime at issue, whether the suspect poses an immediate threat to the safety of the officers or others, and whether he is actively resisting arrest or attempting to evade arrest by flight. See Tennessee v. Garner, 471 U.S. at 471 U. S. 8-9 (the question is "whether the totality of the circumstances justifie[s] a particular sort of. . . seizure").

The "reasonableness" of a particular use of force must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight. *See Terry v. Ohio, supra,* at 392 U. S. 20-22. The Fourth Amendment is not violated by an arrest based on probable cause, even though the wrong person is arrested, *Hill v. California,* 401 U. S. 797 (1971), nor by the mistaken execution of a valid search warrant on the wrong premises, *Maryland v. Garrison,* 480 U. S. 79 (1987). With respect to a claim of excessive force, the same standard of reasonableness at the moment applies: "Not every push or shove, even if it may later seem unnecessary in the peace of a judge's chambers," *Johnson v. Glick,* 481 F.2d 1033, violates the Fourth Amendment. The calculus of reasonableness must embody

Page 490 U. S. 397

allowance for the fact that police officers are often forced to make split-second judgments -- in circumstances that are tense, uncertain, and rapidly evolving -- about the amount of force that is necessary in a particular situation.

As in other Fourth Amendment contexts, however, the "reasonableness" inquiry in an excessive force case is an objective one: the question is whether the officers' actions are "objectively reasonable" in light of the facts and circumstances confronting them, without regard to their underlying intent or motivation. *See Scott v. United States,* 436 U. S. 128, 436 U. S. 137-139 (1978); *see also Terry v. Ohio, supra,* at 392 U. S. 21 (in analyzing the reasonableness of a particular search or seizure, "it is imperative that the facts be judged against an objective standard"). An officer's evil intentions will not make a Fourth Amendment violation out of an objectively reasonable use of force; nor will an officer's good intentions make an objectively unreasonable use of force constitutional. *See Scott v. United States, supra,* at 436 U. S. 138, citing *United States v. Robinson,* 414 U. S. 218 (1973).

Because petitioner's excessive force claim is one arising under the Fourth Amendment, the Court of Appeals erred in analyzing it under the four-part *Johnson v. Glick test.* That test, which requires consideration of whether the individual officers acted in "good faith" or "maliciously and sadistically for the very purpose of causing harm," is incompatible with a proper Fourth Amendment analysis. We do not agree with the Court of Appeals' suggestion, *see* 827 F.2d 948, that the "malicious and sadistic" inquiry is merely another way of describing conduct that is objectively unreasonable under the circumstances. Whatever the empirical correlations between "malicious and sadistic" behavior and objective unreasonableness may be, the fact remains that the "malicious and sadistic" factor puts in issue the subjective motivations of the individual officers, which our prior cases make clear has no bearing on whether a particular seizure is "unreasonable" under the Fourth Amendment. Nor do we agree with the

Page 490 U. S. 398

Court of Appeals' conclusion, *see id.* at 948, n. 3, that, because the subjective motivations of the individual officers are of central importance in deciding whether force used against a convicted prisoner violates the Eighth Amendment, *see Whitley v. Albers,* 475 U.S. at 475 U. S. 320-321, [Footnote 11] it cannot be reversible error to inquire into them in deciding whether force used against a suspect or arrestee violates the Fourth Amendment. Differing standards under the Fourth and Eighth Amendments are hardly surprising: the terms "cruel" and "punishment" clearly suggest some inquiry into subjective state of mind, whereas the term "unreasonable" does not. Moreover, the less protective Eighth Amendment standard applies "only after the State has complied with the constitutional guarantees traditionally associated with criminal prosecutions." *Ingraham v. Wright,* 430 U. S. 651, 430 U. S. 671,

Page 490 U. S. 399

n. 40 (1977). The Fourth Amendment inquiry is one of "objective reasonableness" under the circumstances, and subjective concepts like "malice" and "sadism" have no proper place in that inquiry. [Footnote 12]

Because the Court of Appeals reviewed the District Court's ruling on the motion for directed verdict under an erroneous view of the governing substantive law, its judgment must be vacated and the case remanded to that court for reconsideration of that issue under the proper Fourth Amendment standard.

It is so ordered.

Page 490 U. S. 399

[Footnote 1]

Also named as a defendant was the city of Charlotte, which employed the individual respondents. The District Court granted a directed verdict for the city, and petitioner did not challenge that ruling before the Court of Appeals. Accordingly, the city is not a party to the proceedings before this Court.

[Footnote 2]

Petitioner also asserted pendent state law claims of assault, false imprisonment, and intentional infliction of emotional distress. Those claims have been dismissed from the case, and are not before this Court.

[Footnote 3]

The majority did note that, because Graham was not an incarcerated prisoner, "his complaint of excessive force did not, therefore, arise under the eighth amendment." 827 F.2d 948, n. 3. However, it made no further effort to identify the constitutional basis for his claim.

[Footnote 4]

Petitioner's argument was based primarily on *Kidd v. O'Neil,* 774 F.2d 1252 (CA4 1985), which read this Court's decision in *Tennessee v. Garner,* 471 U. S. 1 (1985), as mandating application of a Fourth Amendment "objective reasonableness" standard to claims of excessive force during arrest. *See* 774 F.2d 1254-1257. The reasoning of *Kidd* was subsequently rejected by the en banc Fourth Circuit in *Justice v. Dennis,* 834 F.2d 380, 383 (1987), *cert. pending,* No. 87-1422.

[Footnote 5]

The majority noted that, in *Whitley v. Albers,* 475 U. S. 312 (1986), we held that the question whether physical force used against convicted prisoners in the course of quelling a prison riot violates the Eighth Amendment

"ultimately turns on 'whether force was applied in a good faith effort to maintain or restore discipline or maliciously and sadistically for the very purpose of causing harm.'"

827 F.2d 948, n. 3, quoting *Whitley v. Albers, supra,* at 475 U. S. 320-321. Though the Court of Appeals acknowledged that petitioner was not a convicted prisoner, it thought it

"unreasonable . . . to suggest that a conceptual factor could be central to one type of excessive force claim but reversible error when merely considered by the court in another context."

827 F.2d 948, n. 3.

[Footnote 6]

Judge Friendly did not apply the Eighth Amendment's Cruel and Unusual Punishments Clause to the detainee's claim for two reasons. First, he thought that the Eighth Amendment's protections did not attach until after conviction and sentence. 481 F.2d 1032. This view was confirmed by *Ingraham v. Wright,* 430 U. S. 651, 430 U. S. 671, n. 40 (1977) ("Eighth Amendment scrutiny is appropriate only after the State has complied with the constitutional guarantees traditionally associated with criminal prosecutions"). Second, he expressed doubt whether a "spontaneous attack" by a prison guard, done without the authorization of prison officials, fell within the traditional Eighth Amendment definition of "punishment." 481 F.2d 1032. Although Judge Friendly gave no reason for not analyzing the detainee's claim under the Fourth Amendment's prohibition against "unreasonable . . . seizures" of the person, his refusal to do so was apparently based on a belief that the protections of the Fourth Amendment did not extend to pretrial detainees. *See id.* at 1033 (noting that "most of the courts faced

with challenges to the conditions of pretrial detention have primarily based their analysis directly on the due process clause"). *See* n 10, *infra.*

[Footnote 7]

See Freyermuth, Rethinking Excessive Force, 1987 Duke L.J. 692, 694-696, and nn. 16-23 (1987) (collecting cases).

[Footnote 8]

See Justice v. Dennis, supra, at 382 ("There are . . . certain basic principles in section 1983 jurisprudence as it relates to claims of excessive force that are beyond question[,] [w]hether the factual circumstances involve an arrestee, a pretrial detainee or a prisoner").

[Footnote 9]

The same analysis applies to excessive force claims brought against federal law enforcement and correctional officials under *Bivens v. Six Unknown Fed. Narcotics Agents,* 403 U. S. 388 (1971).

[Footnote 10]

A "seizure" triggering the Fourth Amendment's protections occurs only when government actors have, "by means of physical force or show of authority, . . . in some way restrained the liberty of a citizen," *Terry v. Ohio,* 392 U. S. 1, 392 U. S. 19, n. 16 (1968); see *Brower v. County of Inyo,* 489 U. S. 593, 489 U. S. 596 (1989).

Our cases have not resolved the question whether the Fourth Amendment continues to provide individuals with protection against the deliberate use of excessive physical force beyond the point at which arrest ends and pretrial detention begins, and we do not attempt to answer that question today. It is clear, however, that the Due Process Clause protects a pretrial detainee from the use of excessive force that amounts to punishment. *See Bell v. Woefish,* 441 U. S. 520, 441 U. S. 535-539 (1979). After conviction, the Eighth Amendment

"serves as the primary source of substantive protection . . . in cases . . . where the deliberate use of force is challenged as excessive and unjustified."

Whitley v. Albers, 475 U.S. at 475 U. S. 327. Any protection that "substantive due process" affords convicted prisoners against excessive force is, we have held, at best redundant of that provided by the Eighth Amendment. *Ibid.*

[Footnote 11]

In *Whitley,* we addressed a § 1983 claim brought by a convicted prisoner, who claimed that prison officials had violated his Eighth Amendment rights by shooting him in the knee during a prison riot. We began our Eighth Amendment analysis by reiterating the long-established maxim that an Eighth Amendment violation requires proof of the "*"unnecessary and wanton infliction of pain."" 475 U.S. at 475 U. S. 319, quoting Ingraham v. Wright, 430 U.S. at 430 U. S. 670, in turn quoting Estelle v. Gamble, 429 U. S. 97, 429 U. S. 103 (1976). We went on to say that, when prison officials use physical force against an inmate*

"to restore order in the face of a prison disturbance, . . . the question whether the measure taken inflicted unnecessary and wanton pain . . . *ultimately turns on* 'whether the force was applied in a good faith effort to maintain or restore discipline or maliciously and sadistically for the very purpose of causing harm.'"

475 U.S. at 475 U. S. 320-321 (emphasis added), quoting *Johnson v. Glick,* 481 F.2d 1033. We also suggested that the other prongs of the *Johnson v. Glick* test might be useful in analyzing excessive force claims brought under the Eighth Amendment. 475 U.S. at 475 U. S. 321. But we made clear that this was so not because Judge Friendly's four-part test is some talismanic formula generally applicable to all excessive force claims, but because its four factors help to focus the central inquiry in the Eighth Amendment context, which is whether the particular use of force amounts to the "unnecessary and wanton infliction of pain." *See id.* at 475 U. S. 320-321. Our endorsement of the *Johnson v. Glick* test in *Whitley* thus had no implications beyond the Eighth Amendment context.

[Footnote 12]

Of course, in assessing the credibility of an officer's account of the circumstances that prompted the use of force, a factfinder may consider, along with other factors, evidence that the officer may have harbored ill-will toward the citizen. *See Scott v. United States,* 436 U. S. 128, 436 U. S. 139, n. 13 (1978). Similarly, the officer's objective "good faith" -- that is, whether he could reasonably have believed that the force used did not violate the Fourth Amendment -- may be relevant to the availability of the qualified immunity defense to monetary liability under § 1983. *See Anderson v. Creighton,* 483 U. S. 635 (1987). Since no claim of qualified immunity has been raised in this case, however, we express no view on its proper application in excessive force cases that arise under the Fourth Amendment.

JUSTICE BLACKMUN, with whom JUSTICE BRENNAN and JUSTICE MARSHALL join, concurring in part and concurring in the judgment.

I join the Court's opinion insofar as it rules that the Fourth Amendment is the primary tool for analyzing claims of excessive force in the prearrest context, and I concur in the judgment remanding the case to the Court of Appeals for reconsideration of the evidence under a reasonableness standard. In light of respondents' concession, however, that the pleadings in this case properly may be construed as raising a Fourth Amendment claim, *see* Brief for Respondents 3, I see no reason for the Court to find it

necessary further to reach out to decide that prearrest excessive force claims are to be analyzed under the Fourth Amendment, *rather than* under a

Page 490 U. S. 400

substantive due process standard. I also see no basis for the Court's suggestion, *ante* at 490 U. S. 395, that our decision in *Tennessee v. Garner,* 471 U. S. 1 (1985), implicitly so held. Nowhere in *Garner* is a substantive due process standard for evaluating the use of excessive force in a particular case discussed; there is no suggestion that such a standard was offered as an alternative and rejected.

In this case, petitioner apparently decided that it was in his best interest to disavow the continued applicability of substantive due process analysis as an alternative basis for recovery in prearrest excessive force cases. *See* Brief for Petitioner 20. His choice was certainly wise as a matter of litigation strategy in his own case, but does not (indeed, cannot be expected to) serve other potential plaintiffs equally well. It is for that reason that the Court would have done better to leave that question for another day. I expect that the use of force that is not demonstrably unreasonable under the Fourth Amendment only rarely will raise substantive due process concerns. But until I am faced with a case in which that question is squarely raised, and its merits are subjected to adversary presentation, I do not join in foreclosing the use of substantive due process analysis in prearrest cases.

Part I Graham v. Connor

Hi. I'm Tim Miller. I'm the Use of Force Subject Matter Expert for the Federal Law Enforcement Training Center's Legal Division. This is Part I of a 9 part podcast series on use of force. You can print the transcript for any of these podcasts. The transcripts have the case sites for cases we will discuss.

Comments about these podcasts should be sent to me at my email address, tim.miller@fletc.dhs.gov.

"How will I be judged by a court of law if someone sues me for using excessive force?" That is a fair question from someone studying to be a law enforcement officer. These podcasts focus on the legal aspects for using force in the course of effecting an arrest, investigatory stop, or other seizure of a free citizen.

A. Graham v. Connor

The leading case on use of force is the 1989 Supreme Court decision in Graham v. Connor. The Court held, "…that all claims that law enforcement officers have used excessive force – deadly or not – in the course of an arrest, investigatory stop, or other *seizure* of a free citizen should be analyzed under the Fourth Amendment and its objective reasonableness standard…"

The Court stated that a seizure occurs when a law enforcement officer terminates a free citizen's movement by a means intentionally applied. An officer may seize a person in many ways. Traffic stops, investigative detentions, and arrests are all seizures under the Fourth Amendment. To seize someone, an officer may yell, "Stop!" The officer may use handcuffs, a baton, or firearm to make the suspect stop. Every seizure must be objectively reasonable – meaning reasonable at its inception, in the manner it was effected, and in its duration.

B. What Happened in Graham – the Facts?

Part I Graham v. Connor

Mr. Graham was a diabetic. After feeling the onset of an insulin reaction, he called his friend Berry and asked for a ride to a convenience store. Graham hoped to buy some orange juice. He thought that the sugar in the juice would counteract the reaction.

After Graham and Berry arrived at the store, Graham got out of the car and "hastily" went inside. (The Court does not explain "hastily"; but one might imagine Mr. Graham running, jogging, or walking with a very quick pace.) Unfortunately, the check-out line was too long and concerned about the wait, Graham "hastily" returned to the car, got in, and told Berry to drive to another friend's house. Maybe this friend would have some juice.

Waiting outside the store was Officer Connor. Connor had watched Graham hastily enter and leave the store and suspected something was amiss. Connor followed the two men for a block or so before activating his overhead lights. Berry pulled over.

Berry tried to explain that his friend was just having a "sugar reaction" but Connor was not convinced. Connor told the two men to wait at their car while another officer returned to the store in order to determine what happened. Things got worse from that point.

Graham got out of the car. He ran around the car two times, sat down on the curb, and momentarily passed out. Back-up officers arrived, and Graham was handcuffed, picked up, and put – not too gently - into the backseat of a police car.

All this time, Berry - and Graham after he regained consciousness - tried to explain that that Graham was just having an insulin reaction. But their pleas had no effect. One officer commented that he had seen a lot of people with diabetes before and that none of them had acted like Graham. In the officer's opinion, Graham was just drunk.

Connor finally received the report from the officer who

returned to the store. The officer confirmed what Berry and Graham had been saying – nothing was amiss. But in the meantime, Mr. Graham had suffered cuts on his wrist, a bruised forehead, a broken bone in his foot, an injured shoulder, and persistent ringing in his ears.

Graham sued the police officers, but the Fourth Circuit dismissed his case based on insufficient evidence that the officers *maliciously and sadistically* tried to hurt him. Graham petitioned the Supreme Court for review under a writ of certiorari.[1]

The Supreme Court reversed the Fourth Circuit, based in part on the *subjective standard.* (Whether the officers acted maliciously or sadistically requires a subjective inquiry into the actual beliefs of the officers.) The Supreme Court remanded the case back to the lower court with orders to judge the officers based on the Fourth Amendment's *objective reasonableness test*.

C. What is the Objective Test?

The Court stated that, "The reasonableness of a particular use of force must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight." The objective test requires the court to envision a reasonable officer and ask this question: Based on the *totality of the facts and circumstances*, could such an officer believe that the force was reasonable?

Since the objective test judges the officer through the lens of a reasonable officer, the subjective beliefs of the actual officer – whether they are good, or bad – are not relevant. Officer Connor, for example, may have honestly believed that Graham was a shoplifter; however, Connor's personal beliefs are not relevant. The relevant question is whether a reasonable officer could believe that Graham was a shoplifter, based on the facts.

Facts make force reasonable. The objective reasonableness test requires officers to rely on their senses – or

[1] Mr. Graham was the petitioner; hence the case is captioned *Graham v. Connor*.

what they saw, heard, smelled, tasted, or touched – and then articulate a factual basis for the seizure. Was the seizure reasonable – meaning reasonable at its inception, in the degree of force used, and in its duration? This series of podcasts on use of force focuses on the degree of force an officer may use to seize someone. The Fourth Amendment chapter in the Student Handbook covers investigative detentions, their length, and probable cause to arrest. Nevertheless, all of these aspects are related and go to the overall question – was the seizure reasonable?

Was it reasonable to stop and investigate Mr. Graham and Mr. Berry? The Supreme Court told the lower courts how to judge police officers accused of excessive use of force in civil actions. What follows are some facts and circumstances that could cause a court to dismiss Mr. Graham's claims for excessive force. Some of these facts are for illustrative purposes only and are not in the Graham decision.

For example, Officer Connor might write in his use of force report:

> "I *saw* Mr. Graham run into the store. Less than 15-seconds later, I *saw* him run back out and get into Berry's car. I *heard* the tires screech as the car drove away at a high rate of speed."[2]

Based on those facts, what could a reasonable officer say? The Supreme Court's decision in Terry v. Ohio states that an officer may conduct an investigative detention based on articulable facts that criminal activity afoot.[3]

An officer's training and experience is also relevant. Connor might add:

> "Based on what I saw, and my department having received no less than four complaints of shoplifting from

[2]This is a hypothetical use of force report that is intended for instructional purposes only. It is not Officer Connor's report.
[3] See *Terry v. Ohio* in the Legal Division Reference Book.

> this store within the past two weeks, I activated my overhead lights, and Berry pulled to the side of the road."

Connor would be admitting to effecting a Fourth Amendment seizure; but again, a Terry Stop is reasonable if Connor can point to specific, articulable facts that criminal activity is afoot.

It should be obvious by now that the officer must help the court visualize what happened. Using good action verbs in a written report makes that visualization possible. Connor might write:

> "After Berry *stopped*, I *walked* to his car. I *saw* Berry behind the wheel. I *saw* Graham seated on the passenger side. I *told* both of the men to wait at the car. I ordered another officer to go back to the convenience store and find out what happened.[4] Then Graham got out of the car. Graham *opened* the passenger door. He *ran* around the car two times. Then he *sat-down* on the curb and *fell* over – as if he had passed out."

Personal beliefs (or conclusions) are generally appropriate, *if* they are supported by facts. Connor might state:

> "I *believed* that Graham was under the influence of alcohol *because* I have seen many people who are under the influence of alcohol or narcotics. They are generally irrational. Graham was irrational; he ran around the car two times after I (a police officer) told him to wait at the car. Then he sat on the curb and fell over - as if he passed out." Connor might also add, "Graham's eyes were glassy. His speech was slurred. His breath smelled sweet, like alcohol." Referring back to his training and experience, Connor could explain why intoxication is relevant. "I know that over 80 percent of the assaults on police officers are committed by people under the influence of alcohol or narcotics."

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[4] A seizure should last no longer than necessary to confirm or deny the officer's reasonable suspicion. Holding Graham and Berry long enough to check-out the convenience store should be reasonable.

But unsupported conclusions are not relevant. Without facts, statements like "Graham appeared drunk" or "He posed a threat to me" are nothing more than the officer's subjective beliefs. They are *mere* conclusions, and play no part in the fact-bound analysis of whether an officer's actions are objectively reasonable.

Other language to avoid begins like, "The suspect *indicated* [that he would not do as I ordered]" or "He s*uggested* [that he would fight me]" or "He *implied* [that he had a weapon]." For the court, trying to visualize what happened, those statements raise too many questions. How? How did the suspect *suggest* [what the officer wanted the reader to believe?]

Making conclusions is easy; good fact articulation is not. And to make matters more difficult, experts will say that officers often experience sensory deprivation in use of force encounters. Tunnel vision and auditory exclusion are two common physiological reactions to a perceived threat. But officers should still try to tell their story with the sounds, smells, and colors that they remember. While it may be impossible to recall exactly what the suspect said, the officer may still remember, "The suspect screamed at me"; that "his face was beet red"; and that "he clenched his fists, like a boxer."

D. There is no "20/20" Hindsight in an Objective Test.

When a plaintiff sues a defendant, like Mr. Graham sued Connor, the plaintiff may make several complaints about the seizure. First, Graham could allege that Connor's decision to stop the car was unreasonable. Next he could complain about the handcuffs and the way he was placed in the cruiser. In short, Graham could complain that the seizure was unreasonable in many ways - at its inception, in the manner it was effected, or in its duration. But officers are judged based on the facts that are reasonably known to them at the time. What they learn later is not relevant. And what was not available to the officers when Graham was initially stopped, handcuffed, and put in the cruiser was the report from the

officer who returned to the store. Nothing was amiss. But using that report would be judging the officers based on 20/20 hindsight – and the Supreme Court specifically rejected that type of test.

E. There are no "Perfect Answers"

The Supreme Court stated that, "The test for reasonableness under the Fourth Amendment is not capable of precise definition or mechanical application." Allowance must be made for the fact that "…police officers are often forced to make split-second judgments – in circumstances that are tense, uncertain and rapidly evolving – about the amount of force that is necessary in a particular situation."

Obviously, there may be more than one way to effect a seizure in a tense, uncertain, and rapidly evolving event - and while one force option may be better than another - all that really matters under the objective test is whether the force used was reasonable. In short, what would a reasonable officer say? Did the force fall within the *range* of reasonableness, or was it excessive and unconstitutional?

So, that's enough for right now. Let's stop for a minute. When we come back, we'll begin to answer the question "When is Force Reasonable?"

Part III Deadly Force- Tennessee v. Garner.

Hi. I'm Tim Miller and this is Part III of our podcast series on use of force. So far, we have been talking in generalities. In the last section, we said that courts weigh the nature of the intrusion against the countervailing governmental interest at stake. I think we agreed that the test may sound a little complicated for a police officer on the street who may be forced to make a split-second decision about a force option. But the test is not hard. In short, what did the officer do, and why did the officer do it? The officer must be ready to articulate facts justifying any use of force. Let's begin with deadly force, and what facts make deadly force reasonable.

II. Deadly Force

The general rule is that the more intrusive the seizure, the stronger the governmental interest should be for effecting it. And since the Supreme Court stated that deadly force is unmatched, there should be a compelling government interest for using it. Over the years, it has been clearly established that deadly force is a reasonable force option when the officer has probable cause to believe that the suspect poses an immediate threat of death or serious bodily harm to the officer or others. While a warning adds to the reasonableness of any force options, it is not always feasible.

A. Tennessee v. Garner[1] – When is it Reasonable to use a Firearm?

The Supreme Court's decision in Tennessee v. Garner provides some good examples of when a police officer may use a firearm to seize someone. The Garner case started with a complaint about a *burglary*-in-progress. Two police officers responded to the scene and one of them *saw* Garner, the suspect, *run* out of the house. The officer described Garner as a 17 or 18 year old male and about 5'5" or 5'7" tall. The officer *saw* no sign that Garner was carrying a weapon and based on the facts, was "reasonably sure" he was not armed.

[1] *Tennessee v. Garner* is briefed in the Legal Division Reference Book.

Part III Deadly Force- Tennessee v. Garner.

The officer *yelled*, "police, halt!"; but Garner kept *running away*. When Garner began to *climb*-over a fence, the officer had two options. He could let Garner escape, or use deadly force to stop him. Relying on a Tennessee statute that allowed police officers to use all necessary force to effect the arrest of a fleeing felon, the officer did what he deemed was necessary - and shot Garner in the back of the head. Garner died on the operating table.

"Deadly force is unmatched," stated the Court. The Court held that the Tennessee statute was unconstitutional in so far as it authorized the use of deadly force to stop a fleeing suspect who posed no immediate threat to the officer or others. "It is not better that all felony suspects die than that they escape" stated the Court. "We conclude that [deadly] force may not be used unless it is necessary to prevent the escape and the officer had probable cause to believe that the suspect posed a significant threat of death or serious physical injury to the officer or others."

It follows that deadly force *is* authorized when the officer can articulate facts rising to a probable cause that the suspect poses an immediate threat of death or serious bodily harm either to the officer or others. A warning adds to the reasonableness of any force option, but is not always feasible. In light of Graham, the officer will be judged from the perspective a reasonable officer on the scene.

B. Other Firearm Cases

Let's discuss some cases where courts decided whether to grant police officers qualified immunity from trial.[2] The first two cases have "Use of Force Reports." These reports have two purposes. First, they provide facts where deadly force is reasonable. Second, they illustrate some of the report writing skills discussed above. They are not the actual reports of the

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[2] Qualified immunity is discussed in the last section of this chapter. It is immunity from suit. If granted, it dismisses a plaintiff's claim for excessive force against the officer. Since granting qualified immunity effectively denies the plaintiff his day in court, the judge is required to consider the facts in a light most favorable to the plaintiff.

Part III Deadly Force- Tennessee v. Garner.

officers, but are based on the courts' written opinions.

1. Krueger v. Fuhr[3]

Use of Force Report: I am Officer Fuhr, a Springfield, Missouri police officer. On June 6, 1989, I received a be-on-the-lookout (BOLO) for Leon Kruegar. Dispatch described Kruegar as a white/male, wearing blue jeans, and a black shirt with the number 12 on it. Dispatch stated that Kruegar escaped from a half-way house and was later involved in an assault at the Tri-State Laundry. Another officer's radio transmission stated that Kruegar was high on drugs and that he had a knife. A third transmission stated that Kruegar was spotted on East Walnut. I drove to East Walnut. I saw a person that matched Kruegar's description. He was a white male wearing a black shirt and blue jeans. He was lying on his stomach between two cars, as if he was hiding. I stopped my cruiser. I got out of the car and I drew my pistol. The man got up and began running. I chased him for about 200 feet and yelled, "Freeze!" When I was within about 3 to 4 yards of the man, I saw him reach to his right hip and grab a knife. The man gripped the knife in a fist. Before he could turn around, I shot him three times in the back.

What could a reasonable officer say? The force was reasonable, held the court. A reasonable officer could believe that the man posed a serious and immediate threat of physical harm.

2. Hudspeth v. City of Shreveport[4]

Use of Force Report: I am Officer Hathorn of the Shreveport Police Department. On March 15, 2003, I was one of several officers involved in a high-speed pursuit of Mr. Hudspeth. Mr. Hudspeth failed to stop at a red light. After one of my fellow officers activated the police car's overhead lights, Hudspeth fled. The chase lasted about 5 minutes and ended in the parking lot of the Circle K convenience store. I saw

[3] Krueger v. Fuhr, 991 F.2d 435 (8th Cir. 1993)
[4] Hudspeth v. City of Shreveport, 2008 U.S. App LEXIS 5829 (2009)

Hudspeth get out of the car at the Circle K. Immediately after he got out, he pointed what I believed was a small silver handgun at another officer. That officer quickly ducked down behind a police car. I yelled at Hudspeth to "get down…" Instead, Hudspeth pointed the silver object at me. I was sure that the object was a pistol based on the way Hudspeth held it. Hudspeth held the object in front of him - with both arms extended - in what looked like a shooting stance. I was directly in Hudspeth's line of fire when he pointed the silver object at me. I crouched to avoid being shot. I fired two shots at Hudspeth; that caused him to turn back towards me. Using the same shooting stance – or with both arms extended outward - Hudspeth again pointed the object at me again. I crouched and shot. I continued shooting until Hudspeth went down. The silver object turned-out to be a cell phone.

What could a reasonable officer say? The Fifth Circuit held that the officer had a reasonable, articulable basis to believe that Hudspeth was armed and posed a threat of serious bodily harm. While the silver object turned out to be a cell phone, the courts do not judge the officer based on 20/20 hindsight.

3. Ellis v. Wynalda[5]

The Seventh Circuit denied Officer Wynalda qualified immunity in this case and held that a jury could find the force *unreasonable* because the plaintiff, Ellis did not pose an immediate threat of serious bodily harm at the time Wynalda shot him. Around 7:00 am in the morning, Officer Wynalda responded to a silent-alarm activation at the Gee Pharmacy. A store employee arrived about the same time as Officer Wynalda and let Wynalda in. The store was in considerable disarray. Wynalda drew his weapon and started to look for the intruder. He soon found a hole in the wall. It looked like someone had used a blunt object, like a sledge hammer, to break through the wall of the adjoining building into the Gee Pharmacy. Officer Wynalda looked through the hole and saw someone walk out of the adjoining building's back door. To catch the suspect,

[5] Ellis v. Wynalda, 999 F.2d 243 (7th Cir. 1993)

Part III Deadly Force- Tennessee v. Garner.

Wynalda ran out and saw a man, later identified as Mr. Ellis, walking away. Ellis was wearing pants, a sleeveless shirt, and was carrying a jacket in one hand and a mesh bag in the other. Officer Wynalda yelled, "stop!" But Ellis kept walking. Wynalda yelled "stop" again. This time Ellis stopped, but turned and through the mesh bag at Officer Wynalda. The bag hit Wynalda's shoulder. It was light and fell to the ground. Ellis then turned away and ran. Officer Wynalda shot Ellis in the back.

What could a reasonable officer say? Under *these* facts, the court held that the force was not reasonable because the suspect did not pose an immediate threat of death or serious bodily harm *when the officer shot him.*

While Officer Wynalda was denied qualified immunity under these facts, such a decision does not mean that he is also liable for excessive use of force. This case is discussed again in the last section to illustrate how the court might weigh the facts at trial.

Let's stop there for a minute. When we come back, we will look at the Supreme Court's decision in Scott v. Harris and how the Court reconciled its opinion in Graham v. Connor with Tennessee v. Garner.

Part II The Objective Test

Hi. I'm Tim Miller and this is Part II of our series of podcasts on use of force. Previously, we said that a police officer effects a seizure under the Fourth Amendment when that officer terminates a free citizen's movement. The seizure must be objectively reasonable. The reasonableness of any seizure is based on the facts. In short, facts make force reasonable. What did the officer see, hear, smell, taste or touch. Using good action verbs in a use of force report helps the officer paint a picture for the court. Action verbs help the court envision what the officer was experiencing on the street. "I saw the suspect clench his fists. He put one foot in front of the other in a fighting stance. His face was beet red and he screamed at me." Facts are relevant; mere conclusions, however, are not relevant. Unsupported conclusions are nothing more than the officer's subjective opinions. And subjective beliefs play no part in the fact bound analysis of whether force was objectively reasonable.

F. So when is Force Reasonable?

The Court in Graham stated, "we must balance the nature and quality of the intrusion on the individual's Fourth Amendment interests … against countervailing governmental interests at stake." That may sound complicated – especially for a police officer forced to make a split-second decision about a force option. But it's really simply. What did the officer do [to the suspect] – or, what was the *nature of the intrusion*? And, why did the officer do it – or, what was the *governmental interest at stake?* The more intrusive the seizure, the stronger the governmental interest should be.

Connor, for example, stopped Berry and Graham by activating the cruiser's overhead lights. No doubt - investigative detentions like that intrude upon a free citizen's liberty. They are inconvenient and embarrassing. But the government also has an interest in investigating criminal activity. They are reasonable when an officer can articulate facts to support them.

And no doubt - the intrusion on Graham's liberty became

Part II The Objective Test

much greater after the vehicle stop. But a reasonable officer might say, "So did the governmental interest at stake." The lower courts look to four factors in the Graham decision to find the governmental interest. No single factor should be considered in a vacuum. The Graham factors are:

1. What was the Severity of the Crime?

Connor may have been acting under a reasonable suspicion that Graham stole something from the store when he activated the lights on the cruiser. With facts that Graham committed an armed robbery, Connor may have used a more intrusive means to stop Graham and Berry. Generally, the more severe the crime, the more intrusive the force option may be.

2. Was the Suspect an Immediate Threat?

Whether the suspect is an immediate threat to the safety of the officer or others is generally considered the most important Graham factor. The general rule: The greater the threat, the greater the force option.

For example, vehicle stops pose a threat. To control the scene, an officer may use reasonable force to control the movements of the driver and passengers.[1] Again, a reasonable officer could believe that the governmental interest became much greater after the vehicle stop. Officer Connor told Berry and Graham to wait at the car. But Graham got out. Add that to evidence of Graham's intoxication, and a reasonable officer might believe that Graham posed a threat to Officer Connor; to other motorists on the adjacent street; and to Graham, himself. So what could a reasonable officer say? Was it objectively reasonable to handcuff Mr. Graham and put him in the back of patrol car - under those facts and circumstances?

3. Was the Suspect Resisting Arrest?

Resisting an arrest, or other lawful seizure, effects several

[1] See *Pennsylvania v. Mimms* and *Maryland v. Wilson* in the Legal Division Reference Book.

governmental interests. During an investigative detention, it hinders the officer's ability to investigate the crime. It may put the officer, trying to control the suspect, at risk. And it may endanger members of the public who get in the way. Graham's failure to obey Connor's order to stay at the car could affect all three.

4. Was the Suspect Fleeing from a Lawful Arrest?

Like resistance, attempting to evade an arrest frustrates several governmental interests. The general rule is that the more serious the crime, the greater the governmental interest in stopping the suspect, and the more intrusive the seizure may be.

5. There are Other Factors.

The Graham factors are not a complete list, but while the lower courts have listed others, most are a subset of what is generally considered the most important – threat to the officer or others. For example, the courts have considered the number of suspects verses the number of officers as effecting the degree of threat. So does the size, age, and condition of the suspect confronting the officer. The duration of the action is important, especially after one stops to consider how exhausting it is to wrestle someone for two or three minutes. And it should go without saying that any officer would want to know a suspect's propensity for violence or psychiatric history, if possible.

Other factors do not fall neatly under the Graham factors, but do flow naturally out of the Court's decision. The degree of injury suffered by the plaintiff seems relevant in light of the Court's guidance that, "not every push or shove, even if it may later seem unnecessary in the peace of a judge's chambers, violates the Fourth Amendment." So in a case where the plaintiff alleges that his handcuffs were too tight, the court may examine the plaintiff's actual injuries - and whether the plaintiff complained so that the officer could correct the problem.

The Ninth and Eleventh Circuit discuss the need for the

Part II The Objective Test

force, particularly in cases where officers used intermediate weapons like batons, tasers, and oleoresin capsicum (OC) spray. "It is the need for force which is at the heart of the Graham factors" stated the Ninth Circuit."[2]

And time is a factor. Since not every encounter requires a *split-second* decision, the reasonable officer might say, "The more time to choose a force option, the more reasonable it should be."

Let's stop here. When we come back we will talk about deadly force and when deadly force is objectively reasonable.

[2] See Headwaters Forest Defense v. The County of Humboldt, 276 F.3d 1125, 1130 (9th Cir. 2002)

Part IV Deadly Force- Scott v. Harris.

Hi. I'm Tim Miller and this is Part IV of our podcast series on use of force. In the last section, we discussed Tennessee v. Garner and situations when deadly force with a firearm was objectively reasonable. Over the years, it has been clearly established that deadly force is a reasonable force option when the officer has probable cause to believe that the suspect poses an immediate threat of death or serious bodily harm to the officer or others. While a warning adds to the reasonableness of any force options, it is not always feasible.

B. Scott v. Harris – Another Form of Deadly Force

For several years some of the lower courts believed that Garner set the standard for using deadly force and that in the case of a fleeing suspect, Garner only authorized deadly force in cases where the officer had probable cause to believe that the *suspect committed a crime involving the infliction or threatened infliction of serious physical harm.* The Court Garner envisioned someone who posed an inherent danger to society merely by being at large - like a serial killer. Then came Scott v. Harris.

Victor Harris was not a serial killer; he was a speeder. He was clocked driving 73 miles per hour in a 55-mile-per-hour zone. Harris fled when the officer activated the cruiser's overhead lights and so began a high-speed pursuit that would leave Harris a paraplegic.

Officer Scott soon joined the chase. And six minutes, and nearly 10 miles after the chase began, Scott terminated it. Scott applied the push-bumper on his cruiser to the rear of Victor Harris' car. At the speeds both cars were traveling, Scott's actions posed a high likelihood of death or serious bodily harm to Harris. Harris lost control of the car. It crashed and Harris was nearly killed.

Harris sued. Scott moved to dismiss the case against him on grounds of qualified immunity. But the district court and

Part IV Deadly Force- Scott v. Harris.

11th Circuit denied Scott's request because Harris did not pose the inherent danger to society by being at large that was envisioned in Tennessee v. Garner. In other words, Harris had not committed the crime involving the infliction or threatened infliction of serious bodily harm before the chase began. Scott petitioned the Supreme Court for review.[1]

The Supreme Court reversed the 11th Circuit. The Court said that the Garner decision was simply an application of Fourth Amendment's "reasonableness" test that was announced in Graham v. Connor. Garner did not establish "...a magical on/off switch that triggers rigid preconditions..." for using deadly force. In each case, "...we must...slosh our way through the fact bound morass of reasonableness." On that basis the Court stated, "We think it is quite clear that Deputy Scott did not violate the Fourth Amendment."

Prior to applying the push-bumper, Scott watched Harris racing down narrow, two-lane roads in the dead of the night and at speeds in excess of 85 miles per hour. Harris swerved around more than a dozen other cars, crossed the double yellow line, and forced cars traveling in the opposite lane to the shoulder of the road to avoid being hit. He ran multiple red lights. He traveled for considerable periods of time in the occasional center left-turn-lane. Harris did all that while being chased by numerous police cars forced to engage in the same hazardous maneuvers, just to keep up. The Court stated that, "The car chase that [Harris] initiated in this case posed a substantial and immediate risk of serious physical injury to others... Scott's attempt to terminate the chase by forcing [Harris] off the road was reasonable..."

But why not stop the chase? Mr. Harris argued that the public would have been protected, and the tragedy avoided, if the police simply ceased their pursuit. But accepting that argument would create problems for law enforcement. The police had no way of knowing that Harris would stop. The Court also stated that, "...we are loath to lay down a rule requiring the police to allow fleeing suspects to get away

[1] Scott was the petitioner; hence the case is captioned *Scott v. Harris*.

Part IV Deadly Force- Scott v. Harris.

whenever they drive so recklessly that they put other people's lives at danger."

Scott's decision had foreseeably tragic and permanent consequences for Mr. Harris. "So how does a court go about weighing the perhaps lesser probability of injuring or killing numerous bystanders against the … larger probability of injuring or killing [Harris]" stated the Court. "We think it appropriate in this process to take into account not only the number of lives at risk, but also their relative culpability. It was [Harris], after all who intentionally placed himself and the public in danger by unlawfully engaging in the reckless, high-speed flight that ultimately produced the choice between two evils that [Officer] Scott confronted." Had Scott not taken the action he did, entirely innocent people may have suffered the same or worse consequences than Harris.

Let's stop again. When we come back, we will discuss intermediate weapons and when they are an objectively reasonable force option.

Part IX Qualified Immunity

Hi. I'm Tim Miller. This is Part IX of our podcast series on use of force. Before we close, I would like to discuss a legal defense to standing civil trial that a police officer may raise. It's called qualified immunity.

V. Qualified Immunity

If sued by a plaintiff for a constitutional violation, the officer may request qualified immunity. Qualified immunity is a defense to standing civil trial. It's raised by the officer well in advance of the actual trial on the merits. If granted, the plaintiff's claim of excessive force against the officer is dismissed. But dismissal is qualified, however, by the officer's use of force being objectively reasonable.

A. The Rationale

The rationale behind qualified immunity for police officers is two-fold. First, it permits officers to perform their duties without fear of constantly defending themselves against insubstantial claims for damages. Second, it allows the public to recover damages when a reasonable officer would know that the officer unreasonably violated a plaintiff's constitutional or federal legal rights. Qualified immunity is designed to protect all but the plainly incompetent or those who knowingly violate the law.

B. Getting Qualified Immunity

Law enforcement officers are entitled to qualified immunity when their actions do not violate a clearly established statutory or constitutional right. The objective reasonableness test determines the entitlement. The officer is judged from the perspective of a reasonable officer on the scene, rather than with the vision of 20/20 hindsight.

Qualified immunity must be raised by the officer. It protects the officer in an individual capacity; and *not* the governmental entity employing the officer.

Part IX Qualified Immunity

C. Analyzing Claims of Qualified Immunity

Qualified immunity has two elements.

1. Did a Constitutional Violation Occur?

The first element is whether the officer violated a constitutional right, under the plaintiff's version of the facts.[1] If no violation occurred, there is obviously no basis for the lawsuit, and the suit is dismissed.

2. Was the Right "Clearly Established?"

Assuming the court finds that the officer violated the Fourth Amendment, the court examines the second element: Was the right clearly established by law? To deny the officer qualified immunity, the court must find a constitutional violation that was clearly established by law. The Supreme Court stated:

> "Clearly established" for purposes of qualified immunity means that the contours of the right must be sufficiently clear that a reasonable official would understand that what he is doing violates that right. This is not to say that an official action is protected by qualified immunity unless the very action in question has previously been held unlawful, but it is to say that in the light of pre-existing law the unlawfulness must be apparent.
>
> If the law was not clearly established at the time an action occurred, an officer could not be reasonably expected to anticipate subsequent legal developments, nor could he fairly be said to "know" that the law forbade conduct not previously identified as unlawful.[2]

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[1] Since the defense of qualified immunity is raised well in advance of trial, and if granted denies the plaintiff his day in court, the judge must consider the facts in a light most favorable to the plaintiff.

[2] *Wilson v. Layne*, 526 U.S. 603 (1999).

Sometimes after examining both elements, the court finds a constitutional violation, but that the law was not clearly established at the time. Brooks v. City of Seattle is an example. The Ninth Circuit held that in the specific context of that case, it was constitutionally excessive to tase a pregnant woman three times in less than one minute. However, the officers still received qualified immunity because the law was not sufficiently clear so that every reasonable officer would have understood that what he was doing violated that right.

And sometimes the court simply holds that the law is not clearly established *without* addressing whether or not the officer violated the constitution. The Supreme Court held that courts do not have to address the elements in any particular order. In Cockrell v. City of Cincinnati, the court refused to decide whether a misdemeant, fleeing from the scene of a non-violent misdemeanor, but offering no other resistance and disobeying no official command, had a clearly established right *not* to be tased. The court expressed no opinion on the matter. It held that the law was not clearly established and the officer received qualified immunity.

E. Reasonable Mistakes Can be Made

An officer can have a reasonable, but mistaken belief as to what the *law* requires, and still receive qualified immunity. Moreover, officers can have reasonable, but mistaken beliefs as to the *facts*. The following cases are illustrative:

1. Reasonable Mistakes About the Law

The case of Garner v. Memphis Police Department,[3] was part of the litigation that eventually resulted in Tennessee v. Garner. The officer relied on a state statute that authorized *all necessary force* to stop a fleeing felon. The Supreme Court later declared the statute unconstitutional, in so much as it authorized deadly force to stop any fleeing felon, but the officer reasonably relied upon it at the time of the shooting.

[3] *Garner v. Memphis Police Department*, 600 F.2d 52 (6th Cir. 1979).

Part IX Qualified Immunity

2. Reasonable Mistakes About the Facts

Officer may make reasonable, but mistaken beliefs about the facts. In Hudspeth v. City of Shreveport, for example, an officer mistook a silver object in the suspect's hand for a handgun. It turned out to be a cell phone.

F. Qualified immunity, denied.

It is not unusual for a court to deny an officer qualified immunity, even if the officer did - in fact - act reasonably. The reason for such a seemingly unfair result is because the judge, in deciding whether to grant the officer immunity from trial, must consider the plaintiff's version of the facts. Why? Granting qualified immunity to the officer denies the plaintiff his day in court. Therefore, the judge must consider the facts in a light most favorable to the plaintiff. In granting qualified immunity to the defendant officer the judge says, in effect, "Mr. Plaintiff, even considering the facts in your favor, no reasonable jury could find for you.

At trial, however, the burden shifts back to the plaintiff. Ellis v. Wynalda was discussed earlier. Officer Wynalda was denied qualified immunity because at the time Wynalda shot Ellis, a fleeing burglary suspect, Ellis had turned away. The bullet struck Ellis in the back, and considering the facts in a light most favorable to Ellis/plaintiff, the jury could find that he did not pose an immediate threat of serious bodily harm.

But at trial the burden shifts. Recall that Ellis threw a bag at Wynalda after the Officer ordered him to halt. Could a reasonable officer believe that Ellis posed an immediate threat at that time? The court thought so. If Wynalda had shot Ellis while he was throwing the bag, that would have been permissible as the actions of a reasonable officer facing a dangerous felon. Expert witnesses may also testify that once an officer makes a decision to pull the trigger, it takes about .30 seconds to stop and that within that time, Ellis could have already turned away.

Part IX Qualified Immunity

VI. Conclusions About Use of Force.

A law enforcement officer triggers the 4th Amendment's objective reasonableness test when she terminates a suspect's movement by a means intentionally applied. The courts weigh the nature of the intrusion against the countervailing interest at stake. In short, "what did the officer do, and why did she do it?" The more intrusive the seizure, the stronger the governmental interest should be for effecting it. To find that governmental interest, courts look to the Graham factors. Courts look at the seriousness of the crime, the threat to the officer or others, and whether the suspect is resisting or fleeing from a lawful seizure. Threat is generally respected as the most important.

Facts make force reasonable. Officers should articulate what they saw, heard, smelled, tasted or touched at the scene. By using good action verbs, the officer helps the court envision what she was experiencing on the street. Experts will say that officers often experience sensory deprivation in use of force encounters. Tunnel vision and auditory exclusion are two common physiological reactions to a perceived threat. But officers should still try to tell their story with the sounds, smells, and colors that they remember. While it may be impossible to recall exactly what the suspect said, the officer may still remember, "The suspect screamed at me"; that "his face was beet red"; and that "he clenched his fists, like a boxer."

The general rule is that the more intrusive the seizure, the stronger the governmental interest should be for effecting it. And since the Supreme Court stated that deadly force is unmatched, there should be a compelling government interest for using it. Over the years, it has been clearly established that deadly force is a reasonable force option when the officer has probable cause to believe that the suspect poses an immediate threat of death or serious bodily harm to the officer or others. While a warning adds to the reasonableness of any force options, it is not always feasible.

Part IX Qualified Immunity

Batons, tasers, and oleoresin capsicum (OC) spray are often called intermediate weapons and like any force option, they must pass the objective test. Courts weigh the *nature of the intrusion* against the countervailing *governmental interest* at stake.

A baton is a reasonable force option against combative suspects – meaning someone who poses an articulable threat of harm to the officer. *These are fights*. Fights are dynamic encounters, and while officers cannot always predict what will happen in a fight, the Physical Techniques Division teaches officers to strike at the suspect's attacking limbs and large muscle groups and to avoid areas like the head, neck, or spine - unless deadly force is objectively reasonable.

Tasers in the dart-mode are reasonable when the suspect poses an immediate threat to the officer or others. The key is to be able to articulate facts that could lead a reasonable officer to believe that the suspect poses a threat. In Draper v. Reynolds, Officer Reynolds - with the help of his police car's dash cam video – the threat was articulable. In Bryan v. MacPherson, it was not. *Finally*, while there may be facts supporting the initial use of a taser, the facts may change, and the threat may also diminish, as it did in Beaver v. City of Federal Way when a back-up officer arrived.

Tasers have also been used to stop fleeing suspects, but officers should be mindful that the temporary paralysis caused by a taser in the dart-mode may cause secondary impact injuries. Officer's should remember the rule that the Graham factors should not be considered in a vacuum; flight "alone" may not be a sufficient basis for using a taser in the dart-mode. The court in Cockrell held that the law was not clearly established in a case where a police officer used a taser to stop a fleeing jaywalker.

But the law is *clear* when a force option creates a foreseeable risk of death or serious bodily harm. Tasing someone in a tree, climbing over a fence, off of a raised platform, or around flammable liquids, creates such a danger.

Part IX Qualified Immunity

Officer should be ready to articulate a very strong governmental interest for using the taser under those circumstances, such as when the suspect poses an immediate threat of serious bodily harm.

And finally, OC and stun-drive tasers may used as pain compliance tools in situations where suspects refuse to cooperate in their arrest. These are cases where the accused is charged with a minor crime. The officer is unable to point to any articulable threat. Flight is not an issue. The suspect simply refuses to get out of their car. Or, he refuses to get into the arresting officer's car. In other situations, protesters have simply sat down and refused to leave. Another common factor was time. The officer had plenty of time to choose a reasonable force option. The issue? Could a reasonable officer believe that the pain compliance tool was necessary to effect the arrest?

In Headwaters, OC was not necessary to remove trespassing protestors. The protestors had been safely and effectively removed by lesser means of force on prior occasions. When the OC or stun-drive taser is necessary, officer are well advised to give warning and to give the suspect time to reconsider his decision.

That's it. I hope you have found these podcasts helpful. Our job at the Legal Division is to help you enforce the law safely, effectively, and in accordance with our Constitution. If you have comments, please send them to me. I'm at Tim.Miller@fletc.dhs.gov. God bless you.

Part VIII Myths v. Reality

Hi. I'm Tim Miller. This is Part VIII of our podcast series on use of force. This is good place to *pause* for a few minutes and distinguish some myths from the realities about using force. A police officer trigger's the Fourth Amendment's objective reasonableness test when she seizes someone or otherwise makes a suspect submit to governmental control. The test is a fact bound determination viewed through the lens of a reasonable officer. The issue is whether such an officer could believe that the force option used by the actual officer on the street was reasonable.

Hopefully, you should now be able to distinguish some myths from the reality of using force.

IV. Myths vs. Reality

No subject is plagued with more myths than use of force. What follows are some of those myths about using force, and the law.

A. *I thought that I had to fear for my life.*

The first myth is that an officer must fear for her life before using deadly force. "I feared for my life" is like saying, "I did it for officer safety." It is a subjective conclusion and plays no part in the fact bound determination about whether the force was reasonable. Facts make force reasonable. While a police sniper may not fear for her *own* life in a hostage situation, deadly force may still be objectively reasonable.

B. *I thought warning shots were illegal.*

Warning shots are often regulated by agency policy. One example is the Department of Homeland Security Policy on the Use of Deadly Force; it generally prohibits warning shots, with an exception that allows warning shots by the Secret Service exercising protective responsibilities. Policy restrictions on use of force are important, and officers should be familiar with their

own policy, but only excessive, unreasonable force can result in a successful lawsuit against the officer.

C. *I thought deadly force was only reasonable when responding to a felony.*

No; whether the officer is responding to a felony or misdemeanor is only one factor in a use of force decision. The relevant inquiry is whether the force was reasonable. Many state and local officers agree that responding to *misdemeanor* domestic disturbances can turn very violent, very quickly.

D. *I thought you always had to give a warning.*

No; a warning adds to the objective reasonableness of any force option. However, warnings are not always feasible – especially in a tense, uncertain, and rapidly evolving deadly force encounter. For example, *shouting* at an armed robber, "Stop or I'll shoot!" may simply cause the robber to turn and shoot the officer.

E. *I thought you had to use minimal force.*

Agency policies may caution officers to use the minimal amount of force necessary to effect a seizure. Others may advise officers to exhaust all lesser means of force before resorting to deadly force. But the law requires officers to be objectively reasonable. In a tense, uncertain, and rapidly evolving encounter on the street, it is not possible to consider *all lesser means of force.* It would require superhuman judgment.

There is a difference, however, between choosing the minimal amount of force necessary and using force that is reasonably necessary. The following example illustrates that difference:

> Assume two officers went to Mr. Jones' house and told Jones he was under arrest. Jones yelled, "I ain't going!" and lunged for a handgun on a coffee table. Assume further that one of the officers shot Jones with a taser

> and at the same time, the other officer shot Jones with a firearm. Both weapons knocked Jones to the floor and prevented Jones from reaching the gun. Now Jones is suing the officer that shot him with the pistol. Jones alleges that the officer that shot with the pistol him did not use the *minimal amount of force necessary*.
>
> Jones is judging the officer based on his own subjective beliefs and 20/20 hindsight. The objective test examines the facts through the lens of a reasonable officer. *Could* a reasonable officer believe that shooting Jones with a pistol was reasonably necessary under this tense, uncertain, and rapidly evolving encounter?

The words "should" and "could" often mark the differences between a *subjective belief* and the *objective test*. In the example, Jones claims, "You *should* have used a lesser means of force." Jones' opinion is subjective. The objective test begins with "could." "*Could* a reasonable officer believe that the force was necessary?"

F. Thelast myth: *I thought that you had to try to retreat*.

While state law often imposes a duty on private citizens to retreat before permitting them to use deadly force, imposing that requirement on police officers is often inconsistent with their duty to protect the public and to enforce the law.[1]

Let's stop. When we come back, we'll discuss a police officer's defense to standing trial called qualified immunity in Part IX.

[1] The law certainly does not prohibit officers from retreating and there may be sound tactical reasons for doing so.

Part VII Intermediate Weapons-Stun Taser and OC

I'm Tim Miller and this is Part VII of our Podcast Series on Use of Force. We have been discussing intermediate weapons. Batons and tasers in the dart-mode are reasonable force options against combative suspects – meaning someone who poses an articulable threat of harm to the officer. Tasers in the dart-mode have also been used to stop fleeing suspects. While the court in Beaver v. City of Federal Way had no trouble finding that a taser was reasonable to stop a fleeing burglar high on drugs, the officer in Cockrell v. City of Cincinnati used it to stop a fleeing *jaywalker*. The law is not clear as to when tasers may be used to stop fleeing suspects for minor offense when serious secondary impact injuries are reasonably foreseeable. The law, however, is clear when a force option creates a foreseeable risk of death or serious bodily harm. Tasing someone in a tree, climbing over a fence, off of a raised platform, or around flammable liquids, creates such a danger and would require very strong governmental interest, such as when a suspect poses an immediate threat of serious bodily harm. Absent facts to support such a strong governmental interest, the force is deemed unreasonable.

Now let's look at tasers in the drive-stun mode and OC spray.

D. Tasers in the Drive-Stun Mode and OC Spray.

Like other intermediate weapons, tasers in the drive-stun mode and OC spray can also be used to bring combative suspects under control. In Griffin v. City of Clanton,[1] Griffin fled the scene of a traffic stop for driving under the influence. Other officers joined the chase and Griffin was cornered in a house. A struggle ensued, and by the time Officer Bearden arrived, several officers still appeared to be wrestling with Mr. Griffin. Bearden reached down and sprayed Griffin with OC, directly on the face. Unfortunately, Officer Bearden had failed to notice during all the commotion that Griffin had been handcuffed.

[1] Griffin v. City of Clanton, 932 F.Supp. 1359 (M.D. 1996)

Griffin sued, claiming that the pepper spray was excessive, but the court dismissed the case. Griffin had attempted to evade arrest by flight. He resisted arrest in the home. He was intoxicated. It was chaotic when Officer Bearden arrived. And while Griffin was handcuffed, that fact was not reasonably known to Bearden. A reasonable officer could believe that OC was still necessary and that spraying Griffin directly on the face would prevent contaminating other officers.

Resistance may pose a threat to the officer, or others. In Monday v. Oullette,[2] Mr. Monday's resistance posed a threat to himself. He had a long history of drug and alcohol abuse and depression. Physically, he was approximately 6'0" tall and weighed over 300 pounds. Police went to his home after a mental health counselor reported that he was attempting to commit suicide by ingesting pills (Xanax) and drinking alcohol. The responding officers discovered that many of the pills were missing and insisted that Monday go with them to the hospital. Monday refused to get up out of his chair. After approximately 20 minutes, an officer told him that if he did not get up, he would be sprayed. He remained seated, drinking a bottle of beer. A single spray of OC was reasonable to make him get up.

OC hurts – and it will continue to hurt, even after the suspect is under control. So while OC may be reasonable to bring a combative suspect under control, the officer should try to alleviate its harmful effects after the suspect surrenders. Failing to do so without cause is excessive force.[3]

E. Force Options

While OC and tasers in the stun-drive mode are "reasonable" force options against combative suspects, they are not always the weapon of choice. Experienced officers have reported that dangerous, determined people have fought through them. The baton and dart-mode taser may be the better choice in a fight, leaving OC and stun-drive tases as pain

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[2] Monday v. Oullette, 118 F.3d 1099 (6th Cir. 1997)
[3] See Lalonde v. Co. of Riverside, 204 F.3d 947 (9th Cir. 2000)

compliance tools.

Pain compliance tools are used in situations where the officer gives an order and the suspect refuses to comply. The pain compliance tool, meaning the OC or the taser in the stun-drive mode, is used to *make* the suspect comply. Most of the litigation over pain compliance tools concern suspects accused of minor crimes. The officer is unable to point to any articulable threat. Flight is not an issue. The problem for the arresting officer is that the suspect will not cooperate in the arrest. Suspects have refused to get out of their car.[4] Or, they have refused to get into the arresting officer's car.[5] In other situations, protesters have simply sat down and refused to leave.[6] Another common factor was time. The officer had plenty of time to choose a reasonable force option. The issue? Could a reasonable officer believe that the pain compliance tool was necessary to effect the arrest?

In Headwater v. Co. of Humboldt,[7] the Ninth Circuit held that OC was not necessary, but excessive. Headwaters concerned three nonviolent protests against the logging of ancient redwood trees in the Headwaters Forest. The plaintiffs linked themselves together with self-releasing lock-down devices, sat-down, and refused to leave. The protests were not new to the officers. Previously, officers had used electric grinders to safely remove the lock-down devices, and protestors, in a matter of minutes. And the officers did so without causing pain or injury to anyone.

In Headwaters, and apparently without any reasonable explanation, the officers decided to use OC. The officers warned the protestors that OC would be used if they did not release themselves from the lockdown devices and leave. When they refused, the officers applied the OC directly to their eyes with Q-tips. If the protestors could be removed safely before without

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[4] See Brooks v. City of Seattle, 661 F.3d 433 (9th Cir. 2011)
[5] See Brown v. Cwynar, 2012 U.S. LEXIS 11466 (3rd Cir 2012); Gorman v. Warwick Township, 2012 U.S. Dist. LEXIS 58415 (E.D. Penn 2012)
[6] See Headwaters v. Co. of Humboldt, 276 F.3d 1125 (9th Cir. 2002); Crowell v. Kirkpatrick, 400 Fed. Appx. 592 (2nd Cir. 2010)
[7] See Headwaters, 276 F.3d 1125

Part VII Intermediate Weapons-Stun Taser and OC

OC before, why was the OC necessary this time?

But a reasonable officer could find the force option necessary in Crowell v. Kirkpatrick.[8] This time officers had an articulable basis for using drive-stun tasers to remove several people chained to heavy barrel drums. Like Headwaters, the crime was minor – trespassing. And the plaintiffs could have released themselves anytime they wished. In Crowell, the officers considered, and attempted, alternative measures to remove them. A sense of urgency also arose when one of the plaintiffs asked an acquaintance at the scene to call other members of their group to return to the property. They were warned that the taser would be used to remove them. They were told it was painful. After the warning, they were given an another opportunity to release themselves and before subsequent tasings, they were warned again.

These are *not* situations where the officer is forced to make split-second decisions with dangerous suspects, as was the case in Beaver. The officer has plenty of time to determine whether each tasing is necessary.

In Brooks v. City of Seattle, for example, the court held that tasing a pregnant woman three times in less than one minute was excessive. Ms. Brooks was arrested after she refused to sign a traffic citation for speeding, but refused to get out of her car. Three officers were on the scene. One of them showed Brooks his taser and asked if she knew what it was. She said that she did not, but added that she was pregnant and "I'm…less than sixty days from having my baby."

The pregnancy was a big concern for the officers, and as one officer continued to display the taser, another asked, "well, where do you want to do it?" The other said, "well, don't do it in the stomach; do it in her thigh." An officer attempted to physically remove Brooks by twisting her arm up behind her back, but she stiffened her body and clutched the steering wheel to frustrate the officer's attempt. At this point, the officer cycled the taser, showing Ms. Brooks what it did. Twenty-seven

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[8] Crowell v. Kirkpatrick, 400 Fed. Appx. 592 (2nd Cir. 2010)

seconds after the officer cycled the taser, and with one of the officers still holding her arm behind her back, she was tased in the thigh. Thirty-six seconds later, the officer applied the taser to her left arm. Six seconds later, she was tased in the neck.

The court focused on what it called two salient factors. The first was Brooks' pregnancy. The second was that three tasings in such rapid succession did not give her time to recover from the extreme pain she experienced, gather herself, and reconsider her refusal to comply.

Let's stop. When we come back, we'll distinguish myths from the realities of using force in Part VIII of our podcast series on use of force.

Intermediate Weapons – Dart Taser

Hi. I'm Tim Miller and this is Part VI of our Podcast Series on Use of Force. We are discussing intermediate weapons. In the last section we talked about batons. A baton is a reasonable force option against combative suspects – meaning someone who poses an articulable threat of harm to the officer. These are fights. Fights are dynamic encounters, and while officers cannot always predict what will happen in a fight, the Physical Techniques Division teaches officers to strike at the suspect's attacking limbs and large muscle groups and to avoid areas like the head, neck, or spine - unless deadly force is objectively reasonable. Now let's discuss tasers in the dart-mode.

C. Tasers – In the Dart-Mode.

Tasers have been credited with effecting lawful arrests, and with fewer injuries to officers and suspects, alike. That was the case in Draper v. Reynolds.[1] This case started late one night on a Georgia highway. The light over the license plate on Draper's truck was out. Draper stopped the truck, but accused the officer of shining a flashlight in his eyes. From there, things got worse. Five times the officer asked Draper for documentation. Five times, Draper failed to get it. Draper accused the officer of harassment. He paced beside the road, yelled, and cursed, "How about you just go ahead and take me to f---ing jail…" and "I don't have to kiss your ass because you're a police officer." After the fifth request for documents, the officer promptly tased Draper. Draper fell, and was quickly handcuffed.

Draper's argument was like this: "The officer didn't have to tase me! I would have complied with the officer's arrest commands!" The 11th Circuit looked to the reasonable officer for the answer. Based on these facts, a reasonable officer could believe that a verbal arrest command, accompanied by attempts to handcuff Draper, would only escalate an already tense and difficult situation into a more serious physical struggle and cause either the officer or the suspect to be seriously hurt.

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[1] Draper v. Reynolds, 369 F.3d 1270 (11th Cir. 2004).

Intermediate Weapons – Dart Taser

While the threat was articulable in Draper, it was not in Bryan v. MacPherson.[2] Bryan was a twenty-one year old male stopped by Officer MacPherson for driving without a seat belt. Officer MacPherson approached the car, told Bryan to turn down the radio, and asked him if he knew why he was stopped. Bryan turned the radio down, but just stared ahead without answering. MacPherson told Bryan to pull to the side of the road. Bryan did so, but began to pound the steering wheel and curse. Clad only in boxer shorts and tennis shoes, Bryan got out of the car.[3] Frustrated and upset about the pending ticket, Bryan yelled gibberish, expletives, and hit his thighs. Officer MacPherson tased Bryan. MacPherson shot Bryan without warning, and from about twenty, to twenty-five feet away. One of the darts hit Bryan in the back. Bryan fell to the pavement, shattering his front teeth.

The Ninth Circuit held that the force was excessive and that reasonable, less intrusive options were available. Backup was on its way and there were insufficient facts that could lead a reasonable officer to believe that Bryan was an immediate threat. Bare chested and wearing only boxer shorts, he did not appear to be armed. One of the darts lodged in Bryan's back, suggesting that he was facing away from MacPherson. While Bryan's behavior could lead a reasonable officer to be wary, under these facts they did not support a belief that Bryan posed an immediate threat.

In Bryan there was no articulable threat. In Beaver v. City of Federal Way,[4] there was an articulable threat, at least initially, but the threat began to diminish after the first tasing. Beaver was a burglary suspect. The responding officer saw Beaver at the scene, ordered him to stop, and Beaver fled. The

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[2] Bryan v. MacPherson, 630 F.3d 805 (9th Cir. 2009).

[3] Bryan v. MacPherson is another case where the police officer requested qualified immunity from suit. Since the court would be dismissing the case and denying the plaintiff, Bryan, his day in court, the judge is required to consider the facts in a light most favorable to the plaintiff. There were a couple of disputes in this case. First, Officer MacPherson claimed that he told Bryan to wait in the car; Bryan said he did not hear the order. Second, Officer MacPherson said that Bryan took a step towards him after Bryan got out. Bryan said that he did not. Those facts had to be considered in Bryan's favor.

[4] Beaver v. City of Federal Way, 507 F.Supp. 2d 1137 (W.D. Wash. 2007).

taser brought Beaver to an abrupt halt.

But the first tasing was not the problem. Once down, the officer ordered Beaver in a loud voice to role over on his stomach. Sixteen seconds after the first, Beaver was tased a second time, when he tried to get up. Before the second - and after each additional tasing - the officer commanded Beaver in a loud voice to role over on his stomach and extend his arms. Beaver did not immediately comply, and two seconds after the second tasing, he was tased a third time.

Then a back-up officer arrived, but conflicting commands – one for Beaver to lie on his stomach and another to lie on his back – were given by the two officers. Beaver suffered the consequences, and ten seconds after the third tasing, he was tased a fourth time.

At this point, the two officers stood over Beaver. Beaver lay on the ground. He was on his stomach. However, his arms were curled underneath his chest. There were no conflicting commands by the officers about Beaver's arms, and twenty-two seconds after the fourth tasing, Beaver was tased for a fifth, and final time. He extended his arms, as ordered, and was handcuffed.

The court looked at each tasing and found that the first three were reasonable.[5] Beaver was suspected of burglary. He fled when the officer ordered him to stop. A reasonable officer could believe he was under the influence of drugs because he showed no signs of comprehension; his veins were bulging; he

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[5] In Beaver, 507 F.Supp. at 1145, the court found the first three tasings reasonable. The court had no problem with the first, but expressed some concern about the second and third. The court stated that Beaver may not have had the ability to obey the officer's orders. For instance, a witness testified that he heard Beaver say "I can't" in response to the officer's commands. An expert witness also testified that Beavers' actions (trying to get up) may have been as much a reaction to being tased as an intentional effort to resist arrest. Furthermore, the period between the second and third tasing was only two seconds, making it is difficult to see how Beaver even had the opportunity to comply. Still, the court held that the first three tasings were reasonable. The officer was alone and he had to make a split second decisions in a situation where a reasonable officer could believe that Beaver was trying to get up and resist arrest.

was sweating; and the officer said, "he had that far off look." He was also a big man – about six feet tall and heavy-set – or about the same size as the officer who tased him. He was attempting to get up. And the officer was alone, at least initially.

But the analysis changed when the backup officer arrived. The court stated, "To the extent that Beaver posed an immediate threat to [the responding officer] during the first three tasings, that threat was significantly diminished when [the backup officer arrived]." When backup arrived, the officers had reasonable, less intrusive options. Instead of tasing Beaver, one officer could hold the taser - in the ready - while another went in with handcuffs.

Still, there are no absolutes in use of force, and while police officers generally find greater comfort in greater numbers, the facts may change that, too. In Teran v. County of Monterey,[6] for example, five police officers faced only one suspect – but on a roof. The suspect was a prowler. He was high on drugs, and after the officers climbed the roof to arrest him, he began to wrestle with them. The officers made a good plan. One officer was to grab one of the suspect's limbs. That much of the plan worked, but the wrestling still continued, and when one of the officers came perilously close to the edge of the roof, another tased the suspect two times in rapid succession in the drive-stun mode in order to make him give up his hands. Reasonable? The court thought so.

And what about fleeing suspects? At over 160 miles per hour, the taser's probes can out-run the fastest suspect within about 25-feet. But there are constitutional limits to a device that causes temporary paralysis and a headlong crash to the pavement. While the court in Beaver had no trouble finding that a taser was reasonable to stop a fleeing burglar, Cockrell v. City of Cincinnati[7] involved a fleeing *jaywalker*. The officer stopped to investigate. The jaywalker fled, and without any warning, the officer tased him. The court framed the issue this

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[6] Teran v. County of Monterey, 2009 U.S. Dist. LEXIS (2009)
[7] Cockrell v. City of Cincinnati, 2012 U.S. App. LEXIS 3787 citing Pearson v. Callahan, 555 U.S. 223, 236-37 (2009).

way: Whether a misdemeant, fleeing from the scene of a non-violent misdemeanor, but offering no other resistance and disobeying no official command, had a *clearly established right not to be tased*. The court expressed no opinion on the constitutionality of the officer's actions. It dismissed the case because the law was not clearly established, under these circumstances.[8]

But the law is clear when a force option creates a foreseeable risk of death or serious bodily harm. Tasing someone in a tree,[9] climbing over a fence,[10] off of a raised platform, or around flammable liquids,[11] creates such a danger. Serious spinal injuries and deaths have resulted from falls. People have been seriously burned from flammable liquids. Absent a strong governmental interest for using the taser under these circumstances – such as an immediate threat of serious bodily harm – the force is deemed unreasonable. "It is not better that all felony [or misdemeanant] suspects die than that they escape" warned the Court in Garner.

Let's stop. When we come back, we'll discuss tasers in the drive-stun mode and also, OC Spray.

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[8] Qualified immunity is immunity from trial. It has two elements. Dismissal is appropriate if the officer did not violate a constitutional right or if the law defining the right was not clearly established at the time of the challenged conduct. The elements may be addressed in any order. The court dismissed the case because the law was not clearly established. See Cockrell, 2012 U.S. App. LEXIS 3787 citing Pearson v. Callahan, 555 U.S. 223, 236-37 (2009).

[9] Harper v. Perkins, 2012 U.S. App. LEXIS 4064

[10] Snauer v. City of Springfield, 2010 U.S. Dist. LEXIS 124770.

[11] Brown v. Burghart, 2012 U.S. Dist. LEXIS 73543

Part V Intermediate Weapons-Batons

Hi. I'm Tim Miller. This is Part V of our Podcast Series. In the last two section, we discussed deadly force. <u>Tennessee v. Garner</u> provides some good examples of when deadly force with a firearm is objectively reasonable. It is clearly established that police officers may use deadly force when the suspect poses an immediate threat of serious bodily harm to the officer or others and gives a warning, if feasible. Now we are going to cover intermediate weapons, and when they are an objectively reasonable force option.

III. Intermediate Weapons

A. What are they?

Batons, tasers, and oleoresin capsicum (OC) spray are often called intermediate weapons and like any force option, they must pass the objective test. Courts weigh the *nature of the intrusion* against the countervailing *governmental interest* at stake. In short, what did the officer do, and why did she do it?

1. The Nature of the Intrusion.

Or, what can an officer do with an intermediate weapon? That depends. A baton can be held at port arms and used to gently push a protestor back to the sidewalk. It can also be used to strike attacking limbs. A baton is capable of causing deep bruising, blood clots capable of precipitating a stroke, and death.

Tasers come in two modes – dart and drive-stun. In the dart mode, the taser uses compressed nitrogen to propel a pair of "probes" – or aluminum darts, tipped with stainless steel barbs – towards the target. The darts travel over 160 feet per second and are connected to the taser gun with insulated wires. When the darts strike the suspect, the taser gun delivers a 1200 volt, low ampere electrical charge through the wires and probes and into the suspect's muscles. The impact is powerful and swift. The electrical impulse momentarily overrides the suspect's central nervous system. The suspect falls to the ground, and due to the temporary paralysis, is unable to protect himself from the fall. Serious, secondary impact injuries like

broken teeth, spinal injuries, and even death have been reported.

In the drive-stun mode, the officer removes the dart cartridge and pushes two electric contacts located on the front of the taser directly against the suspect. In drive-stun, the taser delivers an electronic shock to the suspect. While the shock may not be as *shocking* as overriding the suspect's central nervous system - like the dart-mode – the stun-drive mode is painful, and that pain may deter a suspect from continuing bad behavior.

Another *pain compliance tool* is oleoresin capsicum (OC) spray. OC comes from the oily extract of the cayenne pepper plant. Spraying a suspect with OC irritates the skin, eyes, and mucous membranes of the upper respiratory tract. OC causes dilation of the capillaries, which inhibits the ability to breath.

OC has earned a place on a police officer's belt. With its ability to temporarily incapacitate suspects, OC has been credited with *decreasing* injuries among officers and suspects, alike. It may reduce the need for a more serious force options, and the pain is generally temporary.

Tasers facilitate arrests when suspects actively resist and are generally less harmful than a baton or gun. They have been credited with reducing injuries, to include the need for deadly force.

2. The Governmental Interest.

Or, why did the officer use the intermediate weapon? Officers should look to the Graham factors to find the governmental interest. "Threat" is generally respected as the most important, but the Graham factors do not exist in a vacuum.

B. Batons

A use of force report might state:

Part V Intermediate Weapons-Batons

> "I told Mr. Jones that I was a U.S. Capitol Police Officer and that he was under arrest for failing to appear at a grand jury." *[Arguably, this is a minor offense; but again - the Graham factors do not exist in a vacuum.]* Jones said, "I'm not going!" *[Now the officer has at least some evidence that the suspect will resist the arrest.]* The report continues, "Jones is about 6 feet tall and 190 pounds; I'm about the same height and weight. I was also the only officer on the scene. Jones bladed his body towards me, meaning that he put one foot in front of the other like a boxer. Jones clinched both of his hands in a fist, and raised them towards his chest. He stepped towards me. *[Now the officer has facts to believe that Jones is an immediate threat.]* The report ends, "I struck Jones's right thigh with my baton and he fell to the ground."

A baton is a reasonable force option against combative suspects – meaning someone who poses an articulable threat of harm to the officer. *These are fights.* Fights are dynamic encounters, and while officers cannot always predict what will happen in a fight, the Physical Techniques Division teaches officers to strike at the suspect's attacking limbs and large muscle groups and to avoid areas like the head, neck, or spine - unless deadly force is objectively reasonable.

Cotton v. Busic[1] was a very violent fight. Officers responded to a call that Bobby Cotton was causing a disturbance. Cotton was a schizophrenic and off his medication. The officers met Cotton, armed with two hunks of concrete in each hand. Cotton initially refused to put the concrete down. A scuffle ensued. A by-stander stated that Cotton was the aggressor and that Cotton got one of the officers in a "bear hug." One of the officers stated that Cotton was "strong as hell." Cotton was taken to the ground, but continued to struggle. The officers struck Cotton with nightsticks and flashlights and when the fight was over, Cotton was missing one eye. The court stated, "A police officer need not suffer brutalizing injury before he inflicts it; rather, the restraint on an officer's use of force is that it must be reasonable…"

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[1] Cotton v. Busic, 793 F.Supp. 191 (S.D. Ind. 1992).

Part V Intermediate Weapons-Batons

In Cotton, a call about a disturbance escalated into something much more serious. In Kellough v. Bertrand, the seriousness of the offense effected the officers' initial response. Kellough was an armed robbery suspect. Officers stopped his car and ordered him out. He got out - and did so, the court acknowledged, in a non-threatening manner. But the court also found that the suspect did not immediately lie face down on the ground, like the officers ordered him to do. Instead, he asked what he had done. That caused an officer to kick his legs out from under him. One of the officers also struck him on the arm with a flashlight as he fell. Even accepting as true the suspect's argument that he exited the car in a non-threatening manner, his refusal to follow the officer's orders - and to lie face down on the ground - could cause a reasonable officer to employ some force to make him. And while the court described the strike to the arm as "troubling," it also said it occurred before the suspect was handcuffed and secured.

The seriousness of the offense played a big part in the court's decision in Kellough. Change the facts, however, and the court may change the answer. What if the nature of the offense was drunk driving? Or, what if Kellough was stopped based on an arrest warrant for multiple felony counts of *fraud.* It is doubtful that a reasonable officer would find the same urgency to get him on the ground.

And while the court in Kellough was "troubled" by the blow with the flashlight, the blow occurred *before* the robbery suspect was secured. Blows that occur *after* a suspect is secured leave a reasonable officer asking, "Then why was it necessary?"

In Lewis v. Downs,[2] for example, the suspect tried to stop two officers from arresting his mother and confronted them with an iron rake. One of the officers drew his pistol and ordered him to drop it. He did, and while handcuffing and arresting him for obstruction posed no constitutional objection, striking him in the mouth with a nightstick after he was being led away,

[2] Lewis v. Downs, 774 F.2d 711 (6th Cir. 1985)

certainly did.

And the reasonable officer would pose the same question about striking someone who was not resisting? In Dixon v. Richer,[3] officers had sufficient facts to stop and frisk the suspect for weapons, but the suspect did as the officers ordered. He placed his hands on the car. And still the officers allegedly struck him so forcefully that he started to fall. Another allegedly hit him in the stomach with a flashlight. And while on the ground, the deputies got on top of him and began to beat and choke him. Again, "why?"

Let's take a short break. When we come back we will talk about Tasers in the dart-mode.

[3] Dixon v. Richer, 922 F.2d 1456 (10th Cir. 1991)

Chapter 6

A Recognition-Primed Decision (RPD) Model of Rapid Decision Making*

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INTRODUCTION

Traditional models of decision making do not take into account many critical aspects of operational settings, as described in Chapter 1. Decision makers in operational settings are usually very experienced, in contrast to the naive subjects used in laboratory studies. In this chapter I present a recognitional model of decision making that shows how people can use experience to avoid some of the limitations of analytical strategies. This model explains how people can make decisions without having to compare options. It fuses two processes—situation assessment and mental simulation—and asserts that people use situation assessment to generate a plausible course of action and use mental simulation to evaluate that course of action. I believe this recognitional model describes how decision making is usually carried out in real-world settings. This conclusion is based on a series of studies in which it was found that recognitional decision making is much more common than analytical decision making. Finally, I contrast the strengths and weaknesses of recognitional and analytical decision strategies.

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RECOGNITIONAL DECISION MAKING

For the past several years, my colleagues and I have been studying command-and-control performance and have generated a *Recognition-Primed Decision* (RPD) model of naturalistic decision making. We began (Klein, Calderwood, & Clinton-Cirocco, 1986) by observing and obtaining protocols from urban fireground commanders (FGCs) about emergency events that they had recently handled. Some examples of the types of decisions these commanders had to make include whether to initiate search and rescue, whether to initiate an offensive attack or concentrate on defensive precautions, and where to allocate resources.

The fireground commanders' accounts of their decision making do not fit into a decision-tree framework. The fireground commanders argued that they were not "making choices," "considering alternatives," or "assessing probabilities." They saw themselves as acting and reacting on the basis of prior experience; they were generating, monitoring, and modifying plans to meet the needs of the situations. We found no evidence for extensive option generation. Rarely did the fireground commanders contrast even two options. We could see no way in which the concept of optimal choice might be applied. Moreover, it appeared that a search for an optimal choice could stall the fireground commanders long enough to lose control of the operation altogether. The fireground commanders were more interested in finding actions that were workable, timely, and cost effective.

It is possible that the fireground commanders were contrasting alternatives, but at an unconscious level, or possibly the fireground commanders were unreliable in their reports. We have no way of demonstrating that the fireground commanders weren't contrasting alternative options, but the burden of proof is not on us. There is no way to prove that something isn't happening. The burden of proof is on those who wish to claim that somehow, at some level, option comparison was going on anyway. The reasons we believe that the fireground commanders were rarely contrasting options are: it seems unlikely that people can apply analytical strategies in less than a minute (see, for example, Zakay & Wooler, 1984); each FGC argued forcefully that he or she wasn't contrasting options; and they described an alternative strategy that seemed to make more sense.

Clearly, the fireground commanders were encountering choice points during each incident. During the interviews the fireground commanders could describe alternative courses of action that were possible, but insisted that, during the incident, they didn't think about alternatives or deliberate about the advantages and disadvantages of

the differe ,ptions. Instead, the fireground commanders relied on their abilities to recognize and appropriately classify a situation, similar to the findings of Chase and Simon (1973) for chess players. Once the fireground commanders knew it was "that" type of case, they usually also knew the typical way of reacting to it. They would use available time to evaluate an option's feasibility before implementing it. They would imagine how the option was going to be implemented, to discover if anything important might go wrong. If problems were foreseen, then the option might be modified or rejected altogether, and another highly typical reaction explored.

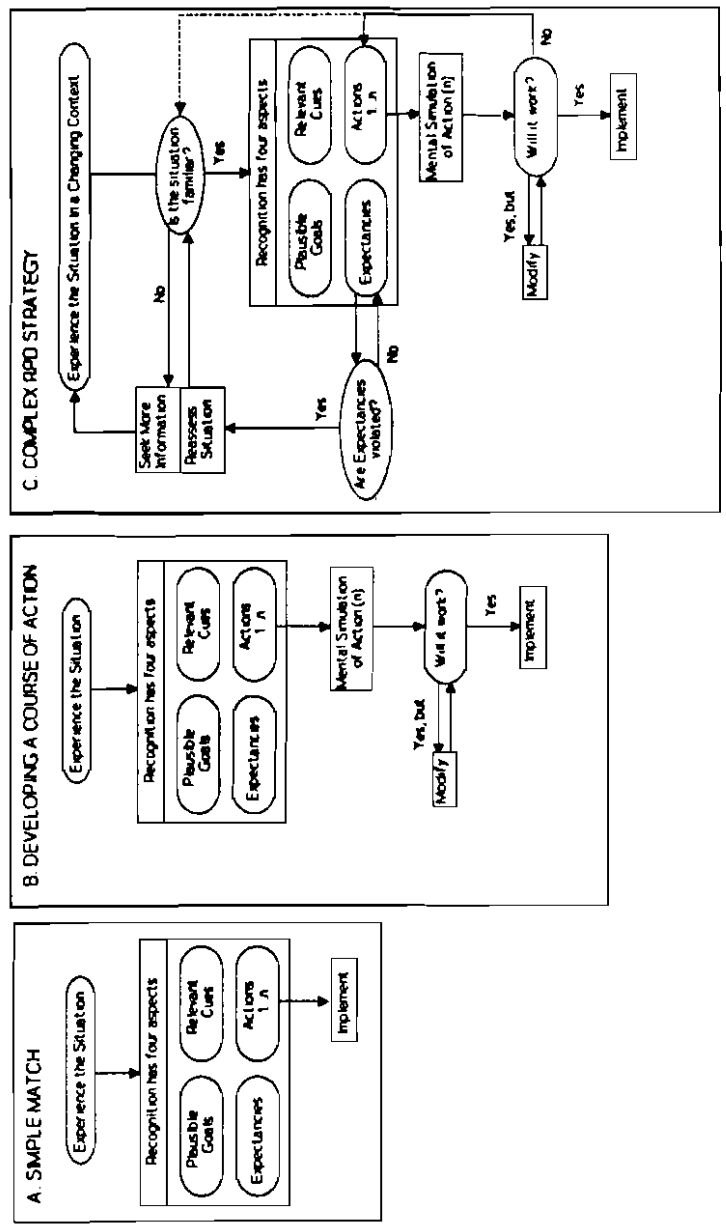
We have described this strategy as a Recognition-Primed Decision (RPD) model (e.g., Klein, 1989a; Klein et al., 1986) of how experienced people can make rapid decisions. For this task environment, a recognitional strategy appears to be highly efficient. The proficient fireground commanders we studied used their experience to generate a workable option as the first to consider. If they had tried to generate a large set of options, and to systematically evaluate these, it is likely that the fires would have gotten out of control before they could make any decisions.

The RPD model is presented in Figure 6.1. The simplest case is one in which the situation is recognized and the obvious reaction is implemented. A somewhat more complex case is one in which the decision maker performs some conscious evaluation of the reaction, typically using imagery to uncover problems prior to carrying it out. The most complex case is one in which the evaluation reveals flaws requiring modification, or the option is judged inadequate and rejected in favor of the next most typical reaction. Because of the importance of such evaluations, we assert that the decision is primed by the way the situation is recognized and not completely determined by that recognition.

Orasanu and Connolly, in Chapter 1, presented one of the firefighting incidents we studied—a reported fire in the basement of a four-story apartment building. Upon arrival, the FGC assessed the problem as a vertical shaft fire in a laundry chute. Since there had been no sign of smoke from the outside, he judged that the fire was just getting underway. This situation assessment included plausible goals (he believed there was time to put it out before it got out of control), critical cues (he needed to find out how far the fire had spread up the shaft), expectancies (he believed that the firefighters could get above the fire in time to put it out), and an obvious course of action (send teams with hoses up to the first and second floors).

Unfortunately, the fire had just spread beyond the second floor, and the crews reported back that they were too late. The FGC then walked back to the front of the building, where he saw smoke beginning to

Figure 6.1. Recognition-Primed Decision Model



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escape from un the eaves, just under the roof. He imagined how the fire had just reached the fourth floor, pushing smoke down the hall. His situation assessment shifted—this was no longer a simple vertical shaft fire. The whole building was being engulfed. The goals were now obvious—search and rescue. The critical cues included the front stairway as a prime evacuation route. The side stairway, previously the focus of activity, was now irrelevant. The expectancies now centered around the FGC's belief that spread of the fire might be too fast to ensure complete evacuation of the building. The course of action was straightforward—cease attempts to extinguish the fire, begin search and rescue operations, and call in a second alarm.

There seem to be four important aspects of situation assessment (a) understanding the types of goals that can be reasonably accomplished in the situation, (b) increasing the salience of cues that are important within the context of the situation, (c) forming expectations which can serve as a check on the accuracy of the situation assessment (i.e., if the expectancies are violated, it suggests that the situation has been misunderstood), and (d) identifying the typical actions to take.[1]

In the case of the laundry chute fire, the goals were partially determined by doctrine (e.g., when to conduct search and rescue) and partially by the nuances of the situation—the goal of trying to extinguish the fire did not prevent the FGC from later ordering his crews to begin search and rescue. But the FGC did have to make sure that the attack on the fire didn't take too long or become too exhausting. In addition, during the initial attempt to extinguish the fire, the crew members were all clustered around the rear stairway where the fire was spreading, so they were well positioned to shift into a search and rescue mode when necessary. The FGC had to be sensitive to a variety of goals at the same time. A simplistic decision analysis that separated different goals might have been misleading, whereas a more sophisticated decision analysis would be difficult to carry out under these time pressures.

Continuing with the discussion of Figure 6.1, if there is enough time the decision maker will evaluate the dominant response option by

[1] It should be noted that we had anticipated that the fireground commanders would rely on retrieval of analogue cases. But despite our probes, the fireground commanders rarely were able to identify analogues they had used. Each incident had so many unique aspects that there was no incident where an analogue matched the entire episode. Analogues were cited as occasionally helpful for aspects of an incident. For the most part, the vast experience of the fireground commanders had enabled them to merge the individual cases and to be able to use a judgment of familiarity or prototypicality that would not be present with the retrieval of an individual analogue case.

agining it, conducting a mental simulation to see if it will work. ... it does, it will be implemented. If it runs into problems, it will be modified. If it can't be fixed, then it will be rejected, and another likely option will be considered. If there is not adequate time, the decision maker is prepared to implement the course of action that experience has generated as the most likely to be successful. Note that this evaluation is context-specific. The evaluation is directed at how a course of action will fare in an actual situation, not at rating the advantages/disadvantages for various dimensions.

A recognitional decision process can also be seen in the example of the Libyan airliner incident, presented in Chapter 2. The Israeli general did not try to generate a set of options or evaluate the options in terms of utilities, probabilities, standard evaluation dimensions, or base rates. Instead, the focus was on forming a situation assessment. The general appeared to be willing to treat the airplane as being off course during a commercial flight, but the deviant behavior of pretending to land and then fleeing to the west challenged this interpretation. The general used mental simulation to try to imagine how a legitimate pilot would have taken such actions in good faith and could not come up with a plausible scenario. Using the failure to find a plausible story as evidence, the general concluded that the pilot was not on a legitimate flight. From this situation assessment, the goal was obvious—prevent the airplane from escaping. The course of action was also obvious—force the plane down. Even in retrospect, knowing the consequences, it is hard to specify a superior decision strategy.

Mental simulation is also used in evaluating a course of action. One incident from our study of forest fires involved a decision to use a key road to transfer crews to and from the fire line. A staff member noted that a slight shift in wind direction could quickly bring the fire right across the road. The other staff members saw this was a real danger, so they decided to close that road and transfer operations to another, less convenient road. This decision did not involve any comparison of the strengths and weaknesses of using each of the roads. Instead, there was a sequential evaluation in which the prime option was identified, mental simulation was carried out, the prime option was rejected, and was replaced by a second option.

There are a number of features that distinguish the RPD model from classical decision models.

- The RPD model focuses on situation assessment rather than judging one option to be superior to others.
- The RPD model describes how people bring their experience to bear on a decision.

RPD

- The RPD n. .el asserts that experienced decision makers can identify a reasonably good option as the first one they consider, rather than treating option generation as a semi-random process, requiring the decision maker to generate many options.
- The RPD model relies on satisficing (Simon, 1955) rather than optimizing—finding the first option that works, not necessarily the best option.
- The RPD model focuses on serial evaluation of options and thereby avoids the requirement for concurrent deliberation between options that marks the focus on the "moment of choice."
- The RPD model asserts that experienced decision makers evaluate an option by conducting mental simulations of a course of action to see if it will work, rather than having to contrast strengths and weaknesses of different options.
- Finally, a recognitional strategy enables the decision maker to be continually prepared to initiate action by committing to the option being evaluated. Formal strategies require the decision maker to wait until the analyses are completed before finding out which option was rated the highest.

We have studied the use of recognitional decision making in a variety of tasks and domains, including fireground command, wildland fire incident command teams, U.S. Army Armored Division personnel (see Klein, 1989a, for a description of these), battle planning (Thordsen, Galushka, Klein, Young, & Brezovic, 1990), critical care nursing (Crandall & Calderwood, 1989), and chess tournament play (Calderwood, Klein, & Crandall, 1988).

These studies reflect a broad range of task constraints. The studies cover decisions made over several days as well as those made in less than 1 minute; decisions involving primarily a single individual and also teams of 5–9 people; decision makers with more than 20 years of command experience and newly promoted officers. Both qualitative and quantitative methods of investigation were employed in these studies, including semistructured interviews, on-site observations, and protocol analysis. The tasks performed ranged in the level of realism from the observations and interviews during an actual wildland fire requiring coordination of 4,000 crew members, to military exercises and computer simulations, to classroom planning exercises.

The results have provided support for the validity and utility of the model as it applies to individual decision makers. Table 6.1 reports the results of five studies that attempted to tabulate the incidence of RPD strategies vs. concurrent deliberation of options, for nonroutine decisions. We can see that the recognitional strategies were more frequent,

ıable 6.1. Frequency of RPD Strategies Across Domains*

Study	# Decision Points	Proportion of Decision Points Handled Using RPD Strategies
1. Urban Fireground Commanders (FGC-1)	156	80%
2. Expert Fireground Commanders (FGC-2)	48	58%
Novice Fireground Commanders (FGC-2)	33	46%
3. Wildfire	110	51%
4. Tank Platoon Leaders	55	42%
5. Design Engineers	51	60%

*These data were adapted from *Advances in Man-Machine Systems Research, 5*, 1989. Copyright © 1989 by JAI Press. Reprinted by permission.

even for these very difficult cases. This is true under circumstances where the coding system involved a liberal criterion for categorizing a decision as "analytical" (i.e., relying on concurrent generation and evaluation of options). If there was any indication that two or more options were contrasted, even if the decision maker abandoned the effort or used it for only a limited part of the incident, it was classified as analytic. Our coding methods were shown to be highly reliable; Taynor, Crandall, and Wiggins (1987) found intercoder agreement to be between 87%–94%.

For the first study in Table 6.1, Urban FGC-1, we looked at all the decision points in nonroutine incidents, including trivial decisions. These decision makers averaged 23 years of experience and showed 80% recognitional decisions. The second study (FGC-2) only examined the nonroutine command decision points of nonroutine incidents. The proportion of recognitional decisions was 58% for the experts and 46% for the novices. In Study 3, the functional decisions about fighting the forest fires showed 56% recognitional decisions, whereas the organizational decisions (whether to relieve someone of command) required more comparisons of different options. There the rate of recognitional decision making was only 39%, yielding an average of 51%. The incident commanders in this study averaged 24 years of experience. In Study 4, the tank platoon leaders were cadets in their first 10 days of training, and the proportion of recognitional decisions was below 50%. For Study 5, we found that experienced design engineers who were *not* under time pressure still relied heavily on recognitional decision making for difficult cases (60%). These data suggest that recognitional strategies are the most frequent, even for nonroutine decisions. Analytical strategies are more frequently used by decision makers with less experience.

RENGTHS AND WEAKNESSES OF RECOGNITIONAL DECISION MODELS

I am *not* proposing that there is a best decision strategy. Both recognitional and analytical approaches have their functions. Sometimes, both are applied within the same decision task. My claim is that recognitional strategies can be adaptive, can allow experienced decision makers to respond effectively, and should be acknowledged as a potential source of strength.

I have noted some limitations of analytical decision strategies. If they are used in the wrong conditions, they can leave the decision maker unable to react quickly and effectively. Conversely, the danger of misapplying recognitional decision strategies is that personnel will lack the experience needed to identify effective courses of action as the first ones considered, or will lack the ability to mentally simulate the option to find the pitfalls, or will fail to optimize when necessary. For example, the task of generating an operational order of battle requires speed and satisficing, and can be compromised by excessive use of analytical decision strategies. However, the task of anticipating the enemy's course of action requires optimizing to identify the worst thing that the enemy might do, and here recognitional processes can lead to tunnel vision and self-deception.

Studies by other researchers suggest that there are a number of factors affecting the use of analytical vs. recognitional decision "strategies" (e.g., Hammond, Hamm, Grassia, & Pearson, 1987). Our research has shown that recognitional decision making is more likely when the decision maker is experienced, when time pressure is greater, and when conditions are less stable. In contrast, analytical decision making seems to prevail when the available data are abstract and alphanumeric rather than perceptual, when the problems are very combinatorial, when there is a dispute between different constituencies, and when there is a strong requirement to justify the course of action chosen.

We do not believe that an RPD process approach should be taught, since the RPD model is already a description of what people do. Instead, we would argue that training is needed in recognizing situations, in communicating situation assessment, and in acquiring the experience to conduct mental simulations of options.

This chapter has tried to show that when people use recognitional rather than analytical strategies, it is not a sign of incompetence or irrationality. Recognitional strategies have strengths and value in naturalistic settings.

KEY POINTS

- Prescriptive decision strategies are not designed for ill-defined tasks or for time-pressured situations.
- A Recognition-Primed Decision (RPD) model describes how decision makers use their experience to avoid painstaking deliberations.
- Experience enables a person to understand a situation in terms of plausible goals, relevant cues, expectancies, and typical actions.
- Experienced decision makers usually try to find a satisfactory course of action, not the best one.
- Experienced decision makers can usually identify an acceptable course of action as the first one they consider, and rarely have to generate another course of action.
- Decision makers can evaluate a single course of action through mental simulation. They don't have to compare several options.
- Recognitional decision strategies are more appropriate under time pressure and ambiguity; analytical strategies are more appropriate with abstract data and pressure to justify decisions.
- In a variety of operational settings, recognitional decision strategies are used more frequently than analytical strategies, even for difficult cases.

Sexual Misconduct

Introduction & Agency Liability

Article 1 of 4

By Jack Ryan, J.D.
with contributions by: Lou Reiter

Introduction

A major problem that has plagued law enforcement over the last two decades is sexual misconduct. The long-standing men's culture of law enforcement may have played a role in this pervasive problem.

In order to address this issue, law enforcement must first acknowledge the existence of sexual misconduct in the profession and then take active steps to address the cultural issues that allow such conduct to continue. The purpose of this manual is to define the various types of sexual misconduct that has existed in the law enforcement profession; to provide case-based scenarios for training purposes; to outline the legal and liability issues of the involved officer and the agency; and to provide agencies with the appropriate response to these issues.

Sexual misconduct takes many forms in the law enforcement profession. First, there is **sexual harassment**. Sexual harassment takes on two forms. The first type is referred to by the courts as ***quid pro quo*** harassment. The term quid pro quo is a Latin contractual term meaning something for something. In the sexual harassment context, it means if the worker wants to be rewarded with a promotion or pay raise, they have to provide something, of a sexual nature, to their supervisor. The second type of sexual harassment, which law enforcement agencies are often faced with is referred to as the **hostile work environment.** A hostile work environment is one in which sexual comments; sexual jokes, sexual pictures etc. are so pervasive that a person is affected in their ability to perform their job.

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The next type of sexual misconduct is **sex discrimination.** Sex discrimination occurs when a supervisor or a law enforcement entity utilizes sexual stereotypes to base their decisions with things like hiring, promotion or discipline. The allegation in this type of case is that the agency inappropriately uses gender or a sexual stereotype as a basis for an employment decision.

The final type of sexual misconduct to be addressed in this training involves the misuse of police power by officers to gain sexual favors from citizens with whom they come into contact. Newspapers and television news broadcasts regularly publicize the acts of some law enforcement officer who has coerced a person into a sexual encounter in exchange for leniency in an arrest or motor vehicle violation. There are also cases where an officer who, under the guise of providing protection to someone who is of diminished capacity due to alcohol or drugs, has also coerced a sexual encounter.

All three of these various types of misconduct are not only seen in newsprint, they are also seen in various judicial decisions following lawsuits brought by the effected party against the individual officer as well as the law enforcement agency. All three types of conduct have an adverse effect on the law enforcement profession generally and the employing agency specifically.

Through education and training, agencies can begin to change the culture that has allowed this type of misconduct to continue. Strong policy, coupled with enforcement will speed the process and send a message to employees that this type of conduct will not be tolerated. Finally, proper decisions by the employees themselves will protect them from one of the most difficult type of legal action they may ever face.

Agency Liability

Over the last two decades, the amount of litigation brought against public agencies has greatly increased. This dramatic increase can largely be attributed to a United States Supreme Court case decided in 1978. The case held that some government entities were “persons” and thus could be sued under 42 U.S.C. § 1983. Prior to 1978, counties, towns and municipalities could not be sued under this statute.

This statute gives the federal courts jurisdiction to hear claims regarding the alleged violation of federally protected rights. Unlike most state court claims brought against government entities, there is no cap on damages for a § 1983 claim. In addition, lawyers who prevail for plaintiffs bringing these claims against a government entity are also entitled to recover attorney's fees. In some cases, these fees exceed the actual award for damages.

Under the federal law, 42 U.S.C. § 1983, a municipality will only have liability where the violation of a federally protected right was caused by some policy, custom, practice, rule or ordinance of the municipality. The corollary is also true. Where the government entity has a policy, rule, custom or ordinance that is enforced, which prohibits the conduct in question, the entity will not be liable simply because the employee committing the act works for the entity.

Policies are an essential component of liability-risk management for any governmental entity. Thus, it is incumbent upon public safety administrators to undertake the task of developing and maintaining policies.

In 1978, the United States Supreme Court determined that a local government entity was a "person" for purposes of § 1983 liability. In *Monell v. Department of Social Services of New York,* the Court considered a lawsuit alleging a violation of civil rights based on a Department of Social Services policy that required pregnant female employees to take a leave from work before such leave was medically necessary.[1] The Court in its decision overturned that portion of *Monroe v. Pape*[2] that excluded local government entities from liability. It was *Monell* that opened the floodgate for litigation against public safety agencies alleging the violation of civil rights.

The decision in *Monell* did not create vicarious liability or liability based on the employer/employee relationship. In fact, the United States Supreme Court expressly rejected the doctrine of *respondeat superior* (let the master respond for the acts of the servant) for entity liability. Instead, the Court held that a local government entity could only be exposed to liability under §1983 when the violation of a federally protected right occurred as the result of some policy, custom, ordinance, rule or regulation of the government entity. Policies, ordinances, rules and regulations must be officially adopted in order

[1] *Monell v. Department of Social Services of New York*, 436 U.S. 658 (1978).
[2] *Monroe v. Pape,* 365 U.S. 167 (1961).

to create liability whereas customs are the accepted practices of the entity which have the force of a policy.

In establishing municipal or county liability under the *Monell* analysis, a plaintiff has four potential mechanisms:

1. Formal rules, regulations, policies or ordinances: This is the easiest claim for a plaintiff to make out since they merely need to get a copy of the official policy and need not show a pattern of conduct by the entity.
2. Custom/Practice: Customs and practices may be established by showing a pattern of conduct which has the force of law or policy. The operating assumption under this type of claim is that the final policymaker for the entity knew or should have known of the custom. As such the final policymaker has acquiesced to the custom by their failure to act in stopping the pattern of conduct from taking place.
3. Attribution Method: This method does not require the showing of a pattern of conduct. Under this type, a single decision which is committed or made by a person who is later determined to be a final policymaker may establish liability. When a final policymaker makes a decision, that decision has the force of policy and is imputed to the entity. It should be noted that a determination of who is a final policymaker is not always clear. If the person setting forth the policy is subject to review and or veto, it is unlikely that a court would consider that person a final policymaker.
4. Failure to Train: Where a government entity is deliberately indifferent to the likelihood that constitutional rights will be violated by a failure to train liability may be imposed. Generally a court will not allow a failure to train claim to stand based upon an isolated incident. In order to set out a failure to train claim a plaintiff must establish one of the following:

- Plaintiff must point to a specific deficiency in training in an area where the need for training is patently obvious. In cases where a plaintiff can establish a failure to train in an area where the need for training is patently obvious, a single incident will suffice. For example, a department that failed to train officers in the use of deadly force may meet this standard.

- Where a plaintiff can show a pattern of conduct which leads to the violation of federally protected rights such that final policymakers are on notice and have failed to correct through training.

Thus, public safety agencies cannot avoid liability by simply avoiding written policy. Doing so, will leave the department open to liability based upon the

custom or practice of the department, which, by their nature, are open to anyone's interpretation.

A short statement on the concept of a final policy maker is worth review. A bench decision from the Rhode Island Federal District Court exemplifies the formalistic approach to determining a final policy maker. In *Murtagh v. City of Providence,* Jack Murtagh was a retired police officer who had become a businessman. He was the owner of porn shops and strip clubs. In an effort to rid the Providence's residential neighborhoods of strip clubs, the police chief, Urbano Prignano Jr. decided to place marked police cars in front of certain strip clubs with their emergency lights activated. In addition, an officer would stand outside of the cruiser with a video camera filming patrons as they entered the strip club.

Murtagh, supported by the local ACLU, filed suit alleging violations of his civil rights, particularly First Amendment violations as well as Due Process violations. He sought an injunction to stop the activities of the police. Prior to a hearing on the injunction, the practice was stopped. At the hearing, Murtagh, as the owner of Cabana Girls' Night Club alleged that the chief was the final policymaker of the Providence Police Department and that the policy promulgated by the chief violated his rights. The Federal District Court of Rhode Island dismissed the case holding that under the city charter, the chief's decisions were subject to review by the commissioner of public safety and thus, the chief was not the final policymaker for the department.

In determining the final policymaker for a public safety agency, one must look to the law to determine who is vested with the final decision making capacity. The law may be found in a city/town/county charter, ordinance, rule, regulation or statute.

A case decided January 29, 2003 examined the reach of a *Monell* claim against an agency. In *Hernandez v. Borough of Palisades Park,* the United States Court of Appeal for the 3rd Circuit outlined the limits of a claim based upon a department policy.[3] The Borough of Palisades Park had a policy that encouraged homeowners who were leaving their homes for extended periods, to notify the police department so that special attention could be given to the home during the owner's absence.

[3] *Hernandez v. Borough of Palisades Park,* 2003 U.S. App. LEXIS 1638 (3rd Cir. 2003).

Unfortunately for the department, a group of officers, five of seventeen on the department or nearly 30%, were using this information to burglarize the homes. Ms. Hernandez notified the department per this policy when she went out of town. When she returned she found that her home had been burglarized and nine fur coats had been stolen.

In analyzing Hernandez' claims in this case the court noted that the chief of police was the final policymaker for the department. The fact that a lieutenant was involved in the burglary was insufficient to put the final policymaker, the chief, on notice that officers were committing these burglaries. The court asserted that "*a reasonable fact-finder may conclude that a chief of police has constructive knowledge of constitutional violations where they are repeatedly reported in writing to the police department…In addition, constructive knowledge may be evidenced by the fact that the practices have been so widespread or flagrant that in the proper exercise of their official responsibilities the municipal policymakers should have known of them."* The court found that rumors that had circulated regarding these burglaries in 1992 were insufficient to establish that the chief acted with deliberate indifference to these rumors, particularly in light of the fact that there was no showing that the chief was aware of these rumors.

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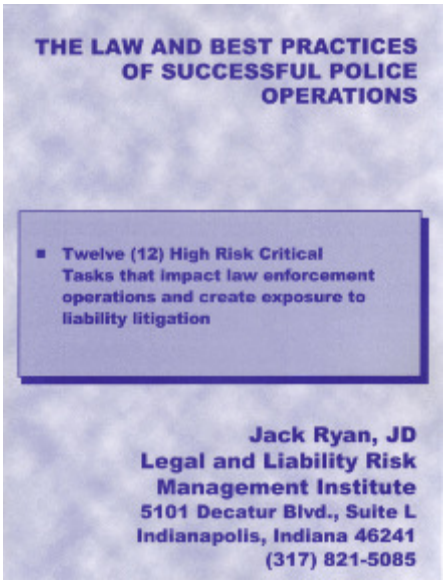

The Law & Best Practices of Successful Police Operations

by Jack Ryan

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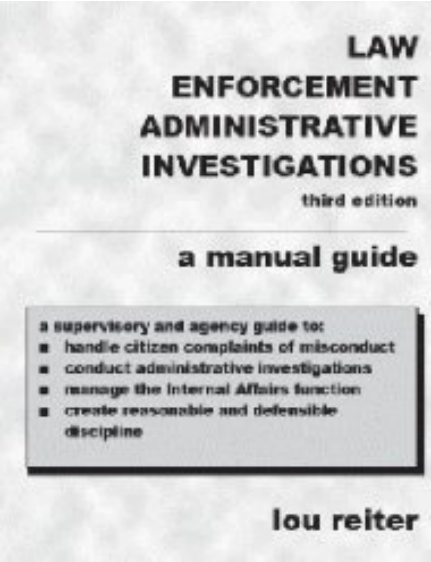

Law Enforcement Administrative Investigations

by Lou Reiter

With Contributing Authors: Patrick Gallagher, Sue Carter Collins, M.S., J.D., PhD, Marilyn M. McFadden, M.P.A., J.D., Steve Rothlein, and Jack Ryan

A Supervisory and Agency Guide To:

- handle citizen complaints of misconduct
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Sexual Misconduct

Policy v. Custom / Operational Policy & Failure to Have a Policy

Article 2 of 4

By Jack Ryan, J.D.
with contributions by: Lou Reiter

Policy v. Custom/Operational Policy

Most police agencies around the United States have made great efforts in developing policies and procedures for their departments. The most important policies and procedures are those that impact "high risk/ critical tasks." High risk/ critical tasks are those recurring police operations that expose the police agency to liability. While most agencies have formal policies that are consistent with the clearly established law and generally accepted police practices, many agencies operations do not coincide with their formal written policy. The agencies operate instead on customs/practices or "operational policies" that may not be consistent with the law or generally accepted police practices. In some case, agencies simply have no formal policy on a particular issue, in which case a court will look to evidence of a custom or practice which has the force of policy with respect to liability.[1]

Garrett began with a tail light violation and an attempted traffic stop. The officer also suspected DUI. The driver of the vehicle fled leading to a 45 minute pursuit. The pursuit ended when the suspect vehicle driven by Eric Irby was forced off the road into a ditch. As an officer tried to apprehend Irby, a struggle ensued. The officer struck Irby over the head with his gun, but Irby was able to escape across a field with the officers now in foot pursuit. The officers finally apprehended Irby by "striking him [repeatedly] with a baton or flashlight," forcing him to the ground, handcuffing him in front of his body, pepper spraying Irby, and pinning him to the ground by officers kneeling on his back. A call was put over the radio for leg restraints and an

[1] See, *Garrett v. Unified Government of Athens-Clarke County*, 246 F.Supp. 2d 1262 (M.D. of Georgia 2003).

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officer responded and hog-tied Irby. Irby was then placed in the roadway behind a running police cruiser. When paramedics arrived they found that Irby was "distressed" and asked that the hog-tie be removed. Irby was taken to the hospital where he was pronounced dead, with the cause of death listed as: "positional asphyxia (hog-tie restraint)."

In analyzing the case, the Unified Government asserted that they had no policy of hog-tying individuals and thus, could not be held liable as an agency. The Unified Government offered proof that the officer had purchased the hog-tie on his own and had been self-trained in its use. In rejecting this lack of policy defense, the court found "that plaintiff has presented sufficient evidence to show that the Unified Government had a widespread custom of using the hog-tie restraint on suspects. For instance, the officers in the case testified in their depositions that they had regularly observed officers employ the hog-tie or hobble restraint in the field. Moreover, on the night of the incident with Irby, Sergeant Nash sent a call out over the police radio for restraints, and both Officers McGee and Eckert responded by bringing hobble or hog-tie cords to the scene, further indicating the hog-tie restraint was frequently used by officers. The court went on to conclude that agency liability could not rest on an unconstitutional policy because although the plaintiff had proved a policy of hog-tying, they had not proved a policy of unconstitutional hog-tying sufficient to put the agency on notice.

This conclusion did not take the agency off the liability hook. The court went on to examine the agency's training on hog-ties. Obviously, since the agency had a custom or operational policy of hog-tying, they had an obligation to train for this critical task. In order to prove a failure to train, a plaintiff must prove:

> "*(1) the municipality's training program is inadequate to the tasks that the officer must perform, (2) the inadequacy is the result of the municipality's 'deliberate indifference,' and (3) the inadequacy is 'closely related to' or 'actually caused' the injury*"[2]

The court concluded that the plaintiff had met the burden to avoid summary judgment on the failure to train claim. The court looked at evidence

[2] *Garrett v. Unified Government of Athens-Clarke County,* 246 F.Supp. 2d 1262 (M.D. of Georgia 2003).

presented by the plaintiff concerning police literature and studies on hog-ties and their use. In addition, testimony from the chief indicated that he had issued an order a few days prior to the incident telling supervisors to stop the practice of hog-tying. The court found that restraining combative suspects is a recurring police task that requires training. Having noted that the agency was on notice that officers were using the hog-tie technique, the agency had an obligation to train its officers for this high-risk task. The court concluded that had the officers who dealt with Irby been properly trained in the dangers of positional asphyxia and hog-tying, they either would not have hog-tied Irby or they would have taken appropriate steps to avoid positional asphyxia.

In 2004, the United States Court of Appeal for the 11th Circuit overturned the trial court's decision in *Garrett.*

Failure to Have a Policy

Over the years there have been some law enforcement legal advisors that have taken the position that the less policy an agency has, the less there is for a plaintiff to use to try to hold the agency accountable. In the current state of civil rights litigation, an agency's failure to have policies covering high-risk/critical tasks may be viewed as evidence that the agency is deliberately indifferent to the rights of citizens.

Solis v. City of Columbus,[3] provides an example of potential agency liability for the failure to have a policy in place that will protect the rights of citizens in their homes. *Solis* involved the execution of a search warrant by a SWAT team following an investigation conducted by Detective Cox.

Detective Cox was working with an informant who provided information regarding the whereabouts of stolen goods taken in several home invasions. According to the informant, the suspect, Walker, was storing some of the stolen goods in his home located at 123 Avondale Ave. in Columbus and was storing some of the stolen goods at the home of a friend who lived in a house directly behind Walker's. The informant did not know the address of Walker's friend's house and the detectives did not want to drive by to get the address for fear of spooking the suspect. Prior to getting a warrant, the SWAT team

[3] *Solis v. City of Columbus,* 319 F.Supp. 2d 797 (S.D. Ohio 2004).

scouted the location and informed Detective Cox, that the house described by the informant was located at 120 Avondale Ave. The informant had told the detective that Walker always carried a Ruger handgun thus, leading to the decision to use the SWAT team.

On the day the search warrant was executed, Detective Cox observed the SWAT team lined up and realized they may have the wrong house. The SWAT team conducted a dynamic entry in executing the no-knock search warrant, complete with a flash-bang. Carmen Solis, age 12 was home with her mom, Nicole Solis, who was 8 ½ months pregnant. It was alleged that the officers "held guns to Nicole and Carmen Solis's heads, forced them to the ground, handcuffed them, and subjected them to verbal abuse. The mother and daughter were kept in handcuffs for 45 minutes.

In analyzing the claims against the city, the court rejected the plaintiffs' contention that the City is constitutionally required to have a policy that demands, in all instances, personal visual verification of a search warrant address by the officer in charge of an investigation. The current written policy regarding verification of search warrant addresses requires a supervisor to review a search warrant prior to its submission to the court to 'insure the location listed on the warrant is correct'" The court then went on to assert that this was not simply a run of the mill search warrant execution. This was a **no-knock warrant utilizing a SWAT team**, the most intrusive type of home entry that police conduct. The court continued: "The City clearly was on notice that officers going to the wrong address is a recurring problem in the execution of search warrants, particularly no-knock search warrants." The court cited cases and other publication of police executing no-knock warrants at wrong locations.

The court concluded: "When such an important right is at issue as the right to be secure in one's home from an unannounced, forcible official entry and search, and when there is such a potential for mistakes—mistakes, as illustrated above, that so readily can have tragic consequences—then a municipality is required to exercise more than usual care." Thus, in the **case of no-knock warrants, the city should have a policy in place to ensure that the police are entering the correct address, "the court has no problem in concluding that a jury could find the City to have been deliberately indifferent to the rights of its inhabitants by failing to have such a policy."**

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The court's conclusion distinguishes no-knock warrants from all others and determined that a city, town or county could be liable for failing to have a policy in place that ensures that the police are entering the correct address.

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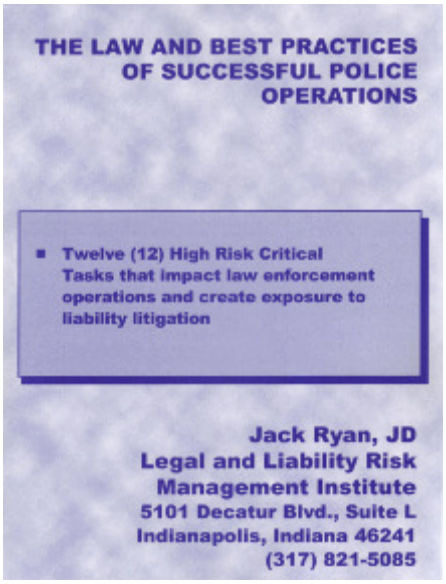

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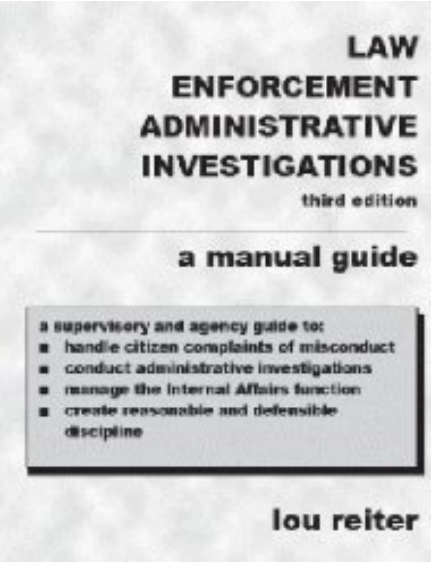

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Sexual Misconduct

Failure to Train &
Failure to Supervise

Article 3 of 4

By Jack Ryan, J.D.
with contributions by: Lou Reiter

The Second Brass Ring-Failure to Train

Police agencies have an obligation to train its police officers for the recurring tasks that officers will face during their career. Where it is foreseeable that a police officer will face a particular task that may result in harm to another person, the officer's agency must provide training in how to conduct that task in a manner which is consistent with generally accepted practices in law enforcement. What is "generally accepted" is defined by the law enforcement profession and by court decisions analyzing police conduct.

Training serves as a means toward high-level performance by police officers. Training is an input toward proper performance. Unfortunately, many agencies conduct training to avoid, or in response to civil liability rather than to promote high-level performance. Over the past two decades, attacks on training have become one of the weapons for persons who file lawsuits against the police.

The foundation case on failure to train is *City of Canton v Harris.*[1] Geraldine Harris was arrested by the Canton Police and brought to lock-up. During the booking process she fell to the floor several times. When asked if she needed medical assistance, she responded incoherently. No medical attention was ever summoned for her. Following her release, relatives brought her to the hospital where she was treated for several emotional ailments.

[1] *City of Canton v Harris,* 489 U.S. 378 (1989).

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During the trial on Harris' claims, evidence was established that shift commanders had the sole discretion to determine whether or not a detainee needed medical attention. It was further established that the shift commanders were given no training to assist them in making these medical evaluations. Harris prevailed on her claim at the trial court level, but the United States Court of Appeals for the 6th Circuit vacated the finding against the city because of the jury instructions. The 6th Circuit would have applied a standard of recklessness, intentional or gross negligence.

The United States Supreme Court held that "a municipality may be held liable under § 1983 for violations of rights guaranteed by the Federal Constitution, which violations result from the municipality's failure to adequately train its employees, only if that failure reflects a **DELIBERATE INDIFFERENCE** on the part of the municipality to the constitutional rights of its inhabitants.

It should be noted that failure to train cases can be established in two ways. The first involves a lack of training in an area where there is a patently obvious need for training, for example an officer who is untrained in deadly force unreasonably shoots someone. The second method of establishing a failure to train by an agency is to establish a pattern of conduct by officers that would put the final policymaker on notice and the policymaker failed to respond with training.

Certain forms of conduct are beyond the reach of failure to train. For example, in *Walker v. City of New York,* a plaintiff who spent nineteen years in jail for a crime he did not commit brought a failure to train claim based on the department's failure to train its officers not to commit perjury.[2] Walker's wrongful conviction was based upon perjured testimony by a police officer. The United States Court of Appeal for the 2nd Circuit held: "*If the conduct on which the claim is based is such that a common person would know the right response without training, there is no duty to train."* The court, in its decision provided a three-part analysis for determining when a duty to train is established:

- Plaintiff has to show that a policy maker knows to a moral certainty that his or her employees will confront a given situation.

[2] *Walker v. City of New York,* 974 F.2d 293 (2d Cir. 1992).

- The plaintiff must show that the situation either presents the employee with a difficult choice of the sort that training or supervision will make less difficult or that there is a history of employees mishandling the situation.

- The plaintiff must show that the wrong choice by the city employee will frequently cause the deprivation of a citizen's constitutional rights.

When considering the areas of training that must be covered, an agency can simply apply this three-part test. For example, does the chief know to a moral certainty that officers may face deadly force situations? Second, is deadly force a situation that presents officers with a difficult choice of the sort that training or supervision would make easier? Finally, if an officer makes the wrong choice in a deadly force situation, is it likely to lead to a constitutional violation?

A case from the United States Court of Appeals for the 10th Circuit involved injuries suffered by a quadriplegic during a car stop.[3] Clarence Paul, a partial quadriplegic was riding as a passenger in Lloyd Gildon's auto. Gildon's wife had reported the vehicle stolen. Officer Gilpatrick of the Altus, Oklahoma Police Department stopped the vehicle. During the stop, the officer ordered Paul out of the vehicle. Paul responded that he was paralyzed and unable to get out. The officer then allegedly chambered a round into his shotgun. Paul then rolled down the window and again informed the officer that he was paralyzed and could not get out of the car.

Paul testified that two officers grabbed him by the neck and pulled him from the vehicle. Officer Gilpatrick placed his knee on Paul's neck and back while he handcuffed him. During this ordeal Clarence Paul urinated on himself and became unconscious. He asked the officers to call him an ambulance. Paul was taken to the hospital where it was determined that his neck was fractured and his hip was sprained. Paul filed a lawsuit alleging that the police department improperly trained officers to place their knees on suspect's neck while handcuffing them. The city introduced training materials from the Council of Law Enforcement Educational Training that specifically included instructions not to place a knee on a suspect's neck "for

[3] See, *Paul v. City of Altus,* No. 96-6376 (10th Cir. 1998).

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obvious medical reasons." The city took the position that if Officer Gilpatrick did put his knee on Paul's neck he acted in violation of this training.

The court refused to grant the city's request for summary judgment after reviewing an incident report left by one of the officers at the scene. The report asserted: "Gilpatrick then brought the subjects (sic) right arm around the middle of his back and had his knee on the subject's neck. The way we're instructed to handcuff in the felony prone position." The court concluded that there was an issue of fact as to what the officers were actually trained to do. Thus, from an agency liability standpoint the entire case rests on what the officer was trained; was he trained as stated in the report? Or, was he trained in accord with the CLEET lesson plan?

This case also provides a good example of why training must be documented at two levels, first, what was trained; second, who was trained. At trial in cases like this, the agency and its trainers may be in an adverse position to the officer since the agency and its trainers will not be liable if it can be shown that the officer acted inconsistently with documented training.

The Third Brass Ring-Failure to Supervise

Shaw v. Stroud is one of the most cited cases on liability imposed for failure to supervise.[4] On February 27, 1990, Officer Morris, a seven-year veteran of the North Carolina Highway Patrol stopped Sidney Bowen, a 42 year-old black man as he pulled into his driveway, on suspicion of driving while impaired. At the officer's request, Bowen presented his license and sat in the patrol car. As the officer reached for his ticket book Bowen ran off. Bowen fell to the ground and Morris caught him. Meanwhile Bowen's wife and daughter watched from the front porch as Bowen shouted to them that he was going to jail. As they neared the patrol car, Bowen shouted to his daughter to get help, "the law is trying to kill me in my own front yard." Morris called for back-up and as he put the microphone down Bowen pulled away. Morris began striking Bowen in the head and shoulders with his flashlight. Bowen fell to the ground but struggled back up and grabbed for the flashlight. Morris let go of the flashlight, backed up and shot Bowen. Bowen again swung at Morris, at which point Morris backed up further and fired at Bowen until he fell to the ground. Morris' version of these events was different, in that he indicated that he fired after Bowen took his flashlight off him, hit him once and was poised to strike him in the head a second time.

[4] *Shaw v. Stroud,* 13 F.3d 791 (4th Cir. 1994).

Sergeant Stroud was Morris's supervisor from the time Morris was hired in 1983 until late November of 1988 approximately 15 months prior to the shooting. "During his tenure as Morris' supervisor, Stroud received reports about Morris' use of excessive force." The court cited to several incidents where allegations of excessive force came to Stroud's attention and he failed to take any action. In addition "Morris instituted a disproportionately high number of assault charges against arrestees. From September 1987 to December 1988, during Stroud's tenure, six of the nine charges of assault on a law enforcement officer in Columbus County, North Carolina were brought by Morris. There were forty-six charges for resisting arrest, twenty of which were initiated by Morris. From 1984 to 1990, thirteen people arrested by Morris alleged that he used excessive force."

In December of 1988, Sergeant Smith became Morris' supervisor. He knew nothing of Morris' history and was not informed of his history by Stroud. In May of 1989, a judge brought Morris' activities to the attention of a Sergeant White, informing White that he had observed numerous occasions that appeared to involve Morris' use of excessive force. The judge further reported that these incidents seemed to involve black suspects and persons of the lower socio-economic class. White brought this complaint to Smith's attention and it was decided to closely monitor Morris. Smith rode with Morris on at least two occasions.

The complaints continued. One involved a defense attorney who complained about the treatment of a client during a drunken driving arrest. Smith sent a line sergeant to the trial for drunk driving; however, no evidence of improper conduct was brought forward. The fire chief complained that Morris was rude to him at an accident scene; Smith counseled him. Three weeks before Bowens' death Morris had to take a drunk driver to the hospital because of fractured skull incurred during the course of the arrest. Although the arrested man complained that Morris had struck him in the head with his gun, there is no indication that the man made this clear to Smith, who had responded to the hospital.

In analyzing the claim made against the supervisors for failing to supervise Morris, the court began by pointing out:

"The principle is firmly entrenched that supervisory officials may be held liable in certain circumstances for the constitutional injuries inflicted by their subordinates… Recognizing that supervisory liability can extend to the highest levels of state government, we have noted that liability is ultimately

determined by pinpointing the persons in the decision-making chain whose deliberate indifference permitted the constitutional abuses to continue unchecked."

The court identified the elements necessary to establish supervisory liability under §1983 as follows:

"(1) that the supervisor had actual or constructive knowledge that his subordinate was engaged in conduct that posed 'a pervasive and unreasonable risk' of constitutional injury to citizens like the plaintiff; (2) that the supervisor's response to that knowledge was so inadequate as to show 'deliberate indifference to or tacit authorization of the alleged offensive practices,' and (3) that there was an 'affirmative causal link' between the supervisor's inaction and the particular constitutional injury suffered by the plaintiff."

The court found that Stroud had knowledge of Morris' conduct and was deliberately indifferent to that conduct. Notwithstanding the fifteen month gap between the shooting and Stroud's supervision of Morris, the court concluded that "*Bowen's death was a natural and foreseeable consequence of Stroud's failure to investigate, or even to address, the pervasive violent propensities of one of his officers. Because Stroud was aware of Morris' frequent use of excessive force, it follows that he knew that Morris' unchecked service on the force posed a constant and dangerous threat to the welfare of arrestees."*

In dealing with Smith, the court found that the actions taken by Smith, while maybe not being the most effective, were sufficient to overcome deliberate indifference or tacit authorization on his part. The court cited Smith's two ride-alongs with Morris and his assignment of a line sergeant to attend court on a case where it was alleged that Morris had committed improper conduct. Smith's conduct was negligent and possibly grossly negligent, but it was not deliberately indifferent. The court granted summary judgment to Smith.

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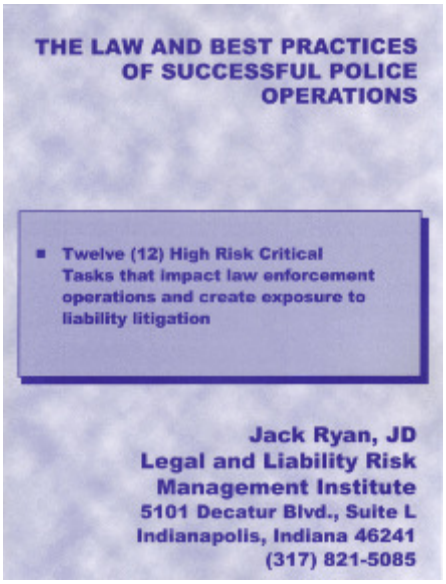

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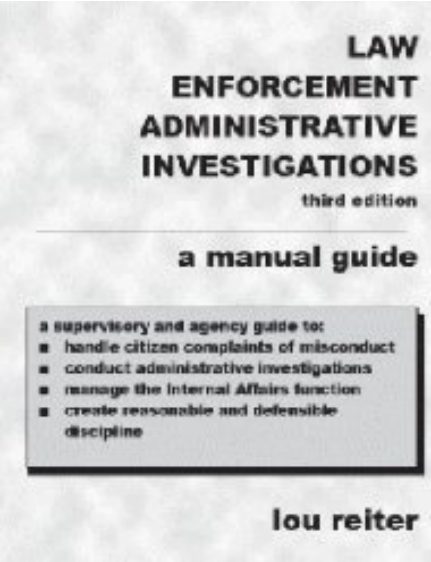

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Sexual Misconduct

The Need for Policy and Training

Article 4 of 4

By Jack Ryan, J.D.
with contributions by: Lou Reiter

The Need for Policy and Training

Utilizing the *Walker* formula previously cited: Does the policy-maker and/or trainer know to a moral certainty that officers will face situations that may involve sexual harassment, discrimination or misconduct in the law enforcement profession? Would an officer be better equipped to deal with these situations if trained and directed by policy? Is there likely to be an injury (legal, psychological, or physical) if the officer makes the wrong choice?

Are we on notice?

Consider some cases:

Lewis v. City of Jacksonville[1]

"This lawsuit originates from allegations that Defendant Larry Pugh sexually assaulted Plaintiff Evelyn Lewis in March of 2005, during a time when Defendant Pugh was a police officer for the City of Jacksonville, Texas.

Plaintiff Lewis alleges that Pugh offered her a ride while she was walking home from a friend's house early in the morning sometime in March 2005. Pugh was in uniform, was armed with a gun, and was driving a City of Jacksonville police car at the time. Lewis accepted the ride and Defendant Pugh took Lewis to an abandoned trailer house and raped her. Lewis

[1] *Lewis v. City of Jacksonville,* 2007 U.S. Dist. LEXIS 34754 (E. Dist Texas 2007)

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indicates that she was afraid Pugh would shoot her if she resisted. Lewis states that she never had consensual sex with Pugh and did not want to have sex with him.

Plaintiff indicates that she called Jacksonville Police Detective Tonya Harris the next day but was unable to reach her. Lewis eventually spoke on the phone with Jacksonville Assistant Police Chief John Page and told him what had happened. Assistant Chief Page asked to speak with Lewis in person, but Lewis said she would rather talk to Detective Harris. Lewis states that she spoke with Detective Harris during the next day or two and told Detective Harris what Officer Pugh had done to her. According to Lewis's Declaration, Detective Harris "felt like the City of Jacksonville knew something bad about Pugh before he raped me." Harris further indicated that "they had a suspicion" and wanted Lewis to "wear a wire." Lewis does not indicate whether she ever did "wear a wire."

Sometime later, Lewis spoke with Joe Evans, an investigator for the Cherokee County District Attorney who was not affiliated with the City of Jacksonville, and told Investigator Evans what Pugh had done to her. About a month-and-a-half to two months later, in October 2005, Lewis gave Investigator Evans a written statement. Lewis also spoke with the FBI shortly after her visit with Evans.

On October 21, 2005, within a day or two of Lewis's written statement to Investigator Evans, Defendant Pugh was placed on suspension by Defendant former Police Chief Mark Johnson. Former Police Chief Johnson fired Pugh on February 8, 2006, after being notified that Pugh had been arrested on charges of sexual assault.

Lewis also alleges that Defendant Pugh assaulted her on August 9, 2006, after Pugh was no longer a police officer.

In her suit, Plaintiff Lewis brings claims against Defendant Pugh for deprivation of rights under color of law pursuant to *42 U.S.C. § 1983*, and for state assault and battery claims arising from the August 9, 2006 incident. Plaintiff Lewis also asserts claims against the City of Jacksonville and former Police Chief Johnson (collectively "Defendants") under *42 U.S.C. § 1983* for their failure to supervise Officer Pugh, their deficient hiring and retention of Pugh, and their toleration of a custom of police misconduct.

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Defendants City of Jacksonville and former Police Chief Johnson move for summary judgment on the grounds that there is no evidence to support a cause of action against the City of Jacksonville and former Police Chief Johnson for municipal or supervisory liability under *42 U.S.C. § 1983*…

Plaintiff argues that several incidents involving Officer Pugh that occurred both before and after the alleged March 2005 sexual assault are sufficient to prove deliberate indifference on the part of the City and Chief Johnson. These incidents occurred from October 2004 through October 2005. The first incident involving Pugh occurred on October 22, 2004 at the "Tomato Bowl," a football stadium in Jacksonville. On that occasion, Jacksonville police officers including Officer Pugh allegedly used excessive force when arresting several individuals during an incident following a high school football game. Following this incident, several of the alleged victims attended a community meeting that was attended by Police Chief Johnson and voiced complaints that Jacksonville police officers had used excessive force during arrests at the Tomato Bowl incident. Several victims of that incident also attended a Jacksonville City Council meeting where they voiced similar complaints. There were no allegations of sexual misconduct related to the October 22, 2004 Tomato Bowl incident.

In the second incident, Officer Pugh allegedly used excessive force and made an unlawful arrest of an individual following a traffic stop in October 2005. This event occurred approximately six months after the Plaintiff alleges she was raped, and no allegation of sexual misconduct was made in relation to the October 2005 incident.

In addition to these two allegations of excessive force, there is evidence that Officer Pugh may have engaged in other instances of sexual misconduct with other individuals while on duty. There is no evidence, however, as to *when* these other events occurred. More importantly, however, the Plaintiff's evidence indicates that the City of Jacksonville and former Police Chief Johnson were not made aware of any incidents of sexual misconduct involving Pugh until June of 2005, at least two months after Pugh is alleged to have raped Plaintiff.

Plaintiff also produces evidence that the City of Jacksonville hired a consultant in the spring or summer of 2005 to assess the Jacksonville police department and recommend changes or improvements. After the consultant had completed his review, the consultant recommended to the City Council that the police department implement several procedural reforms, including

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use of accountability programs, dated log sheets, and additional management and training programs for all members of the department. There is no evidence that the consultant knew of or made recommendations based on any knowledge of alleged sexual misconduct by City of Jacksonville police officers during his 2005 assessment. The consultant reviewed the Jacksonville police department again in April 2006 and recommended at that time that the City fire or demote Chief Johnson. Chief Johnson was suspended prior to his retirement in 2006. Chief Johnson was told he was suspended because of his failure to properly supervise the police department.

Based on the foregoing, the Court concludes that there is no genuine issue of material fact as to Plaintiff's claim that the Defendants' were deliberately indifferent in their training or supervision of Officer Pugh. Plaintiff has produced no evidence that demonstrates a pattern of similar sexual offenses by Pugh prior to March of 2005 that would support a finding that the Defendants deliberately ignored a risk that Pugh might engage in sexual misconduct while on duty. The evidence indicates that Plaintiff's March 2005 complaint of sexual misconduct was the *first* complaint of its type received by the police department. Though citizens had made prior allegations of *excessive force,* a municipality or supervisor must have notice of a pattern of *similar* violations and the officer's prior conduct must actually "point to the specific violation in question." *Davis, 406 F.3d at 383.*"

The court concluded that plaintiff could not establish the requisite proof to grab one of the brass rings necessary to put the agency on the hook.

Doe and Roe v. City of Dalles[2]

"On May 25, 1999, plaintiff was ordered committed to a Youth Corrections Facility and placed in the legal custody of the Oregon Youth Authority. He was then released from the custody of the Oregon Youth Authority in mid or early November, 2000.

Within a matter of days following his release, plaintiff began talking with defendant Kirk, who was a police officer for the City of The Dalles at the time.

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[2] *Doe and Roe v. City of Dalles,* 2004 U.S. Dist. LEXIS 10780 (Dist. Oregon 2004).

Roe and Kirk met with each other and began playing video games and lifting weights together.

On several occasions, plaintiff drank alcohol at Kirk's house. On one of these occasions, Kirk placed Roe's feet on his lap and began rubbing them.

At some point between plaintiff's release and December 22 or 23, 2000, Roe and Kirk traveled to Portland together to pick up a motorcycle.

On another occasion, Roe, while at Kirk's residence, communicated with a woman via the internet. Roe exchanged photographs with the woman over the internet, including pictures of himself taken by Kirk. In one of the photos, Roe was unclothed.

Roe testified in his deposition that he was provided alcohol by Kirk and that he was sexually assaulted by Kirk at Kirk's residence within a day or two of Christmas Eve, 2000. Roe also testified that he had no further contact with Kirk after the incident.

On January 9, 2001, Chief Waterbury issued a written warning to defendant Kirk, based on reports that Kirk had served alcohol to Roe.

On April 16, 2001, Chief Waterbury spoke with plaintiff's mother regarding the allegations against Kirk. Plaintiff's mother informed Chief Waterbury that Kirk had supplied alcohol to plaintiff on several occasions and that Kirk had taken pictures of her son without his clothes on.

On April 18, 2001, Chief Waterbury interviewed Kirk regarding the allegations. Chief Waterbury suspended Kirk the same day. Afterwards, The Dalles Police Department commenced an internal investigation of Kirk based on the allegations against him.

On April 25, 2001, after learning from Chief Waterbury that he would be terminated, Kirk resigned from his position with The Dalles Police Department.

On July 17, 2002, Kirk pleaded guilty to the crimes of Harassment, Sex Abuse III, and Official Misconduct for his conduct toward Roe.

In addition to the events surrounding the alleged abuse of plaintiff Roe, The Dalles Police Department has had several other incidents involving officers giving alcohol to minors and incidents of sexual misconduct by its officers. Throughout the 1990s, officials within The Dalles Police Department were aware of the fact that several officers were spending significant amounts

of time alone with minors and that the officers had allowed certain minors to become part of their personal lives. The Dalles Police Department received complaints from parents during this time period.

Several police officers, including defendant Kirk, were involved in the Explorer Scouts Program, which was run jointly by several entities including the City of The Dalles through The Dalles Police Department and the Boy Scouts of America. Through the Explorer Scouts Program, Scouts learned about law enforcement. Plaintiff Roe was not an Explorer Scout.

In 1992 or 1993, the Police Department learned of inappropriate sexual contact by police officer David Webb with a minor female Explorer Scout. Webb's employment was terminated on April 6, 1993. He later pleaded guilty and was convicted of Attempted Contributing to the Sexual Delinquency of a Minor.

In 1995, The Dalles Police Sergeant James Tannehill initiated a relationship with "T.R.," a minor male Explorer Scout. Sergeant Tannehill gave T.R. alcohol and ultimately had sexual relations with him. The relationship continued until sometime in 1996 or early 1997. Tannehill pleaded guilty and was convicted of child sexual abuse charges."

In examining the potential agency and supervisory liability the court asserted:

"A municipality cannot be liable under a *respondeat superior* theory for the acts of its employees under *42 U.S.C. § 1983*. *Gibson v. County of Washoe, 290 F.3d 1175, 1185 (9th Cir. 2002)*. It is only "when execution of a government's policy or custom, whether made by its lawmakers or by those whose edicts or acts may fairly be said to represent official policy, inflicts the injury that the government as an entity is responsible under *§ 1983*." *Monell v. Department of Social Servs. of New York City, 436 U.S. 658, 694, 56 L. Ed. 2d 611, 98 S. Ct. 2018 (1978)*. A plaintiff may establish local governmental liability by showing that: (1) a governmental employee committed the alleged constitutional violation pursuant to a formal governmental policy or a "longstanding practice or custom which constitutes the 'standard operating procedure' of the local governmental entity"; (2) the individual who committed the constitutional tort was an official with "'final policy-making authority' and that the challenged action itself thus constituted an act of official governmental policy"; or (3) "an official with final policy-making authority ratified a subordinate's unconstitutional decision or action

and the basis for it." *Gillette v. Delmore, 979 F.2d 1342, 1346-47 (9th Cir. 1992)*, cert denied, *510 U.S. 932, 126 L. Ed. 2d 310, 114 S. Ct. 345 (1993)* (internal citations omitted).

A supervisor may be liable under *section 1983* if a plaintiff can establish three elements:

(1) that the supervisor had actual or constructive knowledge that his subordinate was engaged in conduct that posed a pervasive and unreasonable risk of constitutional injury to citizens like the plaintiff;
(2) that the supervisor's response to that knowledge was so inadequate as to show deliberate indifference to or tacit authorization of the alleged offensive practices; and
(3) that there was an affirmative causal link between the supervisor's inaction and the particular constitutional injury suffered by the plaintiff.

Plaintiff contends that the City had an informal custom or practice of disregarding complaints of its police officers engaging in inappropriate behavior with minors. I acknowledge the City's argument that Webb, Tannehill, and Kirk were all disciplined and ultimately lost their jobs because of their conduct. However, I find that significant questions of fact exist as to the timing of these incidents, and specifically, when and if policy level officials gained knowledge of alcohol and sex abuse that appeared prevalent in the police officers' interactions with minors. Evidence of the officials' knowledge of any specific threat to Roe is quite slim, but I cannot say that no reasonable jury would find based on all of the evidence, including evidence of reports of similar misconduct of other officers around the same time, that the City and Waterbury had knowledge or acted with the requisite deliberate indifference toward Roe. Plaintiff may establish liability by showing that through *omissions* the City is responsible for the alleged constitutional violations. *Gibson, 290 F.3d at 1186*. This will be a heavy burden for plaintiff because he must show that the City's deliberate indifference led to its omissions and that the omissions caused the employee to commit the constitutional violation. *Id.;* however, I am not prepared to rule on a motion for summary judgment that plaintiff will be unable to carry this burden. Defendants' motion for summary judgment against the *section 1983* claim is denied."

Thus, the court concluded that this plaintiff could take their case to the jury against the agency and supervisors alleging a custom and practice of allowing sex with minors.

Jacob v. City of Osceola[3]

"Kenig was a police officer for Osceola. He worked for Osceola on a part-time basis beginning in September 2003, but he became a full-time officer a month later in October. Osceola terminated Kenig's employment on August 17, 2004. Kenig was Osceola's only full-time police officer during the relevant time period and he usually worked the night shift, getting off work at about 3:00 or 4:00 a.m.

Prior to hiring Kenig, Booker obtained a criminal background check on Kenig, which did not reveal any reason not to hire him. Booker also spoke with two of Kenig's former employers: the City of Holden Police Department and Ronald Snodgrass ("Snodgrass"), who was the Sheriff of St. Clair County. The Holden Police Department did not discourage Booker from hiring Kenig.

When Booker contacted Snodgrass about Kenig, Kenig was employed at the St. Clair County's Sheriff's Department and he was applying for the position with Osceola. Snodgrass told Booker that Kenig did not meet the county's standards for becoming a road deputy who patrolled the county alone. Snodgrass told Booker that Kenig would be fine as a city officer because he would be confined to the city limits area, but that he did not believe Kenig could be an officer without boundaries. Booker did not ask Snodgrass about the county's standards for its deputies or why Kenig did not meet those standards, primarily because Snodgrass participated in the decision to hire Kenig in Osceola.

Because Osceola did not have a chief of police and because Booker had no law enforcement training, Booker asked Snodgrass to sit in on the interviews for candidates for the Osceola position, even though Snodgrass was affiliated with St. Clair County and not Osceola. Kenig interviewed for the position and Snodgrass participated in the interview and the hiring decision. Snodgrass did not object to hiring Kenig to be an officer in Osceola and he never conveyed any basis for not hiring Kenig to Booker.

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[3] *Jacob v. City of Osceola,* 2006 U.S. Dist. LEXIS 26232 (W. Dist. Missouri 2006).

Osceola terminated Kenig's employment on August 17, 2004, because he provided alcohol to a minor and for brandishing his weapon during a dispute. Kenig pleaded guilty to providing alcohol to a minor in early 2005.

During the relevant time period, Osceola had an employee manual that prohibited sexual harassment. *See* Def. Ex. 9 [Doc. # 50] at § 6(A). During his deposition, Kenig admitted that during his police training he learned that sexual comments and sexual advances were inappropriate and that they violated citizens' constitutional rights. *See* Def. Ex. 11 [Doc. # 50] at 95:11-25.

B. Kenig's Assault on Crystal Jacob

For purposes of evaluating Defendants' Motion, the Court will assume that Jacob's allegations are true.

Jacob was home alone at her house in Osceola on July 13, 2004. Between 2:00 p.m. and 5:00 p.m. that afternoon, she called the Osceola Police because she was afraid her estranged husband would return to the home. Kenig responded to the call and stayed about thirty minutes at the home. When he left, he made a statement about Jacob inviting him back [*5] for dinner later.

Later that evening, Jacob called the Osceola Police Department around 9:00 p.m., and Kenig responded to the call. Jacob called again because her estranged husband had alleged that Jacob's friends were breaking into their home to steal things. When Kenig arrived, Jacob met him at the front porch. Kenig said he would stay until the situation was resolved. Kenig stayed for approximately two hours and he followed her around the house. Jacob stated that Kenig made her uncomfortable because he was following her too closely and making sexual comments, but she could not remember exactly what his comments were.

Later in the evening, Kenig and Jacob were on her back porch. Kenig discussed his divorce and his girlfriend and he talked about how he liked to be with other women. Kenig asked Jacob to have sex with him and she declined. Jacob did not ask Kenig to leave because she was afraid of being alone. At some point, Kenig reached over and touched Jacob's breast. She ended the conversation and told Kenig to leave. Kenig told Jacob, "Why don't you get into something more comfortable" and Jacob again told him to leave.

Kenig walked toward Jacob's front door and she went to her bedroom to change clothes to get ready for bed. Kenig returned down the hallway and he could see into Jacob's bedroom. Jacob was naked from the waist down and she jumped into her bathroom so Kenig could not see her. Kenig apologized and Jacob again told him to leave. When Jacob came out of the bathroom, she saw that Kenig had unzipped his pants and he was exposing his penis to her. Kenig stated, "I've seen yours and now you've seen mine." Jacob told him to leave and Kenig re-zipped his pants.

Jacob started to leave the bedroom to escort Kenig to the front door. Kenig pulled her back into the room. Kenig reached around Jacob's waist and over her shoulder and put one hand down her pants to fondle her vagina and the other hand under her shirt to fondle her breast. Kenig prevented Jacob from moving her arms as he fondled her.

Jacob pulled away as Kenig was kissing her neck and she asked him what he was doing. Kenig responded, "Well, you said you didn't want to have sex tonight." Jacob again told Kenig to leave and he did.

Kenig was subsequently fired by Osceola in August 2004, but not because of the incident with Jacob. Jacob did not report Kenig's conduct to Booker or Osceola, although she did tell another officer about what Kenig did after Kenig was terminated.

C. Other Complaints About Kenig

1. Jessica Miller

Jessica Miller ("Miller") alleged that in March 2004, Kenig responded to a call at the city park in Osceola. Miller alleged that, against her will, Kenig unzipped her pants and fondled her vagina. Miller told Kenig to stop and he did. Shortly thereafter, Miller alleged that Kenig responded to a call at her home and he suggested that he come back later to help her change into her pajamas.

a. Miller's Complaint to Sharon Brunson

In a declaration submitted with Plaintiff's Opposition to Defendants' Motion, Miller stated that she told Sharon Brunson ("Brunson") about the park incident with Kenig. Brunson was a member of the Osceola Board of Aldermen at the time. According to Miller, Brunson wrote down the information and told her she would follow up with her about it.

In an initial statement, Miller stated that she reported Kenig's conduct "shortly thereafter." *See* Miller Declaration [Doc. # 52] dated January 2, 2006, at P4. Subsequently, Defendants procured their own statement from Miller which stated, "I don't remember when I told [Brunson] about the incident with [Kenig]. It could have been after July 14, 2004." *See* Defendants' Reply [Doc. # 56] at Ex. A dated January 17, 2006. Jacob obtained another statement from Miller, which stated,

> *After thinking about it I am certain that it happened in the spring around March 2004 (when Kenig unzipped my pants) and I told [Brunson] within a few weeks after it happened about him unzipping my pants. [Brunson] knew who I was from coming in the store that's why I felt comfortable talking to her.*

See Miller's Statement [Doc. # 59-2] dated January 27, 2006. [2]

2 Initially, the Court did not allow Jacob to submit Miller's Third Declaration dated January 27, 2006. *See* Order [Doc. # 60] However, in the interest of considering all of the available evidence, the Court will vacate its Order and consider Miller's Third Declaration. Accordingly, the Court will grant Plaintiff's Motion for Leave to File Jessica Miller's Third Declaration. [Doc. # 59]

Brunson [also executed a statement regarding when Miller told her about Kenig. According to Brunson's statement,

> *[Miller] explained to me that one evening when she had been drinking that [Kenig] had tried to kiss her and unzip her pants. She said that she believed she may have come on to him, and given him the wrong idea.*

Id. Regarding the timing, Brunson stated that she did not remember the date of the conversation with Miller. According to her, "It possibly occurred after July 14, 2004. It could have been sometime in the Fall of 2004." *Id.*

b. Miller's Complaint to Snodgrass

Miller also stated that she told Snodgrass about the incident with Kenig. Miller stated, "I also discussed the situation with [Snodgrass]. [Snodgrass] told me that he would report the information to [Booker]." *See See* Miller Declaration [Doc. # 52] dated January 2, 2006, at P5. Regarding her complaint to Snodgrass, Miller stated, "I don't remember exactly what I told [Snodgrass]. All I know is I made comments here and there when he came in

the store about the rude things that [Kenig] said to me." [3] *See* Defendants' Reply [Doc. # 56] at Ex. A dated January 17, 2006.

3 At the time, Miller worked in a grocery store in Osceola and Snodgrass would come into the store where she worked. *See* Snodgrass Dep. [Doc. # 52] at 58:6-17.

Snodgrass testified about Miller's complaint. Snodgrass could not recall exactly what Miller told him about Kenig. According to his best recollection, she complained that "Kenig had made some type of comment to her, and she just wanted me to know about it." *See* Snodgrass Dep. [Doc. # 52] at 59:18-20. Snodgrass believed the comments were probably inappropriate, although he could not recall exactly what they were. Snodgrass did not testify that Miller complained about Kenig touching her against her will or unzipping her pants at the park. Snodgrass's testimony focused solely on Miller's complaint about Kenig's inappropriate comments.

Snodgrass told Booker about Miller's complaint, but he did not give Booker her name because "she wanted nothing done about it." *Id.* at 63:10. Snodgrass testified that Miller did not want the comments investigated nor did she want her name relayed to Booker. Thus, he did not provide Miller's name to Booker and there is no evidence that Booker followed up on the information Snodgrass gave him.

There is no evidence regarding the timing of Miller's complaint to Snodgrass. In his deposition, Snodgrass simply testified that, "I think it was warm" when he talked to Miller about Kenig. *Id.* at 59:1. Snodgrass testified that Miller provided him with only one complaint regarding Kenig. *Id.* at 58:23.

2. Tammy Ryan

In March 2004, Tammy Ryan ("Ryan") called the Osceola Police Department to report child abuse at a neighbor's house and Kenig responded to the call. In response to a question from Ryan, Kenig responded "twelve inches." Later in the conversation, Ryan again tried to ask Kenig a question and he stated, "I think my answer was better." She responded, "What do you mean?" and he stated, "twelve inches, didn't your sister tell you?" *See* Ryan Dep. [Doc. # 52] at 13:23 to 15:23. Ryan interpreted Kenig's response as referring to the size of his penis because Ryan's sister had previously dated Kenig. *Id.*

A few days later, Kenig called Ryan at around 2:00 a.m. He told her that he was getting off work at 3:00 a.m. and he said, "You owe me. You want to come by my house and take care of what you owe me?" *Id.* at 16:16-25. Ryan hung up on Kenig and he called twice more within the next week and said the same thing. Again, Ryan interpreted Kenig's comments as being sexual.

Ryan continued to follow up with telephone calls about the child who was allegedly abused and she eventually contacted the Division of Family Services. In a subsequent telephone conversation, Kenig told her to he was "going to shoot her in the F'ing foot" if she did not stop calling about the child. *Id.* at 20:17 to 21:1.

Ryan contacted Booker and complained about Kenig's comments and his threat. Ryan would have spoken with Booker in March or April 2004 based on the timing set out in her deposition. Booker did not follow up with Ryan about her complaint.

3. Tara Scott

In June 2004, Tara Scott ("Scott") and her mother, Diana Morgan ("Morgan"), went to Booker's house to complain about Kenig. Earlier, Scott was walking home in the rain and Kenig offered her a ride home. According to Scott, Kenig "insisted" that she get in the car, but she refused. Morgan contacted Booker and told him that Scott was afraid of police officers and men in general because of her experience with men in the past. Morgan asked Booker to instruct Kenig not to offer Scott a ride or talk to her unless Scott requested it. Booker followed up with Kenig and he stated that he was only offering her a ride because it was raining. There is no evidence that Kenig made any sexual or inappropriate comments to Scott.

4. Vicky Raymond

It is unclear when Vicky Raymond ("Raymond") made a complaint about Kenig, but it was prior to his termination in August 2004. Raymond complained to Donna Hudson ("Hudson"), a member of the Osceola Board of Alderman, that Kenig had made an inappropriate comment to her when she was at the hospital. There is no evidence regarding the nature of the comment. Raymond submitted her complaint to Hudson who in turn notified the rest of the Board of Aldermen and Booker during a subsequent meeting. Booker contacted Raymond about her complaint and she denied that she

had a complaint or that there was a problem. *See* Booker Dep. [Doc. # 52] at 69:16 to 70:2. Booker did not specifically ask Raymond if Kenig's comment was sexual in nature, but she denied that she had any problem with him. Booker contacted Raymond the day after Hudson notified him of the problem.

4. Charlene Sommer

Charlene Sommer ("Sommer") alleged that Kenig tried to kiss her against her will and that he touched her breast while she was getting out of his vehicle. The incident occurred in August 2004. Sommer reported the incident to Booker.

5. Sac Osage Hospital Incident

Snodgrass testified that he heard a rumor that Kenig had touched a woman on the buttocks at the Sac Osage Hospital after he followed her into a nurse's station. *See* Snodgrass Dep. [Doc. # 52] at 31:19-24. Snodgrass stated that he did not receive the complaint and that "it came through a second party, and I cannot remember who the second party is. And I believe one of my deputies even also told me about the situation." *Id.* There is no evidence of when this occurred. Snodgrass reported the incident to Booker and Booker stated that he already had the information. *Id.* at 62:19 to 63:7.

6. Housing Incident

Snodgrass also testified that he heard about a complaint from an individual who lived in a housing unit in Osceola and an officer had allegedly touched her breast. *Id.* at 32:14-17. There is no name provided for the complainant nor is there any evidence about when this occurred. In fact, Snodgrass was not even sure that Kenig was the officer who allegedly committed the misconduct. *Id.* at 67-68. Snodgrass again classified this as a "rumor."

7. Theresa Temkey

Theresa Temkey ("Temkey") had contact with Kenig in June 2004. Kenig allegedly exposed his penis to Temkey and slid his nightstick up her nightgown. Temkey did not tell anyone about the incident with Kenig until May 2005.

D. Jacob's Complaint

In April 2005, Jacob filed a two-count Complaint against Defendants and Kenig. *See* Complaint [Doc. # 1]. The first count was filed under *42 U.S.C. § 1983* and alleged that Kenig violated Jacob's constitutional rights and the other Defendants were liable because they condoned a pattern of misconduct, provided inadequate training, and had inadequate hiring procedures. Jacob sued Booker and Kenig in both their individual and official capacities. *Id.* at P32. The second count was filed against Kenig only for battery. Defendants moved for summary judgment on Count I of Jacob's Complaint in its entirety."

Notwithstanding all of these events, the federal trial court ruled that the events were insufficient to put the city on notice of Kenig's propensities and thus, let the city out of the case.

Avoiding Deliberate Indifference

An agency can avoid entity liability through proper policy, training and supervision. Where officers respond in accordance with proper policy, training and supervision, the officer will also avoid individual liability. This, when dealing with sexual misconduct as well as harassment and discrimination, agencies must have a zero tolerance policy and validate that policy through training, supervision and enforcement.

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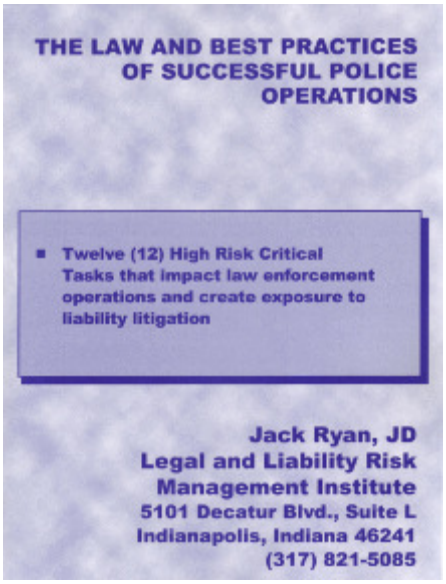

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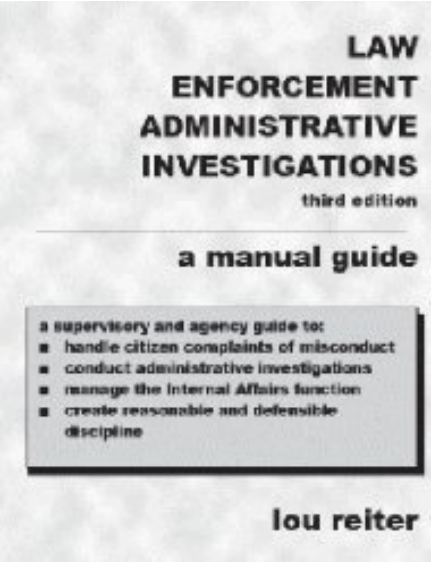

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A Rational Foundation for Use of Force Policy, Training and Assessment

John Klein

Ken Wallentine

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❖ Introduction

Law enforcement trainers and administrators have wrestled with the best approach to use of force training and post-incident analysis since the Supreme Court decided *Tennessee v. Garner*,[1] just over a quarter-century ago. In *Tennessee v. Garner*, the Court articulated the Fourth Amendment "objective reasonableness" standard as the proper assessment tool in reviewing police use of force.[2] As courts have refined the parameters of objective reasonableness and as the Supreme Court has reinforced its constitutional validity, police trainers have attempted to fashion a training model that enables officers to make proper use of force decisions.

A common framework for police use of force instruction is the force continuum, also referred to as a use of force ladder or use of force barometer. The force continuum often is presented as a linear, stair step, wheel or matrix force instructional model that pairs suspect action with defined police response.[3] Force continuum training has attracted much criticism, primarily due to its ill fit with evolving constitutional principles of use of force and lack of flexibility in incorporating the modern force tools available to officers.[4]

Many courts, including the United States Supreme Court, have expressed frustration at attempts to apply the "mechanical application" eschewed in *Graham v. Connor* [5] to police use of force analysis. Justice Scalia's majority opinion in *Scott v. Harris* acknowledged the seductive attraction for something like a mechanical continuum, while plainly renewing the Court's rejection of such analysis. "Although [an] attempt to craft an easy-to-apply legal test in the Fourth Amendment context is admirable, in the end we must still slosh our way through the factbound morass of 'reasonableness.' Whether or not [an officer's] actions constituted application of 'deadly force,' all that matters is whether the [officer's actions] were reasonable."[6] Justices Ginsburg and Breyer both joined the majority opinion, but penned individual

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[1] 471 U.S. 1 (1985).

[2] 471 U.S. 1, 7 (1985).

[3] For a brief history of force continua, *see* James Marker, *Teaching 4th Amendment-Based Use of Force*, 2112 (7) AELE Mo. L. J. 501; Doug Nicholson, *Use of Force Models: Comprehension or Confusion*, www.Articlesbase.com (accessed August 10, 2012).

[4] For critique of the frailties in various iterations of force continua, *see generally* Ken Wallentine, *The Risky Continuum: Abandoning the Use of Force Continuum to Enhance Risk Management*, The Municipal Lawyer, July 2009; John Bostain, *Training without Force Continuums: Learn to Love the Law*, CalibrePress.com Street Survival Newsline, Mar. 19, 2009; Dr. John Peters and Michael A. Brave, *Force Continuums: Are They Still Needed*, 22 Police & Security News 1, (Jan./Feb. 2006); John Bostain, *Use of Force: Are Continuums Still Necessary*, FLETC Journal, V. 4, No. 2, Fall 2006, 33,.

[5] 490 U.S. 386, 396 (1989), quoting *Bell v. Wolfish*, 441 U.S. 520, 559 (1979) ("The test of reasonableness under the Fourth Amendment is not capable of precise definition or mechanical application.").

[6] *Scott v. Harris*, 550 U.S. 372, 383 (2007).

concurring opinions to emphasize their view that plug-and-play analysis of force by police is inconsistent with the Constitution.[7]

The authors acknowledge the manifold criticisms of the force continuum approach. They propose a shift in the discussion to consideration of where law enforcement is with use of force policy and training, whether we are we where we should be to be consistent with best practices and current constitutional analysis, and, if not, what should we do to begin moving in that direction. The authors offer a model for policy and training that is consistent with keeping officers on the street as safe as possible through the best training possible, what we know about human performance factors and with the law of the Fourth Amendment and with what the community expects from its police.

I. Defining the Dialogue

Use of force training does not exist in isolation. To be effective, it should be both tethered to policy founded on the constitutional authority and framework under which police are granted authority to operate and linked to community expectations of the police. It must also be constructed with the goal of providing the safest force options for the officer and those he or she contacts. Courts acknowledge and must accommodate the "tense, uncertain, and rapidly-evolving" situations in which officers must use force.[8] Police officers need policy and training that acknowledges those same realities and that equips them to effectively manage resistance in an appropriate manner, particularly in light of the present day reality where scrutiny of police work is commonplace. Foremost, we urge a dialogue that begins with the understanding that police operate in a far more complex world, with much greater accountability and in the face of more asymmetrical threats than ever before.

Critics of use of force training premised upon constitutional law and not shackled to a stimulus/response model note that there is no consensus-based national policy or training model governing police use of force.[9] They suggest that the force continuum should form the basis of a universally applicable model for use of force training and decisions. The United States Supreme Court has interpreted the United States Constitution to provide a national standard for police use of force. The standard is evident in the Fourth Amendment. However, the Supreme Court has never ventured into a discussion of how to train police officers to operate within that standard. One need only read *Graham v. Connor* to recognize the Court's clear statement of the law on judging use of force by police.

The relationship between the United States Constitution to police policy, training, practice and assessment should not be minimized by calling a Constitution-based system as "just be reasonable."[10] To do so denies the state to which law enforcement has evolved. A linear barometer may have been acceptable four decades ago, prior to the Supreme Court's shift in force constitutionality analysis from the Fourteenth Amendment to the Fourth Amendment.[11] But as others have effectively argued elsewhere, such an approach does not reflect the times and culture of accountability in which police work today.

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[7] *Id.*, 550 U.S. at 386-387.

[8] *Graham v. Connor*, 490 U.S. 386, 396 (1989), quoting *Bell v. Wolfish*, 441 U.S. 520, 559 (1979).

[9] Martin Kaste, *Police Say They Aimed For Restraint With Protesters*, NPR, December 26, 2011 (accessed August 10, 2012), interview with Associate Professor Lorie Fridell.

[10] Lorie Fridell, *et al.*, *Taking the Straw Man to the Ground: Arguments in Support of the Linear Use-of-Force Continuum*, Police Chief 78 (Dec. 2011): 20.

[11] In 1952, the Supreme Court followed a Fourteenth Amendment substantive due process analysis to excessive force claims against police decision. The Supreme Court held that police conduct that "shocks

The model we advocate is legally founded on the Constitution. James Marker refers to this model as an "amendment-based" training and teaching model.[12] Though we begin with the belief that police officers can and must be thoroughly schooled in what the Constitution requires of them and permits to them, our model incorporates integration of reality based scenarios, critical thinking and decision making training consistent with constitutional standards.

The foundation of reality based scenario training is teaching officers to anticipate and recognize threats that are likely to lead to force decisions. Threat assessment training teaches officers to recognize suspect threats and to respond to preempt unlawful force against the officer or public. In his seminal discussion of threat assessment, FBI Legal Instructor Thomas Petrowski noted that threat assessment training is "the cornerstone of use-of-force training."[13] Conditioning officers to recognize suspect threat factors simultaneously helps officers articulate and document the threat factors that informed the officers' force decisions, thus facilitating inevitable administrative assessment and potential judicial review. We refer to this component as "Suspect Threat Assessment and Response Training" or "START."

The agencies that have shifted to use of force training with a constitutional foundation and START have experienced great success. In 2005, the Federal Law Enforcement Training Center ("FLETC") scrapped its stair step force continuum and created a Fourth Amendment-based curriculum supported by a powerful reality based scenario training regimen. Recruits learned constitution parameters of use of force in the classroom and were immediately presented with learning scenarios that helped them prepare to use force on the street, to recognize threats, to respond to the threats and to explain and report their force decisions in response to the threats presented. An excellent use of force training and reporting tool was developed as part of the FLETC training curriculum.[14] The tool offers field utility as both a training tool and reporting support.

John Bostain, *Law Officer* Magazine's 2012 Trainer of the Year and veteran FLETC instructor, recounts hearing from an agent trained in the new FLETC model who claimed that the rigorous use of force

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the conscience" subjects an officer to liability for a constitutional violation. *Rochin v. California*, 342 U.S. 165, 172 (1952). Thirty-three years later, in *Tennessee v. Garner*, the Court held that the use of deadly force to apprehend a suspect is a seizure under the Fourth Amendment "objective reasonableness" standard. In 1989, the Court applied a Fourth Amendment analysis to all claims alleging excessive force by police officers in *Graham v. O'Connor*, 490 U.S. 386 (1989) ("Today we make explicit what was implicit in *Garner*'s analysis, and hold that all claims that law enforcement officers have used excessive force–deadly or not–in the course of an arrest, investigatory stop, or other 'seizure' of a free citizen should be analyzed under the Fourth Amendment and its 'reasonableness' standard"). The Court held that the reasonableness of a seizure by police must be analyzed by the objective reasonableness of the seizure, viewed through the perspective of an officer at the scene and not through the "20/20 vision of hindsight." *Graham v. Connor* provided the following factors for lower courts to apply when assessing the reasonableness of force by police: first, the severity of the crime at issue; second, whether the suspect poses an immediate threat to the safety of the officers or others; and third, whether the suspect actively resists arrest or attempts to evade arrest by flight. These factors are not an exhaustive list because the ultimate issue is always the objective reasonableness of the force used. *Smoak v. Hall*, 460 F.3d 768, 783 (6th Cir. 2006).

[12] James Marker, *Teaching 4th Amendment-Based Use of Force*, 2112 (7) AELE Mo. L. J. 501.

[13] Thomas D. Petrowski, *Use-of-Force Policies and Training–A Reasoned Approach*, FBI Law Enf. Bull., Nov. 2002, 28.

[14] The reporting tool developed by FLETC and adapted by many agencies is available at http://kenwallentine.com/downloads/Use%20of%20Force%20FLETC%20training%20form.pdf (accessed August 11, 2012).

training both prepared him well for a critical incident and provided him the critical knowledge and decision-making skills that he believed saved his life.[15] FLETC instructors report increased confidence levels and testing success with the current training program. An intended consequence of any quality constitutional based, START-enhanced training program is reduction of deadly hesitation in force decision making on the street.

Even before FLETC abandoned its traditional force continuum training model, the Wyoming Law Enforcement Academy had fully revised its use of force training to an "amendment-based" system using reality based learning scenarios to reinforce classroom instruction and includes best practice defensive and arrest control techniques. The Wyoming Law Enforcement Academy began its amendment-based training program over a decade ago and continues to enjoy success today following periodic refinements.[16]

In 2008 the State of Florida migrated away from using a force continuum as a training tool. The dramatic shift in a statewide training recommendation resulted from extensive consideration by curriculum experts at the Florida Department of Law Enforcement (FDLE), after debate amongst subject matter experts and only after the extended consideration and approval by FDLE legal counsel and sanctioning by Florida's Criminal Justice Standards and Training Commission.[17]

Some may observe that the model we advocate is not entirely mutually exclusive with continua. We agree. The continua may retain value as a starting point for a broader public policy discussion and as the rudiment of integrated training model. [18] One may posit the introduction of a force continuum when training new recruits who have absolutely no understanding of the rules of engagement that govern police use of force.

Any veteran police academy trainer can relate countless stories of recruits who have never been struck in anger and who have never played rough contact sports. We gratefully acknowledge the contributions to our profession to those young men and women who join the ranks of law enforcement after honorable service in defense of our nation in the battlefield. Recruits who have not experienced contact sports or physical conflict may lack confidence when using force, perhaps leading to use of more force than reasonably necessary to reach the objective.

The majority of recruits know police force only through the false heroes of television shows and motion pictures. For those recruits, perhaps a force continuum will suffice in the kindergarten stage of police training, but it must be quickly supplanted as they learn law, conflict resolution skills, arrest control techniques and defensive tactics. A modern use of force training curriculum must reach far beyond traditional classroom lectures with visual models of stair steps, continua and wheels. We expect officers

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[15] John Bostain, *Training without force continuums: Learn to love the law*, Street Survival Newsline, March 19, 2009.

[16] James Marker, *Teaching 4th Amendment-Based Use of Force*, 2112 (7) AELE Mo. L. J. 501.

[17] Florida Law Enforcement Basic Recruit Training Program Version 2012.07, http://www.fdle.state.fl.us/Content/getdoc/d71b6636-f97f-42d7-9f5a-46869aea9db1/2012_LE_Text.aspx (accessed August 5, 2012).

[18] For example, the United States Department of Justice, Office of Civil Rights, continues to post literature that broadly references a continuum of force. *See* https://www.ncjrs.gov/pdffiles1/ojp/186189.pdf (accessed March 12, 2014). Notwithstanding, recent consent decrees promulgated by the Office of Civil Rights do not include a formal continuum of force. *See, e.g.*, http://www.justice.gov/crt/about/spl/documents/nopd_agreement_1-11-13.pdf (accessed March 13, 2014); http://www.justice.gov/crt/about/spl/documents/beacon_settlement_12-23-10.pdf (accessed March 13, 2014).

to be advanced beyond a stimulus/response force decision making model by the time that they hit the streets. Then we demand an even higher level of discernment, discretion and sophistication in force decisions from our veteran officers. A trainer must ask at what point does the rudimentary teaching tool of the continuum lose all relevance?

II. **Objectives of Use of Force Training and Policy**

The primary objective of police use of force training and policy is to teach officers to use force at the right time, in the right measure and for the right reason. We believe that fulfillment of this objective will keep officers safer, reduce overall force and reduce agency liability for improper force. Best practice use of force training must provide officers with a decision base that is more than a graphic depiction and that is consistent with law, policy and generally-accepted police practices.

A constitutional based, START-enhanced training program properly delivered easily meets this objective. Such a program is crafted to prepare officers to effectively perceive and assess threats and to respond appropriately when required to make a decision with imperfect/inadequate information and no discretionary time. Though scenario based training, also known as problem based learning has blossomed in popularity only in the past decade or so, trainers and researchers acknowledge the superiority of scenario based training to a more traditional classroom lecture and testing scheme.[19]

Another critical objective of use of force training is to teach officers when and how to defuse, de-escalate and disengage force in a dynamic situation. Constitutional based, START-enhanced training teaches officers to constantly assess their tactics and to measure the constitutionality of their force decisions in light of information that becomes available as the situation develops. Although continua allow both ascent and descent, escalation and de-escalation, in measured fashion at defined intervals, START training necessitates that an officer's force can and must be as fluid and dynamic as the situation itself, recognizing that force is primarily a product of suspect actions.

The objective for agency executives is to promulgate use of force policy that comports with the legal standards for use of force, allows for enhancing officer safety and effective organizational risk management and also reflects community expectations that a police department should use only the minimum amount of coercive force that is necessary to effectively bring an arrestee under control.

Continua can actually encourage a mismatch of these sometimes competing issues. By considering only a suspect's actions to formulate a response, the outcome may be that the level of force employed by an officer may not be the minimum amount of force reasonably required to safely accomplish the objective. It may also be sufficient to meet the legal standard because force should not only be reasonably necessary to accomplish the lawful purpose, but it must be proportional to the threat. Factors included in a threat assessment must therefore include more than the suspect's actions. A best practice use of force policy dictates that constitutional requirements be continually reassessed as the tense and uncertain situation dynamically progresses.

III. **Why Linear Continua Have Proven To Be Ineffective In Policy, Training and Assessment**

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[19] S.F. Hundersmarck, *Police Recruit Training: Facilitating Learning Between the Academy and Field Training*, FBI Law Enf. Bull., Aug. 2009, 26;. U.S. Department of Justice, Office of Community Oriented Policing Services, *PTO: An Overview and Introduction* (Washington, DC, 2003); John A. Seibel, *Reality-Based Training: Skill development in Survival Stress Responses*, http://www.emich.edu/cerns/downloads/papers/PoliceStaff/Training/REALITY-BASED%20TRAINING--Skill%20Development%20in%20Survival%20Stress%20Responses.pdf (E. Mich. U. Center for Regional and National Security) (accessed August 5, 2012).

The continua no longer occupy the preeminent place they once held. At best, they retain value as part of a comprehensive education and training approach. At worst they are stilted and rigid and limit options and represent a veritable "Use of Force for Dummies." Part of our concern with continua is that they have critical limitations—they do not recognize and effectively integrate what we have come to know about how individuals react, nor do they recognize how individuals learn how to perform complex tasks—and the responsible use of force is a highly complex task. Traditional use of force training focused on force continua fail to recognize the police officer as a variable in the decision making process, often limiting the force option discussion to reaction to particular suspect behaviors.

Continua can prescribe force when verbal persuasion may be effective, thereby reducing officer incentive to deescalate and defuse and substantially reducing situational flexibility (what starts as physical ends as physical). It also seems that one of the most compelling reasons to move away from continua is their persistent misuse. While perhaps intended as a minimum standard, continua have been, in some cases, simply adopted as the holy grail of both policy and agency training. There are substantial risks associated with either proposition.

Continua require an officer to react in a limited, prescribed and artificial stimulus-response manner rather than factoring in officer experience and situational variances. Continua therefore require a seasoned and experienced officer to react in much the same manner as a recruit officer. We believe that the profession is much better served by educating officers in critical thinking and decision making scenarios which more realistically reflect the complex environment in which they operate.

Continua also tend to reflect the discarded policing standards of decades ago, prior to the enactment of many of the federal anti-discrimination and disability protection acts and judicial decisions that have become "clearly established law" for civil rights litigation purposes. Arguably, a straightforward application of actions (or reactions) suggested by the continua might well result in subjecting individuals who are hard of hearing to TASER® applications, etc. This lack of ability to factor in experience and the totality of circumstances is both unrealistic and unacceptable from a public policy perspective.

The response-reaction model that has developed over the decades tends to ignore the reality of today's public safety environment and the public safety employee in 2012. While the new hire of the 1960's and '70's was likely a military veteran who simply needed to transition to a new mindset of civilian rules of engagement (enter the revised continuum), today's employee is a vastly different breed – one questioning rote adherence to historical methodology and one much more interested in a learning model which involves flexibility, reasoning, critical thinking and individual choice.

From a constitutional perspective, and we advocate for a framework of constitutional policing, the U.S. Supreme Court has unequivocally held that officers may use the amount of force that is objectively reasonable to control an individual during a lawful arrest.[20] By attempting to create a mental algorithm through which an officer divines a suspect's action(s) and prescribe a predetermined and specific response by an officer, force continua grossly oversimplify the complexity of officer-subject interactions and do not effectively allow an officer to take into account that variation in circumstances required by the courts and consider other options to avoid or minimize the use of force that may be readily available.

Another very practical concern is that use of force training permeates the culture of an organization and shapes the way an organization interacts with and relates to the community. Over time a force continuum becomes ingrained as the agency's *de facto* policy. Officers become oriented toward using force as their primary tool, when perhaps other less intrusive methods are available and may be effective. There then exists the strong possibility that continua instill the wrong organizational values and, in effect, teach young and impressionable recruit officers that they operate in an environment of likely aggression and that they then become conditioned and predisposed to react in an aggressive or adversarial manner.

[20] *Graham v Connor*, 490 U.S. 386 (1989).

Continua may, in effect, also reduce agency accountability. Use of force reviews with a force continuum policy that began and ended with, the suspect did "X" and the continuum says "Y" is within policy, gives the agency an easy out, but certainly not a desired outcome. Post-incident analysis *must* be informed by how officers make decisions in order to justly assess the decisions. The officer is shifting from frontal lobe cognitive processing to mammalian brain pattern recognition and response. Why create a pre-incident tool that *will* be used for post-incident analysis and that fails to accommodate how officers actually reach force decisions?

IV. **Why Constitutional-based, START Training Is Effective**

Use of force training must be consistent with how officers make decisions. Dr. Gary Klein, a former U.S. Air force research psychologist and pioneer in the study of naturalistic decision making, has long studied command and control performance and decision-making. Klein concludes that most officers faced with a dynamic and complex situation use a "recognition-primed decision" ("RPD") model.[21] In the almost imperceptibly brief microseconds given to decision-making in a critical incident, an officer automatically processes perceived threats and possible responses. The brain shifts to RPD when faced with an urgent situation with little or no time for rational decision making and when lacking detailed data for linear processing. An officer's survival, and potentially the officer's civil and criminal exposure, hangs in the balance in the instant that RPD shapes the officer's response to a threat.

Recognition-primed decision making involves rapid scanning of plausible options and selecting the first pattern match option. An officer observes cues and indicators that generate recognition of a pattern. The officer considers alternative action scripts (mentally sorted according to typicality) in a scan through the officer's neurological database of similar experiences, compares a particular action script to the situation presented in a mental simulation, and accepts and executes the first non-rejected action script. One veteran emergency services trainer describes RPD as "if it sounds like a duck, it's most likely a duck."[22] Recognition-primed decision making experts claim that as an officer becomes more experienced (whether by field experience or reality-based scenario training), the officer builds ability to choose the best action script.[23]

Human performance research shows that continua don't work in combat. Even in the self-defense world of martial arts, in recent years the disciplines have expanded to include free-form fighting and mixed martial arts strategies which are highly effective and which do not depend on the formalistic instruction and training of traditional martial arts. To be effective and to guide lawful uses of force, a force model must be much more complex, recognizing more factors than just a pairing of suspect action and officer reaction. Similar findings flow from research in other disciplines that employ RPD. For example, RPD is evident in firefighting,[24] emergency medicine,[25] and aircraft flying.[26]

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[21] Gary Klein, *Sources of Power-How People Make Decisions*, (MIT Press 1998); Larry C. Miller, *RPD on the Fireground*, American Fire Journal (Apr. 1996) 7-8.

[22] Bruce Evans, *A Picture is Worth a Thousand Words—at Least*, Fire Chief, June 2011.

[23] Thomas H. Killion, *Decision Making and the Levels of War*, Military Review (Nov./Dec. 2000) 66-67.

[24] Larry C. Miller, *RPD on the Fireground*, American Fire Journal (Apr. 1996) 7-8.

[25] Susan Bond, *Modeling emergency decisions: recognition-primed decision making. The literature in relation to an ophthalmic critical incident*, Journal of Clinical Nursing Vol 15, no. 8 (August 2006); Renu Sinha, *Impact of Experience on Decision Making in Emergency Situation*, Lulea University of Technology (2005).

The late Colonel John Boyd developed the OODA (Observe, Orient, Decide, Act) loop or cycle from his experience as a fighter pilot.[27] The OODA loop model posits that an officer—and the suspect—makes decisions in a dynamic situation through observation of circumstances, orientation to the perceived threat and forming a mental image of the unfolding circumstances, deciding on an action script and executing the selected action. The OODA loop is time-competitive. The officer's goal is to complete his or her OODA loop in a combat situation before the suspect completes the OODA loop. Victory goes to the person with the fastest OODA cycle processing.

Boyd's work and the work of those who built upon his concept of the OODA loop demonstrate that reaction speed in a crisis moment is perhaps as critical as the actual execution speed of the response. Discretionary time is rare, if not altogether absent in tense, uncertain and rapidly evolving situations. Reducing the time allotted to the decision-making component in the OODA loop is a primary objective of quality use of force training.

The goal of the constitutional based, START-enhanced training program that we advocate is to couple RPD with physical skills, refine the skills, and imbue an officer with confidence in the selected response. Trainers facilitate intuitive responses when the responsive actions have been experienced and mastered in training scenarios. Officers must be trained to recognize unfolding patterns as they rapidly develop, which means that we must provide them with pattern recognition experiences in training scenarios START requires intensive reality-based scenario training, increasing intuitive response and decreasing decision making time in the OODA loop. Colonel John Boyd called this "implicit guidance and control."

Constitutional based, START-enhanced training begins with the presentation of police use of force—an unambiguously legal subject— in the same fashion as any other legal subject in the academy and in-service curriculum. We believe that officers who learn the intricacies of legal limits on search and seizure, arrest and detention, interrogation and other legal topics, are fully capable of grasping nuances of constitutional limitations on force. We know that those to whom we are accountable, the public, and those who hold us accountable, courts and political officials, expect no less.

It is an easy transition from teaching use of force law in the police academy to teaching recruits about the agency's use of force policy. Prevailing police use of force policies are based on the Supreme Court's overriding guidance in *Graham v. Connor* and its progeny. There is no dissonance created when officers are taught through scenarios using a constitutional base for force decisions and then guiding the officers' performance on the streets with a policy grounded on *Graham v. Connor.*

Use of force training should also be consistent with how force decisions are evaluated. A linear force continuum illustration is not consistent with model or pattern jury instructions in use in state and federal courts across the nation. Judges demand that attorneys craft jury instructions tailored to the facts in the particular case and solidly grounded in the law. A common jury instruction in a lawsuit alleging excessive force by police provides:

> Force is not excessive if it is reasonably necessary under the circumstances to [detain/make a lawful arrest]. In deciding whether force is reasonably necessary or excessive, you should determine what force a reasonable law enforcement officer would have used under the same or similar circumstances. You should consider, among other factors, the following:
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> (a) The seriousness of the crime at issue;

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[26] Lt. Col. Brian Murray, *You Have to Be Mental to be a Fighter Pilot*, Canadian Air Force Journal, 45-46, Vol. 3, no. 4 (Fall 2010).

[27] Grant T. Hammond, *The Mind of War: John Boyd and American Security*, (Smithsonian Inst. Press 2001).

(b) Whether [name of plaintiff] reasonably appeared to pose an immediate threat to the safety of [name of defendant] or others; and

(c) Whether [name of plaintiff] was actively [resisting [detention/arrest]] [attempting to avoid arrest].[28]

The elements of this jury instruction, required for use in a trial alleging excessive police force under 43 U.S.C. section 1983, are plainly drawn from the landmark case of *Graham v. Connor*. The United States Supreme Court has articulated the law of use of force, at the same time providing Fourth Amendment jurisprudence as the proper jury education tool. Several noted police defense attorneys, including the lead counsel for the officers in *Graham v. Connor*, have commented on the damage that force continua wreak on efforts to defend officers accused of excessive use of force.[29]

Constitutional based, START-enhanced training is outcome-based, not formula-based and incorporates training to defuse, de-escalate and disengage from force. A continuum instructs when to use force; it does not ask or teach when *not* to use force. Stair steps, ladders, X-Y axis skyward arrows and barometers—the most common visual representations of force continua—all imply increasing force, adding force and don't accommodate visual cues for de-escalation of force. Training to a force continuum visual model is conditioning to that model, thereby shrinking room for creativity and flexibility as the officer addresses a critical incident. Constitutional based, START-enhanced training is outcome-based, not formula-based.

Experience and evidence suggests that constitutional based, START-enhanced training promotes significantly better thought process in both force decision making and in written reports. The Federal Law Enforcement Training Center conducted research to validate its methods to test recruit performance in use of force testing scenarios. The initial research was conducted at a time that FLETC used a stair-step force continuum to teach use of force law. Recruits generally selected an appropriate force option. However, while 70% of the recruits selected the correct force option, only 57% of the recruits correctly stated the legal justification for the use of force.[30] The latter is not a particularly attractive number for an administrator or for legal counsel defending the officer and the agency.

After FLETC revised its use of force curriculum with a constitutional based curriculum presented through intensive reality based scenarios and evaluations, FLETC staff replicated the research study with recruits who had been trained with the new curriculum. The results were remarkable and instructive. In the second study, recruits trained with a constitution-based use of force curriculum selected the correct force option 100% of the time.

FLETC testing also showed that 83% of those recruits were able to properly articulate a lawful justification for their selected force option.[31] The quality and comprehensiveness of post-incident reporting directly correlates to the defensibility of the officer's action. Officers who are trained to perceive, assess and respond to threats are intuitively more prepared to articulate the threats that they perceived and the

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[28] California Civil Jury Instructions. Excessive Use of Force: Unreasonable Arrest or Other Seizure—Essential Factual Elements.

[29] Dr. John Peters and Michael A. Brave, *Force Continuums: Are They Still Needed*, 22 Police & Security News 1, (Jan./Feb. 2006).

[30] J.L. Meyerhoff, *et al., Evaluating Performance of Law Enforcement Personnel During a Stressful Training Scenario*. Annals of the New York Academy of Sciences, 1032(1): p. 250-253 (2004).

[31] T.N. Wollert & W.A. Norris, *Stress and Decision Making*, Survival Scores Research Project, Federal Law Enforcement Training Center: Glynco (2011).

reasons for their force responses. We believe that constitutional based, START-enhanced training can lead to a higher level of safety for officers because they are trained and tested in perceiving threats before the threats mature to assaults and they respond earlier with possibly less force. This is important when considering how an agency responsibly and effectively manages risk, provides "police services" and operates in and interacts with the community. As Gordon Graham, a noted lecturer and risk management expert, has said: "What always amazes me is that 'safety' seems to take a back seat on these discussions." Graham wryly notes that some in the profession seem to say, "let's make it as complex as we can so that officers and deputies have to think a lot prior to acting." We believe that constitutional based, START-enhanced training provides a higher level of safety for officers both in the field and in the courtroom.

V. Conclusion

We should not—indeed, cannot fairly—discuss use of force in a vacuum. It begs a much larger question. Law enforcement trainers, officers, legal counsel and policy makers should engage in dialogue about how or where use of force fits into the larger picture of the underlying purpose and role of law enforcement. The U.S. Constitution is based in part upon John Locke's concept of the social contract.[32] This social contract gives legitimacy to the role of police in society and basically holds that the purpose of government is to better protect the rights that people naturally possess: life, liberty and property. Citizens agree to give up their power to enforce their own rights to the government. As an agent of government the police are bound by this social contract. Their power is held as a public trust. We would argue that using principles from the Constitution and the Bill of Rights as the basis for use of force training is appropriate for policy and training models.

Our suggestion is a constitutionally based use of force policy and education and training tool (education is key) that relates use of force to the larger organizational, community and societal context. This is much the same approach to education and training that the U.S. Navy took when they embarked on a program of redesigning their entire curriculum (and organizational culture) to reflect an "ethics across the curriculum" approach to candidate and officer training and education. Because use of force training doesn't exist in isolation, it must be tethered to something–and we believe that is the constitutional authority and framework under which we are allowed to operate. We recommend that, as an integral part of any use of force training (including our START model which is constitutionally-premised threat assessment and response training) there be continuing emphasis on communication, containment, negotiation, the exercise of restraint, de-escalation strategies and non-violent conflict resolution techniques.

Comprehensive education and training efforts should have as their goal the achieving of a civil rights compliant agency so that officers understand how to operate effectively within a larger constitutional context which both empowers us and which also constrains the use of allowable force. Even though the research suggests that use of force incidents are a very small subset of police-citizen encounters, they are certainly a subset that causes untold problems, expense and disharmony. We believe that we should be moving the profession toward a framework of continuous improvement best practices with constitutional and civil rights as the primary organizational value.

Because the U.S. Supreme Court has definitively articulated the constitutional standard for the use of force, and given the present national economic conditions and increasing use of regional structures, task forces and mutual aid, there seems to be a compelling argument for policy consistency across jurisdictions–particularly as it relates to thresholds for the use of force. We wonder why, when the Constitutional standard governing the use of force is the same everywhere in the country, why the policy and training should be so vastly different across jurisdictional lines? The constitutional/START model makes a powerful argument for working toward a national continuous improvement of best practices approach to police risk management. Such a best practices based approach on issues that should be

[32] Locke 1690/1986.

uniform across jurisdictions could serve to bring the clarity and uniformity that a best practices model suggests—unlike the present proliferation of diverse and inconsistent policy and training models.

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27

State-Created Danger
Should Police Officers be Accountable for Reckless Tactical Decision Making?

Jeffrey J. Noble & Geoffrey P. Alpert

Police officers are called upon to resolve our society's shortcomings by arresting those who commit crimes, manage those with mental illness, and resolve violent and dangerous situations. Often these situations happen in the middle of the night, with little or no warning, and no opportunity to develop a comprehensive plan, seek advice, or refer to a manual. The police are expected to intervene quickly and make what are often critical decisions. For the most part America's police are up to the task, but not all tactical decisions are sound. And while poor judgments based on limited information or insufficient time or even mistakes may be understandable, reckless acts that provoke violence must not be tolerated.

Situations where police officers respond with force to extricate themselves from a dangerous position that they created are particularly troubling. For example, officers who use their bodies as a barricade to prevent a driver from fleeing goes beyond being simply foolish, and may be considered reckless when the officer who deliberately placed him- or herself in danger fires at the vehicle in "self-defense." This is magnified when the police have the opportunity to plan, to summon resources, and to respond in a tactically sound manner, but fail to do so through incompetence, laziness, or expediency. This article will review the implementation of force by police officers and consider the implications of tactically unsound or reckless decision making when the police use force in a dangerous situation not created by the suspect, but by the officer.

Prepared especially for *Critical Issues in Policing* by Jeffrey J. Noble and Geoffrey P. Alpert.

Police Tactics

Police officers are the nation's front line in dealing with noncompliant, resistive, combative, mentally ill, and violent subjects. Because these situations are almost always fluid, dynamic, and unique there are no predetermined steps that may be applied in every case to achieve a desired result and it is impossible to prepare a police officer for every imaginable field situation. There are, however, predictable types of behavior and reasonable tactical strategies that allow officers to avoid placing themselves and others at a substantial risk of injury and decrease the need to impose a significant level of force to resolve the situation. To achieve these worthwhile goals police management can structure meaningful guidelines and training. The methods and techniques employed by officers to exercise legitimate control are referred to as tactics. Tactics are best described as a sequence of moves that limit the suspect's ability to inflict harm and advance the ability of the officer to conclude the situation in the safest and least intrusive way.

Police officers are trained how to evaluate and manage potentially violent field situations and how to apply tactics to minimize the danger of risk to themselves and others. Officers are trained to formulate a plan whenever possible by gathering information, considering risk factors, assembling sufficient resources, communicating with other officers, and using available time to their advantage. Officers understand the value of cover and concealment, contact and cover strategies, and calm and effective negotiation skills. They are well-versed in containing scenes, setting perimeters, isolating suspects, and evacuating those in harm's way. Modern police officers are also provided a wide range of tools (including less lethal options like pepper spray, Tasers, and impact projectiles) to minimize the necessity of using serious or deadly force. Police officers are taught tactics in the police academy and through continuing professional training throughout their careers. Supervisors debrief tactical situations with their officers and apply lessons to real-life situations. Police tactics are routinely discussed, emphasized, and reviewed at all levels of a police organization. This focus on officer safety stems from the recognition that when officers perform poorly an officer, a community member, or a suspect may suffer a severe or fatal injury.

Law enforcement continually considers high-risk situations and sometimes makes wholesale changes in their tactics based on an incident or a series of incidents. For perspective, consider the 1966 Texas tower incident where Charles Whitman began randomly shooting at people, killing 14 and wounding dozens more.[1] The police response depended on the independent actions of responding officers, which mostly consisted of uncoordinated handgun and rifle fire that had little effect other than to chip away at the tower. Some officers commandeered armored cars to rescue the wounded and others commandeered an airplane that allowed the officers to shoot down on Whitman, but the plane was quickly driven back by Whitman's gunfire. Finally, several officers were able to access the tower through a system of tun-

nels. After climbing 30 flights of stairs the officers confronted Whitman, who was killed in an ensuing gun battle.[2]

The Austin police stopped Whitman, but their improvised efforts were uncoordinated, depended on a large amount of luck, and took over 90 minutes. Although the independent actions of the officers resolved the incident, police departments across the nation recognized the need for a better response to critical incidents of this magnitude. The Texas tower incident, along with the Watts riots a year earlier, were the impetus for the formation of special teams of police officers equipped and trained to deal with these types of dangerous and unusual criminal incidents. Known by various names and acronyms, Special Weapons and Tactics (SWAT), Hostage Rescue Teams (HRT), Special Response Teams (SRT), Special Emergency Response Teams (SERT), and Special Operations Units (SOU), tactical teams have proliferated since the Texas tower incident.[3]

Just as the Texas tower incident and the Watts riots of the 1960s were the impetus for the formation of SWAT teams, events in the 1990s dramatically changed the police response for tactical dynamic reactive incidents. North Hollywood (CA), Littleton (CO), Jonesboro (AR), and Atlanta (GA) all share a common tragic experience—individuals exhibiting aberrant human behavior that resulted in the ongoing random shooting of unarmed citizens. The shootings continued until there were no further possible victims or due to some "independent" act of courage by a uniformed police officer. As a result of these incidents, law enforcement officials recognized that the traditional tactics of containment, negotiation, and the activation of SWAT teams were ineffective in these types of events. Learning from their collective experience, law enforcement trainers developed an "active shooter" rapid response technique where the first responders—the uniformed police officers—can and must take an immediate independent action to resolve tactical dynamic life-threatening situations.[4]

While the development of SWAT teams and active shooter response protocols have increased the ability of police officers to resolve certain types of violent behavior, law enforcement has continually worked to improve the tactics employed by officers to resolve a myriad of unplanned and unpredictable high-risk situations. Although officers are generally well-trained, well-prepared, and quite capable of resolving violent confrontations in a safe and reasonable manner, mistakes are made. Police officers are not faced with a theoretical set of circumstances and provided sufficient time and resources to develop a comprehensive response, rather they face the immediate threat of what could be a serious or deadly injury to themselves or others. In these types of situations it is reasonable that some mistakes will be made; however, it is unreasonable to allow officers to act recklessly to provoke a violent response.[5]

Unsound Tactical Decision Making

Unsound decisions in the face of predictable violent behavior sometimes sets a series of events into motion that can result in tragedy. All too frequently

poor tactics dealing with suspects inside vehicles, officers who fail to use available cover, and officers who act too hastily without waiting for available back up are the root cause of officer-created jeopardy. Incidents involving vehicles are perhaps the most widespread events where an officer's lack of discipline and poor decision making result in an officer's provocative acts that cause the suspect to respond in a way that leaves the officer no reasonable alternative other than to use force in self-defense.

Tactical shortcomings involving vehicles are most often instances where officers use their bodies as barricades, attempt to grab keys from the ignition, when they try to forcibly extricate someone from a vehicle, or when they latch onto a moving vehicle only to be dragged away. Unfortunately, there are many examples to illustrate these points. In *Abraham*,[6] an officer attempted to arrest a shoplifter who managed to flee from the store and enter his vehicle. The officer placed her body in front of the vehicle to prevent the suspect's escape after the suspect had already collided with other vehicles. The shoplifter inched his vehicle toward the officer, but when the officer refused to move, the shoplifter suddenly accelerated toward the officer and the officer fired in self-defense. In *Allen*,[7] an armed suicidal man was sitting in his car. Instead of containing the scene, seeking a position of cover, and trying to talk the man into surrendering the weapon, the officers left their cover and tried to wrestle the gun from the man's hand. During the struggle, the man pointed the gun at one of the officers and in response the officers shot and killed the man. In *Greenidge*,[8] an officer working a prostitution sting approached a suspect sitting in a vehicle. The officer had a handgun in one hand and tried to open the car door with her other hand. The officer did not wait a few seconds for additional back up nor did the officer illuminate the interior of the car with a flashlight. The suspect moved suddenly and the officer fired, striking the unarmed suspect.

Similarly, officers who fail to seek or abandon a position of cover are also rejecting a basic officer safety tenet. A position of cover allows officers to attempt to negotiate a peaceful solution while waiting for additional resources that may be applied as alternative means to safely conclude a tense and potentially dangerous situation. When officers do not use available cover, tactical situations may quickly escalate into what may otherwise be an unnecessary use-of-force application. In *Medina*,[9] officers were attempting to arrest a man for violating bail. The man claimed he had a gun and exited his home holding a staple gun wrapped in a towel that he intended to represent as a firearm. Officers initially reacted appropriately by shooting the man with a less-lethal beanbag and released a police K-9, but neither was effective. Rather than attempting any additional tactics, an officer decided to leave his position of cover to knock the man down. Believing that the man was armed, the officer had no alternative once he left his position of cover than to fire when the man turned in his direction.

Finally, officers are trained to understand that time is a valuable tactical asset. Time allows officers to plan, resources to arrive and be deployed, and

tactics to be considered. Unnecessary hurried actions are almost always a significant tactical error, particularly when there is clear evidence of the dangers of moving too quickly. Consider the facts in *Dickerson*.[10] In that case, an intoxicated man fired a handgun nine times inside his home. Two officers arrived at the scene and immediately entered the home without waiting for back up, without setting a perimeter, or making any attempts to negotiate the suspect's surrender. Once inside, the man threatened the officers with the handgun and the officers shot and killed the man. Police radio tapes showed that only one minute had passed from the time that the officers arrived to the time when they shot the man. Entering a home in these circumstances evidences a wanton disregard for the officers' own safety and the safety of others.

Use-of-Force Law

Police officers are entrusted to use some physical coercion to control and apprehend those who are suspected of engaging in criminal activity or those who place the officer or others at risk of harm. While the government permits the police the authority to use force on behalf of the community, that force is closely monitored and any force that is not objectively reasonable is deemed to be excessive.[11] The seminal case on police use of force is *Graham v. Connor.* In that case, the Court held that force claims are analyzed under the Fourth Amendment's reasonableness standard, which balances the "nature and quality of the intrusion on the individual's Fourth Amendment interests against the countervailing government interest at stake."[12] The Court held that the "proper application requires careful attention to the facts and circumstances of each case including the severity of the crime at issue, whether the suspect poses an immediate threat to the safety of officers or others, and whether he is actively resisting arrest or attempting to evade arrest by flight." Reasonableness "of a particular use of force must be judged from the perspective of a reasonable officer on scene, rather than with the 20/20 vision of hindsight."[13] One aspect of this holding that has not been studied sufficiently is the effect of stress and adrenaline on an officer's perception of an event. While research has shown that stress effects officers' performance and perception, it is not known the ways in which officers interpret threats under extreme stress.[14] In its holding, *Graham* refers to the Court's prior holding in *Garner* and states that "the question is 'whether the totality of the circumstances justifie[s] a particular sort of . . . seizure.'"[15]

Although the standard outlined in *Graham* instructs one to look at the totality of the circumstances to determine if the officer's actions were objectively reasonable, one portion of *Graham* has caused confusion among the circuit courts, which have created rules neglecting the totality of the circumstances and focused their analysis only on the final frame.

> With respect to a claim of excessive force, the same standard of reasonableness at the *moment* applies: "Not every push or shove, even if it may later seem unnecessary in the peace of a judges' chambers," violates the

> Fourth Amendment. The calculus of reasonableness must embody allowance for the fact that police officers are often forced to make split-second judgments—in circumstances that are tense, uncertain, and rapidly evolving—about the amount of force that is necessary in a particular situation. (citation omitted, italics added)

Some circuit courts have interpreted the word "moment" and "split-second judgment" to limit the analysis of a use-of-force incident to only the facts at the moment of the use of force. These courts hold that the events leading up to the use of force are irrelevant. This is referred to as the "final frame" analysis because only the instant prior to the use of force is considered.[16]

Final Frame

There is little consistency among the circuit courts in determining the scope of actions to be reviewed in a police use-of-force case. Some circuits do review the totality of the circumstances to determine reasonableness. The First Circuit has held that the proper rule is to examine the events leading up to the use of force, not just the moment before because such a rule is more consistent with the Supreme Court's mandate for courts to consider these cases in the totality of the circumstances.[17] The Third Circuit is willing to review evidence of events preceding the seizure and found that "totality" is an encompassing word that implies that reasonableness should be sensitive to all of the factors bearing on an officer's use of force and reasoned that "a more fundamental point is that it is far from clear what circumstances, if any, are left to be considered when events leading up to the shooting are excluded. How is the reasonableness of a bullet striking someone to be assessed if not by examining preceding events?"[18]

Other circuits will not look beyond the seizure itself. For example, the Seventh Circuit has held that preseizure conduct cannot be reviewed as the Fourth Amendment prohibits unreasonable seizures—not unreasonable, unjustified, or outrageous conduct in general.[19] The Fourth Circuit found that based on the Supreme Court's focus on the very moment when the officer makes the split-second judgment, the events that occur before the seizure are not probative of the reasonableness of the use of force.[20] The Eighth Circuit excludes evidence relating to whether the officers created the need to use force by mishandling the encounter because it is not related to the reasonableness of the seizure itself. However, the court adds to the confusion by stating, "But this does not mean we should refuse to let juries draw reasonable inferences from evidence about events surrounding and leading up to the seizure."[21]

Still other circuits have created their own unique rules to determine how, if, or what circumstances should be considered. The Sixth Circuit opts to carve up the incident into separate segments and judges each on its own terms to see if the officer was reasonable at each stage.[22] The Sixth Circuit opined:

> The time frame is a crucial aspect of excessive force. Other than random attacks, all such cases begin with the decision of a police officer to do

> something, to help, to arrest, to inquire. If the officer had decided to do nothing, then no force would have been used. In this sense, the police officer always causes the trouble. But it is trouble which the police officer is sworn to cause, which society pays him to cause and which, if kept within constitutional limits, society praises the officer for causing.[23]

The Tenth Circuit has held that a use of force can be deemed unreasonable if the officer's reckless or deliberate tactics during the seizure unreasonably create the need for the use of force.[24] The court added that the police conduct that provokes the use of force must be immediately connected with the use of force, however, the primary focus of the review remains on the exact moment of the use of force.[25]

The Ninth Circuit has created an entirely different test. The Ninth Circuit will look beyond the moment of the force application and will hold an officer liable for his otherwise reasonable use of force if the officer intentionally and recklessly provokes a violent confrontation. However, the Ninth Circuit requires that the provocation be an independent Fourth Amendment violation.[26] The requirement is based on a prior Ninth Circuit decision where public health officials obtained an administrative forcible entry warrant to investigate a sewage leak. Upon their arrival, the resident threatened to get a gun, so a SWAT team was summoned. The SWAT officers forced entry into the home and confronted the mentally ill resident who twice tried to shoot the officers. The officers returned fire and killed the man. The court held that the massive disproportionality of the response to the problem of a leaky sewer pipe rendered the entry unreasonable, and based on the Fourth Amendment violation of an unlawful entry the court held the use of force to be unreasonable.[27]

The circuits that advocate a final-frame analysis are overlooking the holding in *Graham* that requires careful attention to the facts and circumstances of each case (such as the severity of the crime or whether the suspect is actively resisting or is attempting to evade arrest by flight) and are focusing only on whether the suspect poses an immediate threat to the officers or others. Such a limited view prevents a thorough analysis of what could be the most intrusive action that can be perpetrated by the state—taking the life of one of its citizens. Most importantly, this wide disparity among the circuits demands some intervention by the Supreme Court to create a rule that may be uniformly applied.

Split-Second Decision Making

There are clearly sound policy reasons for being differential to the tactical decisions of police officers who are confronted with resistance and little time to consider alternatives. Indeed, the law should not be so strict that it creates a hesitancy for officers to act (thereby increasing the likelihood of injury to the officers), or worse, the unwillingness of officers to act at all (thereby placing the community at risk). Police officers who make split-second decisions in dangerous situations should be provided with a fairly wide zone of protec-

tion in close cases even if there is a plausible claim that the situation could have been handled better or differently.[28] However, when a situation does not require a split-second decision and it evolves at a pace where reasonable alternatives may be considered and implemented, the law should encourage officers to avoid acting in reckless ways. In fact, officers should be trained and encouraged to reduce the need for making split-second decisions and to slow down the pace of an encounter rather than to intensify it.[29]

Ideally, police officers' decisions to implement the use of force, whether minimally intrusive, a physical encounter, or the use of deadly force, will be made by an experienced and well-trained, well-meaning officer. The officer should be informed about the situation and/or be able to interpret the situation she approaches properly, not be faced with time restraints to develop a rational response. Further, the officer should have the opportunity as well as the ability to implement the appropriate course of action. However, this ideal situation does not often exist in the real world of policing. There are always situations where police officers are required to make critical decisions under adverse conditions, with insufficient information, with acute time stress, and significant risk of injury to themselves or others. But even these factors may not place the officer in a position where there is truly only a *split-second* to make a decision.

The idea that police officers will only make key decisions in most potentially violent confrontations at the last instant under acute time stress, known as the *split-second syndrome*, overlooks the thought process of officers in advance of any decision to use force.[30] The reality of policing is that there are very few instances where police officers only have a split-second to make a significant use-of-force determination. If an officer is suddenly and without warning confronted by an armed man or if an officer responds to a traffic collision and is instantaneously assaulted by a person suffering from a mental illness, the officer must make split-second decisions to defend himself and others. In these situations of random violent acts officers may have no control over the preliminary frames and are forced to make split-second decisions to prevent serious bodily injury to themselves or others. In a true instance of split-second decision making, the analysis is much easier to complete as there are no preliminary frames to review.[31]

More frequently officers will have at least some knowledge about the situation that they are about to confront. It is when officers have both knowledge and time, yet still recklessly provoke a violent response, that unnecessary force occurs.[32] Indeed, most situations offer police officers three frames of analysis to aid in their decision-making process. These three frames include activities prior to any contact with the suspect, when the officer makes contact with the suspect, and finally the decision to use force that causes the injury.[33]

The first frame includes activities prior to any contact with the suspect. Police officers rarely stumble onto the scene of a crime without any warning. Most often, they respond to some external stimulus. Typically information is provided to officers verbally by a witness, through a dispatcher after a community member calls the police, or from their own observations. This com-

munication provides the officer with at least a minimum amount of information and allows the officers to conduct some level of tactical planning. These initial bits of information allow the officers to begin their planning process and to make assessments for subsequent steps. The purpose of preparation through planning in a tactical sense is that it allows police officers to make sound decisions that will minimize the danger to the officer, the community, and to the actor who is creating the risky situation. The opportunity to plan for a tactical response can be divided into three categories: those where there are hours, days, or weeks; those where there are minutes; and those where the officer is instantly confronted and there is no legitimate opportunity to formulate a plan.

Police officers are trained to develop plans before taking action whenever possible. The more time available during the planning process, the more comprehensive of a plan can be expected. The first step in the planning process is to collect as much relevant and reliable information as possible. This information gathering stage may be complex, like conducting undercover reconnaissance to determine the layout of a building prior to the execution of a search warrant, but may be limited to asking the dispatcher for additional information as an officer responds to a call, or to request another officer for back up or cover. In situations such as a search warrant execution or the response to a scheduled protest, where there are hours, days, or weeks before the event, the planning should be extensive. In these types of events, one would expect a comprehensive written plan that indicates staffing, supervision, a clear mission statement, and considerable contingency planning. Conversely, when time is limited to a few minutes the planning process may consist of coordinating the response with other responding officers, efforts to seek additional information, or requests for additional resources.[34]

Concurrently during the information-gathering phase the officer is engaged in analysis. The officer should consider specific risk factors, available resources, the area where the incident is occurring, the speed of their response, the potential need to contain the scene, isolate the suspect, or evacuate those at risk of harm in the area. The analytical process breaks down the overall incident into its component parts and allows the officer to develop her initial tactical plan. This progression of observation, orientation, decision making, and actions allows officers to gather information, conduct some level of analysis, make decisions, and act with speed and accuracy.[35]

Officers similarly have an opportunity to continue their decision-making efforts at the point when they initially contact the suspect. The officer is able to make visual observations of the suspect that provide the officer with a wealth of information. It is during these first few critical seconds that officers will be able to assess whether the suspect is armed or is potentially armed, whether others are at immediate risk, whether the suspect is coherent or irrational, the size of the suspect, the environment, and most importantly, the suspect's response as the officer begins to negotiate by communicating in a calm and deliberate way. Even if this initial contact lasts only a few seconds,

the officer has had an opportunity to gain a vast amount of information that may be used in a force decision.

Typically, it is only after these steps that the officer will make a force decision. Clearly, all force decisions are made at the last moment and should be based on the totality of the circumstances that confronted the officer and ultimately the actions of the suspect that places the officer or others at risk of immediate harm. Making a force decision early would be imprudent as circumstances may change, eliminating the need for the level of force. Holding the officer accountable for only the final frame would be equally imprudent as the final frame alone may not justify the officer's actions. Consider an officer who fires at an individual who was reaching for his waistband. This frame alone could never justify a use of force, particularly the use of deadly force. However, if an imaginary motion picture of events were backed up to the series of frames preceding the final frame where the force was implemented, those frames may reveal facts that would make the officer's action objectively reasonable and the use of force may be justified.

Standards

Although the *Graham* Court clearly articulated the standard of objectively reasonable conduct to differentiate the amount of force that may be exercised and the amount of force deemed to be excessive, reasonableness is sometimes an elusive concept. The concept of reasonableness is particularly difficult when applied to a police use of force where the officer lacks a bad motive and the suspect is morally blameworthy. Yet, our system of justice demands that judgments be made and despite the inherent subjectivity of the Fourth Amendment balancing test clear guidance can be provided for officers.[36] The test then, from a police procedural standpoint, is: What is a reasonable error? Should officers be held accountable for their mistakes or negligent acts, should some higher standard such as gross negligence or recklessness be applied, or are the standards developed by the circuit courts, who only review the moment that the force was applied, ignoring all of the officer's actions prior to that point?

A mistake is an error that results from a defect in judgment or a deficiency of knowledge. Mistakes in policing most frequently occur when an officer misinterprets information or when factors crucial for the decision-making process are not recognized or identified.[37] Mistakes are a subset of simple negligence. Simple negligence is defined as the failure to exercise ordinary care or as a deviation from the conduct of a reasonable person of ordinary prudence under the same circumstances.[38] Under such a standard the intention of the officer is not a factor and acts of mere inadvertence could create officer liability. The application of a simple negligence standard would not consider the reality of policing in that such decisions are made in the field in what is often a dangerous and rapidly changing environment and could create a chilling effect on officers who may fear that their well-intentioned or inadvertent actions may subject them to civil liability.

Using the benefit of hindsight, use-of-force experts are very adept at identifying mistakes or negligent actions that officers could have performed differently. They will point out that the officer could have retreated, used a less-lethal tool like pepper spray, or waited for back up. They will suggest that the officer should have called for more officers, a supervisor, a SWAT team, a negotiator, a K-9, an armored vehicle, or even a helicopter. They will advocate that if the officer had all of her equipment, or better equipment, if their weapon was holstered safely, if their attention was not diverted, if the officer was not too close or too far, or if any of these factors had occurred the situation would have resolved peacefully. It is exactly this type of review that the Supreme Court sought to avoid. The hypercritical assessment of crisis decision making involving mistakes or simple negligence that is conducted later in the calm and safety of a courtroom would be an obstruction to effective policing.

A standard of recklessness is a more serious transgression against common police practice than simple negligence. Recklessness is a disregard for or indifference to the dangers of a situation or for the consequences for one's actions.[39] These intentional acts carried out during a known or obvious risk create a high probability that harm will occur.[40] Recklessness should not be confused with bravery, where a person demonstrates a reasonable level of fear rather than none at all. A reckless officer may be seen by some as heroic; consider an officer who, without regard for their own safety, fearlessly charges into a building to confront an armed assailant. This type of reckless display is more often a blunder that places the officer or others at great risk with little true benefit. The reckless act of charging into a situation necessarily causes the suspect to react. The suspect is faced with a split-second decision of her own and unlike the officer, the suspect has had no training, has demonstrated poor decision-making skills by failing to immediately surrender or comply with the officer's commands, may be under the influence of a drug or alcohol, or may suffer from a mental illness.

Unfortunately, neither simple negligence nor recklessness is an appropriate standard. The application of a simple negligence standard would be too unforgiving to officers who are responding to the actions of a suspect in situations that may be dangerous and volatile. Such a standard may cause officers to refuse to act to avoid the risk of liability while allowing the community to absorb the risk that the police were intended to resolve. Recklessness, on the other hand, may be too lenient of a standard. Recklessness would be very difficult to prove even if the officer's intention was imputed due to the evident errors committed by the officer.

A gross negligence standard is perhaps the appropriate standard to apply in the determination of objective reasonableness. Gross negligence is not easy to define, but it falls somewhere between simple negligence and recklessness.[41] Gross negligence is a conscious and voluntary disregard of the need to use reasonable care, which is likely to cause foreseeable grave injury or harm to persons. It is conduct that is extreme when compared with simple negligence, which is a mere failure to exercise reasonable care. Gross negli-

gence is much more than any mere mistake resulting from inexperience, excitement, or confusion, and more than mere thoughtlessness or inadvertence, or simple inattention.[42] A standard of gross negligence to determine reasonableness would balance the need to allow officers to make mistakes or acts that may amount to simple negligence, but at the same time create a remedy to discourage officers from conducting themselves in such a manner that needlessly provokes a violent confrontation.

Effective Realistic Training to Improve Tactical Decision Making

While it is true that no amount of perfect planning can prevent random violence, it is also true that planning and training can aid first-responding officers to exercise good judgment and good tactics as they engage in independent actions to save lives, prevent injuries, and resolve dynamic tactical situations. Much of police use-of-force training has been appropriately criticized due to (1) the reliance on shooting drills that focus on fixed targets engaged by officers who are comfortably positioned a few yards away, (2) the use of two-dimensional interactive videos that test only the "final frame" of an encounter, eliminating the opportunity to train officers on how to plan and coordinate their approach and initial actions, or (3) the use of role playing, although it is more realistic, fails to create a level of stress in the officer that would be generated by the danger and uncertainty of a field situation.[43] Recognizing that police tactics require practical application and have little value if officers cannot apply their learning to field situations, many police organizations have begun to focus their use-of-force training on decision-making models that are applied in the most realistic environments possible.

Technology has improved over the last several years and allowed developers to create much more realistic interactive video simulators. Although not as ideal as interacting in the field, this new generation of simulators allows officers to plan their approach, communicate with other officers, and be tested on their tactical decision-making skills. These new simulators use firearms identical to those that officers deploy in the field. The weapons are no longer tethered to a machine; they are carried in the officer's holster to be deployed only when necessary. The videos now have multiple branches allowing the trainer to change the scenario based on the officer's actions. Trainers can create situations that may, or may not, require a force application. This type of "shoot–don't shoot" training reinforces the officer's decision-making skills and forces the officer to consider alternatives ranging from no force to deadly force to resolve the encounter. But perhaps the greatest innovative aspect of these simulators is the ability to literally shoot back at the officer. Equipped with a compressed air cannon the trainer can fire plastics projectiles at the student. These plastic balls do not injure the student, but they are painful and serve as an immediate reminder that the officer failed to take appropriate cover when cover was available. The ability to fire back at

the officers also places the officers under duress, forcing officers to make decisions much as they would in the field.

The first generation of 360-degree simulators that function as part of a live firing range have also become available for trainers. Over the last decade, these simulators allow the officers to drive their vehicle onto a firing range and confront situations that may be occurring in front of them, to their sides, or even behind them. This type of simulation allows a greater amount of time to judge the officer's initial actions, to hear their plans, and to require the officer to communicate to other officers, witnesses, and suspects alike.

Range qualifications have also improved. Traditionally, police officers have qualified by firing at a "bull's-eye" target. These targets were changed to silhouettes, which were slightly more realistic, but the officers remained standing a few yards away firing from a position of comfort or at worst from behind a small barricade. Range masters are now requiring officers to shoot while moving, while kneeling, from behind objects that may provide cover, and from the open door of a police car, emphasizing the need to use cover, to reload while remaining in a position of cover, and to communicate with other officers who may be engaging the same target.

Finally, the most realistic training available for officers is role playing, which has evolved into force-on-force training. Through the use of simunitions, cartridges that are used in the officer's own gun that fire a marking agent, trainers are able to put officers into scenarios and evaluate the officer's response from the beginning. Officers can be trained how to diffuse situations, contain scenes, set perimeters, communicate information, formulate plans, and to make tactical approaches. Trainers offer advice on the effective use of low light situations, back lighting, the use of a flashlight, cornering, and a myriad of other tactical advantages. The simunitions provide immediate feedback to the officer should they fail to take appropriate cover, if they miss their target, or if they engage a target with a poor backdrop. Through this type of interactive role playing officers are better able to deal with the stress that they are under in the field and understand the advantages of proper tactics.

Police departments owe their officers proper policies, training, supervision, and a system of accountability. Departments must train officers not to create dangerous situations or to put themselves in situations that require force as self-defense. There are many tactics that may seem reasonable at the time and provide officers with a quick and simple response to an uncooperative suspect, but result in a use of force that could have been avoided. As we have noted, reaching into a car that is running to turn it off and get the keys is one of those seemingly reasonable responses that can result in an officer being dragged down the street and then shooting the driver to save his own life. Regardless of the specific scenario, officers must be taught to avoid self-created danger or jeopardy, and must learn how to respond safely to situations that can lead to injury or death.

Notes

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New Developments in Understanding the Behavioral Science Factors in the "Stop Shooting" Response

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(Research at FSRC and elsewhere leads to an understanding of the behavioral reasons why officers cannot stop shooting the instant the threatening behavior of the subject ceases.)

The Shoot and Assess Dilemma

A law enforcement officer can use deadly force with a firearm in a variety of circumstances. However, once that officer has used deadly force, the microscope of the investigators, his or her department, the courts, and society will focus on the circumstances of the shooting and the officer's response(s) to those circumstances. Inherent within this investigation will be a close scrutiny on two phases of the shooting. First, the officer's decision and/or reaction to start shooting and then the officer's decision and/or reaction to stop shooting.

For understandable reasons, in lethal force encounters, the officer's primary focus is usually on surviving threats to his or her life, and most of the officer's preparation and training has focused on the officer's responses that would most likely guarantee that survival. Very little attention if any is focused on immediately stopping shooting when the lethal threat changes—even if stopping immediately was humanly possible.

There has been and continues to be a variety of approaches to what officers should do while shooting and when officers should "stop" shooting. A small number of officers and departments in the United States and elsewhere still believe in and train that an officer should shoot one round and then stop and assess. Others believe in and train the double tap and then assess. Still others believe in and train the triple tap and then assess. Since at least the mid 1980s, a developing and predominant training approach has been to have officers shoot and assess simultaneously. This training method of shooting and assessing evolved and became more popular as more was understood in the law enforcement community regarding the actual stopping power of a bullet and the kind of circumstances officers confront when attempting to save their lives or the lives of others by means of lethal force (Harper, 2000; Ogden, 2007).

It became apparent from research and a variety of high-profile incidents, such as the FBI/Miami incident, that shooting once, twice, or even three times and then stopping and assessing, which all take time, gave the opportunity and advantage to the "bad guy" who may be continuing to fire (Lewinski, 2000). Recent research has also revealed that even novice shooters can fire at least three rounds in 1.5 seconds (Lewinski, 2007). Therefore, the safest way for an officer to respond in a firefight is to shoot and continue to shoot accurate shots on target until the threat stops. Although *shooting and assessing* is undoubtedly the safest way for officers to respond in today's firefights, a downside has become apparent to the shooting and assessing

response. That downside is that while the shooting and assessing response helps an officer survive in the street, it could lead to a misunderstanding of an officer's competency or motivations. This could be especially true when a large number of shots is fired after the threat has ended or different officers in the same situation fire a different—and sometimes dramatically different—number of shots.

What has become clear is that officers from the same department with the same training and guidelines will respond differently in lethal force encounters and will start and stop shooting at different times. This is primarily because of individual perceptions and responses to the threat, and the perception of the cessation of that threat. These individual factors often are not directly linked to a department's training and policies but arise out of the human factors that an officer brings to and meets in these encounters.

The Results of FSRC's Research on Understanding the Time to Stop Shooting

History

In the past, problems that have arisen out of the shooting and assessing response have been alleged to be the result of emotional or personal factors on the part of the officer such as "too much firepower," "the officer being emotionally out of control," "bias or hatred," "malice or evil," "poor training and supervision," etc. The Force Science Research Center (FSRC) has been dedicated to understanding the *stop shooting problem* when an officer is shooting and assessing, and our research and the research of other universities are beginning to shed light on why an officer who is both shooting and assessing cannot stop shooting immediately.

The very act of stopping has been studied by several researchers to date. This research has found three main components to stopping: (1) that stop and go processes in the brain seem to operate independently of each other (Logan & Cowan, 1984, pp. 308-313), so the cognitive process to stop is racing against the cognitive process to go; (2) the longer the delay between the onset of the go stimulus and the onset of the stop stimulus, the harder it is to stop (p. 297)—theoretically, then, for police officers, the more rounds they have continuously fired, the harder it becomes to stop that reaction and the longer the time frame before they can stop; and (3) when you are asked to respond to more than one stimulus at a time, the reaction time to the second stimulus will be slower than if they both had been independently presented (Johnson & Proctor, 2004, p. 178). Officers who are both shooting and assessing will likely give more concentration and attention to one aspect over the other. The one with the lower level of attention or effort is the one that will suffer or be less sensitive and reactive to changes. For instance, an officer who is shooting to stop the threat and is intently focused on accurately shooting or, on the other end of the spectrum, an officer who is emotionally recoiling at the thought of his or her own apparent and imminent death and is intently shooting to save his or her own life are both going to be impaired in their ability to perceive and respond immediately to changes in the subject's behavior.

Further, much of the research conducted on stopping has been on the inhibition of a reaction that has yet to be completed; this is called the "stop signal paradigm" (Logan & Cowan, 1984, p. 296). This research shows that most people can stop in 200 ms an action that they had just started but have not completed. The ability to stop their reaction in this time also implies that the initial reaction and motor movement

time take longer than 200 ms to complete. When shooting, police officers are usually engaged in a continuous action, which Morein-Zamir, Nagelkirke, Chua, Franks, and Kingstone (2004) found to be strongly correlated with the stopping observed in the stop signal paradigm. Green (2000), however, found something very different. He investigated the research on stopping reaction time from a continuous action in more "real world" circumstances when he conducted a review of the literature on braking reaction times with drivers in automobiles or simulators—a slightly different form of stopping. He found that under expected conditions, reaction time to begin braking was between 0.70 to 0.75 seconds, while under unexpected conditions, reaction time was 1.5 seconds or longer (pp. 206, 209). This rather large disparity between 0.20 and 0.70 or even 1.5 seconds may be attributable to the differences between studies conducted in pure laboratory conditions that isolate a specific phenomenon compared to real-world research which involves a variety of phenomenon, including attentional problems and automatic motor programs that are difficult to interrupt or control for in real-world studies but are usually controlled for in a laboratory study.

Each one of these components cited above, if they applied, would add time to the overall ability of the officer to stop shooting as soon as the threat changes. Plus, there are other factors to consider. Damon, Stoudt, and McFarland (1966), for example, in examining a version of the conditions studied by Hick (1952), found that when a subject made a decision involving only one choice, it resulted in an average reaction time of 0.20 seconds. Each additional choice adds up to 0.05 seconds more (citied in Olson & Farber, 2003, p. 322). Stopping is therefore a singular or series of multiples and/or a complex of dynamic processes, which can be affected by several different factors, all of which have an impact on reaction time to both start and stop anything. In an effort to clarify this research and its application to a law enforcement population, FSRC took a closer examination at the *stop shooting response* with police officers.

FSRC's Research

First, FSRC's work with the "Tempe Study" was focused on the starting and stopping reaction to the most elementary circumstances (Lewinski & Hudson, 2003a, 2003b). When a light was turned on, an officer armed with a specially equipped training gun was to pull the trigger of the gun as often as he or she could until the light went off. The light was turned on randomly and turned off randomly so that the officer never knew when the test was going to begin or end, but the officer did know it was going to end and that this was not a threatening situation. It was apparent that the officers were under some stress during the testing and worked as hard as they could on the experimental tasks (Lewinski & Hudson, 2003a, p. 28).

From a previous "Tempe Study," FSRC knew that the average time to see the light come on and to begin to pull the trigger, for the average officer was a full quarter of a second. Through the expert work of Dr. Bill Hudson (Deputy Director of the FSRC and Chairperson of the Computer and Electrical Engineering Department at Minnesota State University, Mankato), FSRC was able to set up a Glock training pistol with a system that allowed a precise measurement of the time to complete the physical action of a trigger pull. That time was 6/100ths of a second for the average officer using a short stroke Glock. Therefore, the quarter of a second perception processing time and the 6/100ths of a second reaction/motor time resulted in a time to complete the first trigger pull in response to the simplest stimulus of 31/100ths of a second (Lewinski & Hudson, 2003a, p. 27).

Because of the simplicity of the stimulus in their study (a single light going on or off), FSRC was able to obtain the fastest reaction time possible for the average officer to respond to anything and that includes both starting and stopping shooting. Any other type of reaction or response in any other circumstance is going to take the officer longer. FSRC discovered that the quickest an officer could stop shooting in response to a simple change in external circumstances, when he or she was actively engaged in the process of starting to shoot or actually shooting until the threat stops, is approximately 35/100ths of a second, with most of the officers (68%) taking up to 6/10ths of a second (Lewinski & Hudson, 2003a, p. 28). Because the average time for the average officer to cycle through trigger pulls on a Glock while firing multiple rounds is approximately a quarter of a second, our data means that the average officer is able to react to the simplest external stimulus to shoot serially and back off the trigger pull after firing two rounds when the stimulus is extinguished (p. 29). This, of course, varies with at what point in the trigger pull sequence the officer detects the change. This study informs us that when the average officer stops shooting based solely on a perception of change in the outside world, the fastest the officer is able to do this is 35/100ths of a second or the completion of one full trigger pull cycle and the completion of the second shot by pulling the trigger back to the back of the trigger stop, resulting in two shots being fired (p. 28).

We must make two important qualifications here. First, for the most part, most of the officers were trying to pull the trigger as quickly as possible. Secondly, the officers knew the light was going to go off; they just didn't know when. The conclusion from this research is that even though some officers in real life shooting situations in the street will stop shooting as soon as the subject stops his or her threatening behavior, for most officers who perceive a threat and respond to that threat by shooting until the threat stops, those officers (shooting and assessing) will still fire at least two rounds from a Glock or similar short stroke weapon. This will occur not when the subject has changed their threatening behavior but after the officer begins to detect a change in the threatening behavior. This distinction is important because the psychological processes of perception and detection often take many times longer than the physical responses involved.

The Tempe Study measured the fastest time for the average officer in the simplest circumstance to stop shooting. As stated previously, every other type of shooting circumstance is going to generate a longer time to stop shooting in response to a change in circumstance outside of the officer. This is due to the following:

- *Simplest Challenge*—FSRC'S laboratory test was the simplest challenge the officer could face. It doesn't get any simpler than light on and light off. Actual shooting situations on the street often demand much more complex decisionmaking to both starting and stopping shooting than FSRC tested in the lab. These sometimes profoundly complex perceptual and decisionmaking processes can also be significantly emotionally laden and that can profoundly complicate and subsequently increase the time for the perception of a change in the threat and the resulting decision and reaction to stop shooting.

- *Selection of the "Right Threat to Focus On"*—Street encounters are more visually and auditorily complex than the test conditions in the laboratory and often require the officer to see and hear many things simultaneously. This requires the officer to select the most important thing to focus on and hopefully this also turns out to be the most important factor(s) for the officer's safety and ultimate survival on the street and in the legal aftermath. For instance, an officer who is focused on a

front sight placement will not be able to immediately see a change in the assailant's threat action and therefore will sometimes shoot many more rounds after the threat has changed or stopped. On the other hand, an officer who is focused on the subject and not their own gun sights will also be unable to stop immediately, but because of his or her focus, he or she may be able to stop sooner to a change in the behavior of the subject he or she is shooting at than an officer who is not focused on the subject. Unfortunately, this officer may also be very inaccurate with his or her shots. Simply stated, an officer has to be focused on the behavior of the subject that changes if he or she is going to be able to react to that change as quickly as possible (Lewinski, 2008b, p. 125; Vickers, 2007, pp. 53-54; Vickers & Lewinski, 2009).

- *Expectation that the Threat Will Stop or Continue*—In the laboratory, it was very clear that the light would go off and the officer would then be required to stop pulling the trigger. Most officers in an actual firefight do not know if or when the threat they are facing will cease or whether they will die before the threat stops. This primes their reaction to continue until a "noticeable" change occurs in "their perception" of the threat. If the "noticeable" change is different than what the officer expects or what actually occurs at a different location than the one the officer is focused on—that in and of itself will lengthen the officer's reaction time to stop shooting (Corbetta, Miezin, Dobmeyer, Shulman, & Petersen, 1991, p. 2395).

- *Role of Emotional Reactions in the Trigger Pull Response (Trigger Pull Cycle Time)*—Although fear and anger both fuel adrenaline and this enhances gross motor responses like running or lifting something heavy, it has a negligible or even an impairing effect on fine motor skills such as sighting a gun and pulling a trigger. Therefore, we expect an officer's trigger pull cycle time to vary little in the street from the cycle time that we discovered in the lab. Assuming the officer has good weapon management skills, all factors being considered, the emotional reaction of the officer will not significantly enhance or decrease their trigger pull cycle time (Schmidt & Wrisberg, 2004, p. 69).

Given all of these factors, it is clear that FSRC just laid down the bottom line on reaction time. It gets much more complicated from this point and, often, unfortunately for the officer, slower.

The Role of the Eye in Stopping Shooting

The following factors are very old and well-understood psychological principles that have been tested in a variety of circumstances and that in *performance psychology* are known to affect the areas of vision, perception, and attention. They do have a profound impact on perception, processing, and reaction time to both starting and stopping anything and so also impact the human performance reaction in a shooting situation. Recent studies in these areas, as published in *The Journal of Neuroscience* and a variety of other professional and popular publications, have lent further understanding as to how these factors function in lethal force encounters and will help explain why some officers take so long to both start and stop shooting (Shomstein & Yantis, 2004). Before we can understand the psychological factors in perceiving a threat, we first must understand the physical role of the eye.

Focus

To understand the significance of this, the reader must first understand how information gets into the brain. Seeing that a lethal force encounter is primarily a visually dominant activity, this will be illustrated with an explanation of the process of seeing. In doing so, it can be demonstrated that the research challenges the belief that we can see, record, and react to more than one thing at a time, particularly under conditions of intense visual focus. This does not mean that we cannot react to visual stimuli in the peripheral vision—in fact, quite the opposite is true—but under conditions of intense visual focus, our ability to perceive and react to stimuli in the peripheral vision is impaired.

The reality is that each eye is capable of clearly seeing only within two to three degrees of what it is staring at (Vickers, 2007, p. 18). Everything else is in our peripheral vision, and the clarity of the peripheral vision changes from "fairly good" when looking almost straight ahead to "very bad" at the outside of our peripheral vision.

To test this out, the reader can print out this page, stare at the X, and while staring at the X, try and see how well they can read the numbers on either side of the X right out to the edge of the paper. Try this at different distances and also try to see both sides of the page at the same time and you will see the impact focus has on clarity of perception both close up and further away, even on information that is directly in front of the reader, who presumably is doing this while under minimal stress.

50000 40000 30000 20000 10000 X 00001 00002 00003 00004 00005

What this means for an officer involved in a shooting is that the specific visual focus of the officer (left or right, near to far, and specific to general) will dictate what the officer is able to clearly see and react to or report. If the officer is not specifically focused on it, as we will see later, the officer—if he or she sees anything at all—will not be able to react very effectively to it or remember it.

A qualifying factor should be included here. Peripheral vision is excellent for acquiring a variety of information, including our distance from objects. Even so, it creates significant problems for officers involved in shooting situations in two areas. First, peripheral vision is excellent for judging the speed of travel of objects coming close to us such as a tackler in football or a fastball in baseball. However, the phenomenon of how the eye judges the path of travel and speed of an approaching object is conducted differently with focal vision than with ambient vision (Schmidt & Wrisberg, 2004, p. 115; Vickers, 2007, p. 20). When an officer becomes aware of an object coming toward him or her, such as an automobile, out of their peripheral vision, and then shifts to judging the path and speed of the vehicle with his or her focal vision, the shift in visual processing from focal to peripheral can result in the perception that the vehicle has "jumped" toward them. Forensic investigation may or may not find physical evidence to support this, but this perception of "jumping" may be due to a shift in how the information is processed by the eye and brain. This qualifying point is added here because the perception of the "jump" may lead an officer to begin to shoot when they normally would not have or to shoot earlier than they might have.

Eye Movement (Saccades)

This is the name for shifts in the eye that result in the ability to see clearly from side to side and up and down without moving the head (Vickers, 2007, p. 20). In the illustration just above, the reader will also see that when vision is shifted to the right or left, the reader's view of the X blurs, but the side of the page that is being looked at gets clearer. The important point here, though the reader probably did not notice this, is that shifting focus takes time. In fact, even though the reader might have thought of it as immediate or instant, for the average person, in average circumstances, the eye shift takes 2/10ths of a second to shift to one side and 2/10ths of a second to shift back (Crevits, De Clerck, & Van Maele, 2000, p. 322). If this is translated into trigger pulls, in the time it took the reader to glance from the X in the center to either side of the page and back, it would take 4/10ths of a second and, again, the average officer would have fired two rounds in that time span or—to shift the reference—two rounds could have been fired at the officer.

The reader can test this out for him- or herself. While looking at the X, the reader can count one thousand and one (the average time count for one second). Note, at the appropriate cadence, each word in this count takes one quarter of a second to think about). The reader can then simultaneously quickly shift his or her eyes, and he or she will see that the average quick look to either the left or the right, a quick fixation to note the number at that sight, and back again takes the word count of "one thousand," or just under a half second, or two shots if we translate that time into trigger pulls.

The reader should also note two other things during this illustration. One is that if he or she focused at all on the "5000" during the saccade, it takes a lot longer than half a second to complete this task. Secondly, while shifting his or her eyes quickly—and it has to be done quickly—he or she can partially see but not read the "4000," "3000," and "2000" as they go by them. The brain simply does not record what is in-between these focus points under a quick saccade (Vickers, 2007, p. 20).

The Role of Attention and Shifts in Attention

The brain, through the senses, primarily the visual sense, gets the information it needs to deal with the world. Because the senses and the brain are bombarded every second with vastly more information than the brain can use and most of which is irrelevant, the brain focuses on what is currently important to it and generally ignores everything else unless something "catches" our attention (Vickers, 2007, p. 54).

For instance, the reader of this article might be seated in a chair or standing. The pressure of the surface the reader is sitting or standing on is most likely ignored until he or she brings his or her attention to it. Try to remember how this "ignored" pressure felt 20 seconds ago and unless the reader's attention was focused on it then, they likely cannot remember it now, even though it is the reader's own bottom sitting on that chair or his or her feet standing on the floor. Imagine yourself in court three months to five years from now and an attorney is cross-examining the reader on the circumstances surrounding his or her reading of this article and asks the reader to describe the pressure of the chair on his or her body from the beginning of their reading of this article until now. Would the reader admit that it actually was his or her body in the chair, but he or she does not remember anything about how it felt to be there? Would the reader "fill in the blanks" by thinking about what the chair felt like at some other time and logically concluding it had to have felt the

same at the time he or she was reading this article? Or would they simply guess how it felt because he or she was too embarrassed to admit not remembering?

This same illustration of the focus of attention is true of the visual exercise we just presented. If you are focused (visual attention) on the X, you cannot completely and accurately report on "0005." This is the result of a combination of two factors: (1) visual and (2) attentional focus.

The same is also true for an officer in a shooting situation. Before the authors explore this further, the process of *visual accommodation* needs to be explained. Just as the reader can shift his or her visual attention from peripheral to focal vision, he or she can also shift it from near to far. This shifting process is called "visual accommodation" (Goldstein, 2002, p. 42). The reader can again experience this for him- or herself through conducting a simple study. First, the reader should hold the thumb of either hand in front of his or her body at arm's length. If his or her vision is focused on the thumb, the background will blur. If he or she focuses on the background, the thumb, or the foreground, will blur. Although, again, the reader is likely unaware of it, shifts in this type of focus from near to far and back again take time. If the reader was to also clarify what he or she saw at either end of the shift of visual focus from near to far and back again, it would take as long as half a second or more to shift and come back again. If an officer is focused on his or her sights or has his or her sights on a subject he or she cannot completely and accurately report what the subject he or she is aiming at, or anything else in front of the officer, is doing precisely at the time he or she is sighting. The implications of this officer's "inattention" are twofold. First, the officer will not be able to immediately "react" to anything that either newly presents as a threat to the officer or changes in the current threat situation while the officer is not narrowly focused on them. Secondly, the officer will not be able to "remember" things directly outside of his or her narrowly focused area of attention because he or she would literally not have seen it or not have seen it clearly enough to accurately remember it (Lewinski, 2008b; Vickers & Lewinski, 2009).

A caveat needs to be included here. Any reader who has participated in a dynamic game such as football, tennis, or baseball knows the value of using peripheral vision to assist in judgments and reactions. For instance, baseball players who are playing in the outfield will easily use the large dark object appearing in their peripheral vision as they are focused on catching a fly ball to know how far away they are from the outfield wall and to judge the speed of their travel, time to impact, etc. This is because of the *schematics* ball players have built in their brain from years of playing in a known environment. They do not need to focus on the wall to see it is there; they make assumptions or draw conclusions about facts that are not well-defined because these facts fit within their knowledge and experience. Similarly, officers in a force encounter will use information acquired from their peripheral sensory or attentional processes and match or compare that information to a schematic or blueprint in their head that was acquired from training or previous experiences. This helps them process and understand information that is incompletely perceived without their needing to focus on it just as the baseball players in the prior illustration. This means an officer in a highly threatening encounter who has information about the situation he or she is in that leads him or her to believe he or she is about to be assaulted will have a quicker reaction time to attacks coming from his or her peripheral vision. Unfortunately, use of the peripheral vision and context without visual clarification can lead to errors in judgment. The counter to that as the reader will see shortly is that visual clarification

can take a dangerously long period of time as well as possibly taking the officer's attentional focus off other relevant threats (Schmidt & Wrisberg, 2004, p. 264).

The reader might also logically conclude that if he or she cannot accurately see something and he or she needs to, the reader might have to first "focus" on it (visual and attentional focus takes time) to "clarify" that the reader is seeing what he or she believes he or she is seeing (this takes time); "make a decision" about it (this takes time); and, then, "stop" doing what he or she is doing—in this illustration, shooting. This simple illustration of the components of a stop shooting reaction informs us that the act of putting on the brakes on a motor activity like shooting takes time, particularly under conditions of intense focus as might occur when an officer is shooting to save his or her own life.

Some officers might skip some or all of these steps, but for those who engage in all of them, the total time to stop shooting in a visually complex, dynamic, rapidly unfolding circumstance as most officer-involved shootings are could be a total of the following approximate time factors: shift and focus (¼ of a second) (Vickers, 2007, p. 20), clarify (¼ of a second) (pp. 19-20), decision (¼ to ½ of a second or more) (Lewinski & Hudson, 2003b, p. 26), and stop shooting (¼ to ⅓ of a second) (Lewinski & Hudson, 2003a, 2003b).

If the reader totals up the numbers, he or she can see that an officer who engages sequentially in all of the proceeding steps can take a second to a second and a half or more to stop shooting. Measured in trigger pulls, which are occurring at a quarter of a second each, this is an extra four to six rounds after the threat stops. This is approximately the same amount of time that Green (2000) found for reactions to stopping in a real-world driving situation. If the reader changes the response from *stop shooting* to *start shooting*, he or she can also easily see that an officer who does all of the above steps will take three quarters of a second or more to start shooting.

Most officers do not take this long to stop shooting after the threat changes. Some take longer. Some of the officers may take longer because one of the previously mentioned stages is demanding more time of them such as a shift in focus, the officer needs to clarify a change in the threat, or the officer is actually engaged in a complex decision process. Each of these or combinations of these could dramatically increase the time it takes for an officer to stop shooting. Officers also take longer for other reasons. The primary author of this paper found the most frequent reason for delayed reaction time is that the officer is psychologically recoiling from being in the middle of an assault on his or her life. In attempting to emotionally cope with this threat and simultaneously rally a life-saving response, the officer is unable to instantly perceive even major changes in the threat. Preoccupation with his or her own reactions and efforts, literally draw the officer's focus and attention away from the threat and, in fact, anything outside of his or her own responses. In these cases, the officer is not shooting to stop but shooting to save his or her life. Although these two responses should be the same, the way they are being used here is quite different. The officer who is externally focused on the threatening subject, the behavior of that subject, has his or her sights focused on the subject, and is shooting to stop the threat is the officer who is most likely to actually hit and stop the threat and then be able to back off the trigger pull fairly effectively. The officer who is emotionally recoiling from what most frequently is a sudden, life-threatening assault and who is shooting to save his or her life because of his or her internally focused, emotional response may be more likely to not be focused on the threat and to engage in a "spray and pray" shooting pattern instead which is

ineffective—particularly in a dynamic, active, rapidly unfolding shooting scenario. It also means that an officer with this type of emotional response is going to be very unresponsive to changes in the behavior of the assailant who is threatening him or her because the officer simply will not notice it (Lewinski, 2008b).

The officers who do not take this long to stop shooting may be exceptionally fast; they may have skipped one or more of the steps, most likely the clarify step or the decision step; or they simultaneously engaged in several steps and thus shortened their total response time. Some officers who do not fire all of these "extra" rounds may stop for some other reason than a change in the threat level. Or they may see a change in the threat level but interpret it differently than their fellow officers—for instance, one officer may see someone collapsing to the ground and perceive he or she is no longer a threat and stop shooting, while another officer may perceive the same subject engaged in the same motion and see it as "crouching down" and believes that the subject is still a threat. This second officer will continue shooting even though the first officer has stopped.

Further, officers will sometimes stop shooting because in training they rarely fired more than two or three rounds in sequence, or they thought they would never have to fire more than two or three regardless of their training. Some officers may simply fire a few rounds because that is all they will ever fire under any circumstance. Some officers, regardless of the threat level, are reluctant to fire at all and do so only very slowly, thus allowing them to better see behavioral changes in the threatening subject and to stop shooting faster. It also makes it more dangerous for them under actual firefight conditions. Aside from these irregular patterns, it should be clear that whether an officer's focus of attention is externally focused on the threat or internally focused on his or her own emotional responses, that focus of attention is going to determine the effectiveness of the officer's shooting and his or her ability to change his or her response in relation to changes in the threat (Lewinski, 2008b, p. 130).

Recent research from Johns Hopkins University (Shomstein & Yantis, 2004) has shed further light on our understanding of other psychological processes in lethal force encounters, particularly our understanding of the puzzling issue of why officers are not able to stop shooting at the immediate termination of the threat.

One of these research findings directly relates to factors that elongate an officer's response to stop shooting and also to shifting to engage other targets or shooters. This research is to be found under the research name of "attentional blinks" (Raymond, Shapiro, & Arnell, 1992, pp. 858-859) or "inattentional blindness" (Mack, 2003, p. 180). They are different but related concepts. Very simply put, the research and theory holds that if you are even moderately focused on one thing, your brain not only does not process or ignores the other things you are not focused on but actually acts to suppress the information on which you are not focused. This means it could be impossible for an officer in a dynamic, visually complex, rapidly unfolding shooting situation to see anything other than that on which he or she is immediately focused. The reason he or she cannot really see anything but that on which he or she is focused is not only because there is too much going on for him or her to focus on anything other than what is immediately important, but also the officer's own brain is helping him or her stay focused by actively blocking out the information on which the officer is not focused. An important qualifier here is that what an officer sees as important in the middle of a firefight—such as scrambling to get a sight picture—might not be the same thing an attorney or court believes is important when they review the case months or years

later. For instance, an officer who is frantically scrambling to get a good sight picture or trying to rapidly bring his or her weapon up on target as quickly as he or she can to shoot to save his or her own life will be challenged for not noticing that the subject that was threatening the officer moved his or her head or turned his or her body during this very brief encounter.

The time price it costs the officer to shift attention from something that he or she is focused on to something else that needs to be focused on ranges from 2/10 to 6/10ths of a second at a minimum (Horowitz, Birnkrant, & Wolfe, 2003; Saarinen & Julesz, 1991). This means that an officer who is engaged and visually focused in putting his or her front sight on a threat could take a quarter to more than half a second or more just to notice a change in the behavior or status of the threat at which he or she is directly aiming. If the officer is engaged in shooting while he or she shifts his or her focus, the officer will fire an extra two rounds before he or she notices that the threat presented by the subject has changed or that another or a different threat is present.

Again, it is very important to remember that the brain of the officer who is focused on his or her front sight actually works to suppress the information about whatever else is going on in front of him or her for a very brief period while the officer is engaged in focusing and shooting (Vickers, 2007, p. 54). This also holds true for the brain of the officer who is focused on kinesthetic alignment, making a decision while being distracted with intrusive thoughts or anything else that draws his or her attention away from the threat. Logically, this makes sense because it is hard to simultaneously focus equally on two things at the same time or to even think of two things at the same time especially under threats to one's life. Neurologists such as Dr. Joseph LeDoux (1996) remind us about how and why we become very rigid, concrete, and inflexible in our attention and problem solving under this high level of stress. The more sudden and unprepared we are for the assault, the more instinctive our responses will be.

The officer reading this is likely aware of the current research and press announcements that relate to the difficulty of both talking on a cell phone and driving. The research informs us that focusing on a conversation impairs the ability to deal with visual problems while driving, such as the detection of a road hazard or the change of a driving condition, and then the processing or decisionmaking related to coping with that change (Green, 2000, pp. 212-213).

To escalate this illustration from talking on a cell phone and driving to a point where it is closer to the intensely focused experiences of an officer in a lethal force encounter, the reader should compare the ability to deal with a driving problem immediately after spilling very hot coffee on his or her lap. The reader's immediate focus, for even a very short duration, to the problem of the pain, wetness, mess, etc., of the spilt coffee would significantly impair his or her ability to see developing problems down the road, engage in a conversation with someone else in the vehicle, be able to report what song or news item was on the radio, or even to be aware of the red light he or she just drove through.

Dr. Steve Yantis from Johns Hopkins, in his research published in *The Journal of Neuroscience*, helps us understand what is happening to a human being in these kinds of split attention encounters (Shomstein & Yantis, 2004).

Dr. Yantis put his research subjects in a functional MRI machine so he could observe the activity of his subjects' brains as he challenged them with different tasks related to

attention. While they were in the MRI, they were able to look at a computer screen and had headphones on so they could focus on either their hearing, their vision, or both and be able to shift back and forth between them (Shomstein & Yantis, 2004, p. 10703).

Yantis observed that when he required his subjects to focus on the computer screen with their eyes, the part of their brain associated with hearing was "turned down." When he required the subjects to focus on their hearing through the headphones, the part of their brain dealing with vision was significantly "turned down" (Shomstein & Yantis, 2004, p. 10704). Yantis says this is because the human brain has problems dealing with more than one major item at a time. Yes, we can multitask as long as nothing we are dealing with becomes very important, in which case the brain shifts all its attention to what is important at that time and we lose the ability to detect, remember, and process other issues or items.

Officers in the street have observed that when they are focused on making their firearms work to shoot to save their lives that they too might not be able to even hear someone next to them screaming in their ear or even know that they fired their own guns or how often they fired them (Artwohl, 2002, p. 18).

Simply put, the work of Dr. Yantis illustrates and explains the attention and brain functions underlying tunnel vision and tunnel hearing. It also states that if we are focused on one thing—looking at something—and then a threat or challenge comes in through another sense, such as hearing, our response to that is going to be much slower than it normally would be.

So, if we are focused on seeing and specifically seeing what is important to us, we likely will not hear something that could be very important. Even if we did hear it, our reaction would be slower than it normally would be if we were listening for it.

Implications: So What Does All This Mean?

The implications of all of this are profound and wide ranging.

From the point of view of a trainer, it means that an officer dealing with a threat is going to react slower to that threat if they are not anticipating it or prepared for it. Also, dealing with multiple subjects in a high stress encounter is going to present an extreme challenge to the officer and trainer. Not only will the officer be able to primarily see only what he or she is focused on, but the officer's own brain may sabotage or delay the officer's ability to perceive and react to threats from others or even from the subject he or she is directing his or her attention to if he or she is not focused on or anticipating that specific threat. For instance, an officer focused on the subject's right hand and expecting that hand to contain a weapon is going to react much slower if the subject has the weapon instead in his or her left hand than if he or she had anticipated from the beginning that the weapon would appear in the left hand. The officer could also speed up his or her reaction time to a weapon in the left hand if he or she were open to the option that the weapon could appear in either or both hands. In previous news lines, FSRC has discussed visual scan patterns and the influence of scan patterns on the detection of threat and the memory of that threat (Lewinski, 2008a).

The trainer needs to develop programs that will assist an officer in rapidly scanning and precisely identifying the appropriate threat components of a scenario. This may

be as valuable for the officer as weapon skills. Yantis's work and the other research we have cited in this article inform us that weapon skills are far less productive if they are not combined with great target recognition and identification skills. Further, in regards to weapon management skills, instructors must provide training for their officers that involves dynamic movement relevant to incidents they will face and also that involves tracking and shooting at subjects who also are engaged in dynamic movement.

From the point of view of an investigator and prosecutor, the implications are even more profound. The work previously cited and the illustrations of the work at Dr. Dan Simons' visual cognition laboratory at the University of Illinois–Urbana-Champaign inform us that even under normal non-stress conditions we are seriously deluding ourselves if we think we can see, pay attention to, react to, and remember everything that we might ideally be able to see, even if it is present or happening directly in front of us (Simons & Levin, 1998). Yantis's work tells us that even in non-stress situations, if we are focused on the information coming into one sense, such as the eye, we are less aware or even unaware of information coming into the other senses, such as taste, smell, hearing, touch, or movement (Shomstein & Yantis, 2004). From the work of both Simons and Yantis, it is clear that at least during a brief period of "focused attention," we are "tuned down" to information coming in from another sense other than the one we are using to focus and even in that sense we are still "tuned down" to any other information coming into that very same sense—other than that information on which we are specifically focused.

Of course, in the laboratory, it is impossible to generate life-threatening situations with which the research subject needs to cope. However, street research informs us that an officer can be so focused on the threat or his or her attempt to cope with the threat that the officer literally cannot hear his or her partner screaming in his or her ear, do not notice where he or she is standing or moving to, do not record the number of rounds he or she has fired, etc. The officer also suffers significantly from an inability to perceive information that could be, at that time, tactically important to his or her own survival, let alone information that at some later point becomes significant in a court of law, based on someone else's perception of what should have been important to the officer at the time (Artwohl, 2002, p. 18).

In the past, these errors in attending to and recording information were termed and still are referred to as *perceptual distortions* as if in some non-stress environment we are able to sense, process, and remember in some nondistorted way everything that occurs to us. The reality is that most of us are very poor, in fact incapable, of perceiving and recording everything that occurs to us at any particular moment. We are often so preoccupied with our own thoughts or actions and so inattentive to the world outside ourselves that we frequently are not any more aware in the present moment in non-stress situations than when in high stress life-threatening situations. Therefore, the term *perceptual distortions* is a misnomer. Not perceiving the totality of an event is how we normally operate. In fact, even in non-stress situations, once we focus on anything, even if it is an idea in our own head, we significantly compromise our ability to perceive, react to, and remember anything that is occurring around and to us. Has the reader ever driven to work actively engaged in some internal problem or focused on an interesting discussion only to find that they have already reached his or her destination, oblivious of being on the journey? This phenomenon, although qualitatively different than the officer who is in a high stress, life-threatening encounter, is functionally identical. An illustration the

reader might relate to is one that the primary author has experienced while working on this article on a trip from England on Iceland Air. The author was listening to music and at times did not even notice the songs that had just been played or even remember that the music was on. According to Yantis, my brain had "tuned down" the background music from my ears so I could focus on what was important to me at that time, which was looking at my computer and thinking about this article. The author notes that some songs caught his attention, but then they distracted him from the attention this article required (Shomstein &Yantis, 2004).

This process of perceptual distortion has been called *tunnel hearing* or *tunnel vision* in the law enforcement world, but long before those terms entered the cop world they were being researched as a process of normal, everyday functioning under the names of *selective attention*, *attentional focus*, etc. An area of psychology entitled Attention was developed primarily to research these phenomena, and three journals dedicated to this area went into publication in the 1950s. For more information, see Niedenthal and Kitayama (1994).

What is most puzzling about all of this for the uninformed is why an officer who is in a life-threatening situation cannot remember something that is directly connected to his or her survival such as how he or she moved or shot, how many rounds were fired, or the movement of the very person he or she was shooting at to stop that person from killing him or her.

Besides the principles we have just covered, we need to refer to Tom Aveni's research cited in a previous news line (Lewinski, 2008a). Aveni's (n.d.) work informs us that the average officer-involved shootings, particularly those in which officers die, involve a shooting that occurs five to six feet or less from the officer. The average officer fires three rounds in response to the threat. FSRC's research informs us that the threat can rapidly unfold—perhaps as quickly as in a quarter of a second or less (Lewinski, 2000). In this very brief, usually dynamic, visually complex, rapidly unfolding, and life-threatening encounter, the officer, for the most part, is incapable of focusing on more than one thing at a time. If, for instance, the officer is focused on drawing his or her weapon, then he or she literally cannot see what the subject is doing. If the officer is skilled and trained enough so that drawing his or her weapon is automatic and instinctive, then the officer's mind is free to think of other things. The average officer, well-trained by current standards, can only directly focus on one other thing such as what the subject is doing, but he or she might not be able to report on where, geographically, the subject is doing this. Simons' (2000) work tells us that if you are focused on one thing in a visual field, you cannot see another thing in that visual field without shifting your focus, so an officer who is focused on the subject's hand on his or her waistband will not be able to see the subject's face (without directing his or her attention to it) let alone whether or not the subject is standing next to a tree, rock, car, etc. The officer often—unless it was noted at some other time than the immediate shooting encounter—is not able to tell us where he or she is in the scene other than some vague generalizations. The investigator needs to understand that in this brief encounter, the officer is only able to be relatively accurate about what he or she is focused on, not what the investigator later thinks is important. For instance, if the officer is focused on his or her gun and the number of shots fired, the officer can be very accurate about that behavior, but in the case in which the focus is on the officer him- or herself and the rounds fired, the officer will be reasonably inaccurate about the subject's behavior. If the officer is focused on the subject's behavior, he or she

often, for instance, cannot tell the investigator where he or she stood or accurately report his or her own behavior for that brief microsecond of time.

As stated previously, this inability to notice and react to anything other than that on which an officer is focused is not a myth generated by law enforcement officers. It is a well-documented phenomenon in cop shootings—from the early work by Dr. Roger Solomon to the current work of Drs. Artwohl, Honnig, and others (Artwohl, 1997, 2002, 2003; Honig & Roland, 1998; Klinger, 2002; Solomon, 1997; Solomon & Horn, 1986). This phenomenon has also been well-documented and explained by research in perception, attention, and cognition for over half a century. Please note the excellent summary of the literature (thousands of citations) in Niedenthal and Kitayama's (1994) *The Heart's Eye*, which focuses on almost fifty years of research on the effect of emotions on attention. Unfortunately, for a variety of reasons, the neuropsychology of why these phenomena occur has generally not reached the law enforcement world, and the law enforcement world has not reached into academia.

The general conclusion from all of this is that an officer must first perceptually and attentionally recognize that the subject has ceased to be a threat before the officer can then begin to alter his or her response to the threat. This process takes time and can result in many rounds being fired at the threatening subject for some period of time after the subject has ceased to be a recognizable threat.

Investigators in particular need to be informed about the dynamic action of subjects in deadly force encounters (Lewinski, 2000) and should use that information to help them understand shot placement or patterns of shot placement in the subject at which the officer is firing. For instance, a vehicle travelling at 10 miles per hour is going to travel about 14 and a half feet in one second. An officer standing in front of the vehicle with his or her weapon out as it begins to accelerate may take as little as 0.6 of a second to raise his or her weapon and fire one round (Lewinski, 2002) and spin to evade the vehicle. Even with this amazingly fast reaction time, which would occur without thought, the vehicle travelling at 10 miles per hour would cover over seven feet before it was hit with the first round. If the officer had any thought at all before he or she reacted, the first round to hit the vehicle would strike it after it had travelled over 14 feet. The same comparison could be made about the impact on the officer's stop shooting response and the influence of the time to assess that the vehicle had gone by and was no longer a threat.

The chart included in Table I (Lewinski, 2009) allows investigators to also compare the officers starting and stopping time with the travel time of a human being. The darkened squares in the chart (going from right to left) allow the reader to follow the average stride time and distance for the average person, starting with the first stride (the furthest right block) and ending with the person in a full stride at a "good" pace (the farthest left block). For instance, if the reader looks at the chart, he or she can see that the average person in moderately good running shape can, for at least a short period of time, cover at least five and half feet for every stride taken and can take each stride in one quarter of a second. Considering that the average person has no problem running 10 miles per hour for a short distance, the reader can then see that the same comparison can be made with a human as with the automobile. If an officer, reacting to a threat posed by a person running at 10 miles an hour, simply, without thought or aiming, raises his or her weapon and fires, the average person will be hit with the first bullet at a distance of seven or more feet away from where he or she first presented the threat, and that person will likely be in a different physical position.

Table 1. Speed of Person in Miles per Hour by Stride Length and Speed per Stride in Seconds

Force Science SpeedGrid™

Time in Seconds per Stride

Feet Traveled per Stride	0.17	0.18	0.19	0.2	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.3	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.4
8	32.09	30.30	28.71	27.27	25.97	24.79	23.72	22.73	21.82	20.98	20.20	19.48	18.81	18.18	17.60	17.05	16.53	16.04	15.58	15.15	14.74	14.35	13.99	13.64
7.5	30.08	28.41	26.91	25.57	24.35	23.24	22.23	21.31	20.45	19.67	18.94	18.26	17.63	17.05	16.50	15.98	15.50	15.04	14.61	14.20	13.82	13.46	13.11	12.78
7	28.07	26.52	25.12	23.86	22.73	21.69	20.75	19.89	19.09	18.36	17.68	17.05	16.46	15.91	15.40	14.91	14.46	14.04	13.64	13.26	12.90	12.56	12.24	11.93
6.5	26.07	24.62	23.33	22.16	21.10	20.14	19.27	18.47	17.73	17.05	16.41	15.83	15.28	14.77	14.30	13.85	13.43	13.03	12.66	12.31	11.98	11.66	11.36	11.08
6	24.06	22.73	21.53	20.45	19.48	18.60	17.79	17.05	16.36	15.73	15.15	14.61	14.11	13.64	13.20	12.78	12.40	12.03	11.69	11.36	11.06	10.77	10.49	10.23
5.5	22.06	20.83	19.74	18.75	17.86	17.05	16.30	15.63	15.00	14.42	13.89	13.39	12.93	12.50	12.10	11.72	11.36	11.03	10.71	10.42	10.14	9.87	9.62	9.38
5	20.05	18.94	17.94	17.05	16.23	15.50	14.82	14.20	13.64	13.11	12.63	12.18	11.76	11.36	11.00	10.65	10.33	10.03	9.74	9.47	9.21	8.97	8.74	8.52
4.5	18.05	17.05	16.15	15.34	14.61	13.95	13.34	12.78	12.27	11.80	11.36	10.96	10.58	10.23	9.90	9.59	9.30	9.02	8.77	8.52	8.29	8.07	7.87	7.67
4	16.04	15.15	14.35	13.64	12.99	12.40	11.86	11.36	10.91	10.49	10.10	9.74	9.40	9.09	8.80	8.52	8.26	8.02	7.79	7.58	7.37	7.18	6.99	6.82
3.5	14.04	13.26	12.56	11.93	11.36	10.85	10.38	9.94	9.55	9.18	8.84	8.52	8.23	7.95	7.70	7.46	7.23	7.02	6.82	6.63	6.45	6.28	6.12	5.97
3	12.03	11.36	10.77	10.23	9.74	9.30	8.89	8.52	8.18	7.87	7.58	7.31	7.05	6.82	6.60	6.39	6.20	6.02	5.84	5.68	5.53	5.38	5.24	5.11
2.5	10.03	9.47	8.97	8.52	8.12	7.75	7.41	7.10	6.82	6.56	6.31	6.09	5.88	5.68	5.50	5.33	5.17	5.01	4.87	4.73	4.61	4.49	4.37	4.26
2	8.02	7.58	7.18	6.82	6.49	6.20	5.93	5.68	5.45	5.24	5.05	4.87	4.70	4.55	4.40	4.26	4.13	4.01	3.90	3.79	3.69	3.59	3.50	3.41
1.5	6.02	5.68	5.38	5.11	4.87	4.65	4.45	4.26	4.09	3.93	3.79	3.65	3.53	3.41	3.30	3.20	3.10	3.01	2.92	2.84	2.76	2.69	2.62	2.56
1	4.01	3.79	3.59	3.41	3.25	3.10	2.96	2.84	2.73	2.62	2.53	2.44	2.35	2.27	2.20	2.13	2.07	2.01	1.95	1.89	1.84	1.79	1.75	1.70
0.5	2.01	1.89	1.79	1.70	1.62	1.55	1.48	1.42	1.36	1.31	1.26	1.22	1.18	1.14	1.10	1.07	1.03	1.00	0.97	0.95	0.92	0.90	0.87	0.85

*Average speed per stride in miles per hour

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	Average Stride Distance in Feet	Average Stride Time in Seconds	Speed in MPH
1	1.5	.35	2.92
2	2.5 - 3	.34	5.01
3	3.5 - 4	.33	7.23
4	4.5	.31	9.90
5	5 – 5.5	.29	11.76
6	5.5 - 6	.27	13.89
7	5.5 - 6	.25	15.00

On average, it was found that when youthful, vigorous, relatively fit people start to run, their first step takes about .35 of a second (not counting reaction time) and covers 1.5-2.0 feet. Their second step requires about .34 of a second and covers about 3.0 feet. Their third takes about .33 of a second and the stride lengthens to 3.5 to 4.0 feet… and so on. Typically, after 5 to 7 steps, people max out at about .25 of a second per 5.5- to 6.0-foot stride, which they can then maintain for a short period of time.

It is the responsibility of investigators to inform themselves of these phenomena and their implications for officer performance and memory in a lethal force encounter.

Conclusions

The following conclusions can be drawn from the theoretical research, applied research, clinical research, and the experiences of law enforcement officers who have survived lethal force encounters:

- An officer is usually not able to immediately see and react to changes in the subject(s) at whom he or she is shooting. This is not determined by whether that change is an increase or a decrease in the threat presented to the officer by the subject.

- The focus of the officer's attention—internal or external, specific or general, near or far, and left or right—will determine the officer's "ability" to perceive and react to changes in the threat and also the length of time it takes for the officer to perceive and then react to that change.

- The delay in noticing any change in the nature of the threat and having the officer change his or her behavior in response to that threat could theoretically take the average officer a second to a second and a half in a dynamic, "real-world," life-threatening encounter if the officer did not expect that the threat would cease. This process alone could be the reason for an extra three to six rounds being fired by the officer after the threat ceased—particularly if the officer was shooting as quickly as possible, was focused on shooting to save his or her own life, or emotionally recoiling in response to that threat and also simultaneously involved in assessing the threat. Of course, the more an officer is directly focused on the threat, the quicker a change can be identified and the officer can stop shooting.

- Officers will both start and stop shooting based on a variety of factors, including their visual angle on the incident and their ability to perceive the threat, their attentional and reactive capabilities, their weapon skills, and their psychomotor movement times.

It is one of the stated missions of FSRC to bring to law enforcement the current scientific research at FSRC and other universities. This article is written to further that end.

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Teaching 4th Amendment-Based Use-of-Force

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Contents

• "Clearly established law" establishes training
• Teaching the 4th amendment reasonableness standard
• Teaching the *Tennessee v. Garner* standard
• Teaching the *Graham v. Connor* standard
• Conclusion

Developing an amendment-based use-of-force training program takes a lot of work, insight, collaboration and foresight. Critics of the amendment-based approach highlight "Graham's direction to be objectively reasonable in light of the totality of the circumstances cannot be transferred straight from the law book to the street." [1] While this is procedurally correct, it is the substantive approach that makes the amendment-based approach viable.

To date, there has been limited direction on how to train and teach the reasonableness standard. Most often, only the discussion on the legal standard is presented and oftentimes, the trainer only focuses upon the 4th Amendment standard, even though his or her agency may also need training on the 8th and/or 14th Amendment standards. In 2000, the Wyoming Law Enforcement Academy (WLEA) began developing how to teach an amendment-based use-of-force training program for peace officers, detention officers and corrections.

WLEA formally launched the new training program in January 2001. Through training approximately 2,000 officers since the program's inception, the program has evolved with

the latest revisions occurring in 2011. Following WLEA in 2005, at the federal level, the Federal Law Enforcement Training Center (FLETC) transitioned to an amendment- based use-of-force program using a similar methodology. [2] The purpose of this article is to provide insight, based on the WLEA model, for transitioning from a continuum to amendment-based use-of-of force training and offer a trainer's perspective to developing and teaching a 4th Amendment use-of-force training program.

❖ "Clearly established law" establishes training

In the mid 1970's, Prof. Gregory Connor created the first "force continuum" as an instructional aide, designed to assist criminal justice trainers throughout the country.[3] LAPD developed the "Force Continuum Barometer" which was published in their 1978 training bulletin. In 1980 longtime international trainer, Kevin Parsons, Ph.D., developed the "Confrontational Continuum."

According to Parsons, "The concept of the continuum was to explain to officers 'when' to use force options as opposed to the traditional defensive tactics class which dealt only with 'how' to use force options. Thus, the continuum was designed to be a training tool."[4] John C. Desmedt of Protective Safety Systems, Inc. developed a "Use of Force Model" concept in 1981.

According to Desmedt, "In order to produce a valid model, it would have to be organized essentially as our original model."[5] Years later, in 2003, the use-of-force "Sector Model" was created by Ken J. Good of Strategos International and was described as "an evolution in Use of Force models."[6] Historically, agencies and training providers developed their own use-of-force programs generating a variety of contemporary continuums consisting of stair steps, ladders, barometers, matrices, etc., which total more than 50 different models.

Through the years, continuums increased in complexity it seems for no other reason than to reinvent the wheel producing several differing standards to explain to a jury. So why have varying use-of-force continuums been accepted by law enforcement trainers and the legal community without debate for so many years?

The general concept of use-of-force is, "A law enforcement officer may use that amount of force upon a person that the law allows. A law enforcement officer may not use more force upon a person than the law allows."[7] As the Tenth Circuit Court of Appeals stated, "Clearly established law dictates training, not the other way around".[8] Thus, an understanding of clearly established law is imperative for a use-of-force trainer. Clearly established Federal law is defined as "the governing legal principle or principles set forth by the Supreme Court at the time the state court renders its decision." [9]

Historically, from 1952 to 1985, the Supreme Court applied a Fourteenth Amendment substantive due process analysis to excessive force claims against police. [10] It was not until 1972 when the Second Court of Appeals provided a four-part test and a definitive statement to further define the shocks-the-conscience standard, "…force that is brutal and offensive to human dignity…" [11] In 1985 the United States Supreme Court's landmark case *Tennessee v. Garner* began a slight shift in clearly established law and away from Fourteenth Amendment substantive due process analysis.

The court ruled, "the use of deadly force to apprehend a suspect is a seizure under the Fourth Amendment objective reasonableness standard…" A police officer may not seize an unarmed, non-dangerous (fleeing felon) suspect by shooting him dead. [12] The court went on to provide guidance for lower courts conducting judicial analysis of officer's decisions in this particular circumstance.

In 1989 in *Graham v. Connor*, the Court moved the judicial analytical focus from the long used Fourteenth Amendment substantive due process, to the Fourth Amendment objective reasonableness standard. The court expanded post incident analysis to include all uses of force.

"The notion that all excessive force claims brought under § 1983 are governed by a single generic standard is rejected." "Instead, courts must identify the specific constitutional right allegedly infringed by the challenged application of force and then judge the claim by reference to the specific constitutional standard which governs that right." [13]

To say the years from 1985 to 1989 created a change in clearly established law is an understatement. *Tennessee v. Garner* and *Graham v. Conner* changed the post use-of-force analysis process for the courts and indirectly provided an opportunity for change for the law enforcement community and their use-of-force trainers. Some argue it mandated change via clearly established law.

❖ Teaching the 4th amendment reasonableness standard

Since 1989 multiple use-of-force training courses and conferences around the country presented the legal points of the *Graham v. Conner* case and the reasonableness standard. Many presented by former or retired law enforcement officers who are now attorneys. However, a critical missing link between the legal world and the law enforcement community and their trainers was created. There was very limited direction on HOW to train the reasonableness standard, only discussion on the legal standard.

As previously stated, the *Garner* and *Graham* decisions were directed towards the legal profession in the context of use-of-force post-incident analysis, making the court-provided guidelines very appealing for use-of-force investigators at all levels. However,

when developing a decision-making use-of-force training program for the officer, which includes report writing and testifying guidance, the substance and the training methodology are critical variables to ensure there is not a casual transferring of legal principles to the law enforcement classroom.

The basic concept of amendment-based use-of-force training is to move the post-incident analysis factors forward to the pre-incident decision-making process. Doing this takes a change in traditional training concepts. Use-of-force is not a team event; it is an individual decision which is judged individually. Traditional continuum-style training focuses on suspect behavior as a variable and the officer's predetermined response as the constant. In contrast, amendment-based use-of-force training focuses on each officer as an individual and the suspect's behavior cues as the constant.

For example, at the WLEA, each individual officer must make a solo arrest in a dynamic force-on-force scenario. The scenario has specific elements to be acted out to test the individual officers' tactics, use of force options, and ability to articulate his or her actions. The scenario is performed thirty-six times, for thirty-six officers.

Because the officer walking through the door is the "variable" with differing heights, weights, strength and abilities, there is potential for thirty-six different outcomes, with different force options, and they all could be reasonable. This is where the traditional force continuum has limitations by not addressing the officer as an individual and as a variable in a confrontation. Because reasonableness is "not capable of precise definition or mechanical application." **[14]**

The court provided directive guidance in the *Tennessee v. Garner* case, providing factors to aid in describing the totality of the circumstances. Along with these factors new guidance was given to fact finders (courts) analyzing uses of force:

1) "Proper application requires careful attention to the facts and circumstances of each particular case.
2) Must be judged from the perspective of a reasonable officer on scene not 20/20 hindsight.
3) Must embody allowance for split-second decisions in tense, uncertain, and rapidly evolving situations.
4) An officer's evil intentions will not make a Fourth Amendment violation out of an objectively reasonable use of force; nor will an officer's good intentions make an objectively unreasonable use of force constitutional."**[15]**

❖ Teaching the *Tennessee v. Garner* standard

In 1985 the Supreme Court established rigid preconditions for using deadly force (shooting with a firearm) in the context of preventing the escape of a violent fleeing felon. In 2007 the Supreme Court further stated in *Scott v. Harris*, "*Garner* did not establish a magical on/off switch that triggers rigid preconditions whenever an officer's actions constitute deadly force."

Garner was simply an application of the Fourth Amendment's "reasonableness" test, *Graham* to "the use of a particular type of force in a particular situation." [16] In the Tenth circuit, as recent as 2010, lower courts continue to use the *Tennessee v. Garner* standard to judge officer's use of deadly force (shooting with a firearm) to prevent escape. [17]

For these reasons the *Garner* standard is currently included in the WLEA use-of-force curriculum. *Garner* provided several factors, the court stated, "if the suspect threatens the officer with a weapon or there is probable cause to believe that he has committed a crime involving the infliction or threatened infliction of serious physical harm, deadly force may be used if necessary to prevent escape, and if, where feasible, some warning has been given." [18]

When teaching the first factor, probable cause to believe that he has committed a crime involving the infliction or threatened infliction of serious physical harm, emphasis is placed on the probable cause standard. Differing from reasonable suspicion, probable cause is the standard for making an arrest without a warrant. Thus, if an officer does not have articulable information to place the person under arrest for a violent crime, the factor cannot be satisfied, resulting in a no-shoot situation.

The second factor is, deadly force may be used if necessary to prevent escape; however, the *Garner* court did not clearly define what "necessary" means. In 1997, the Ninth Circuit Court of Appeals, further defined necessary, "The necessity inquiry is a factual one "Did a reasonable non-deadly alternative exist for apprehending the suspect?" [19] If the suspect is fleeing with a gun in hand, tackling the suspect, using OC Spray or a baton to prevent his escape would certainly not be reasonable.

The final factor is, give a warning of the imminent use of force, if feasible. There are two inquiries to be answered by an officer in determining when it is both feasible and appropriate to issue a warning prior to using deadly force to apprehend a fleeing suspect.

1) "An officer first should consider whether the suspect is aware that the police are trying to apprehend him, such that he has knowledge that he should stop."
2) "If an officer reasonably believes, based on the suspect's prior conduct, that such a warning would not cause the suspect to surrender, but rather would provoke the

suspect to engage in violent and life-threatening behavior, or to increase his or her efforts to flee, then a warning is not feasible." [20]

In the training environment, officers will at times passionately debate the reasonableness of using deadly force in the context of a fleeing felon. In the legal world, most all decisions are debatable. The goal in training *Garner's* rigid guidelines is to encourage the officer make the least debatable use-of-force decision in the context of using firearm to prevent escape.

❖ Teaching the *Graham v. Connor* standard

The *Graham v. Connor* use-of-force post-analysis factors included, but were not limited to, "the severity of the crime at issue, whether the suspect poses an immediate threat to the safety of the officers or others, and whether he is actively resisting arrest or attempting to evade arrest by flight."[21] Using the *Graham* factors for decision-making and a report-writing template for training purposes requires an adjustment in the alignment of the original factors.

The first and most important factor for an officer in decision-making as well as report writing is threat assessment. In 2002, FBI Special Agent Thomas D. Petrowski, J.D., stated, "The cornerstone of use-of-force training should be threat assessment." Petrowski further explained, "officers must be trained to respond to the *threat* of violence and not to the *actual* violence itself, guarding against the inherent presence of hesitation.[22] When training threat assessment, elements of ability, opportunity, and intent can help train officers to reasonably come to their conclusions", as "[A] simple statement by an officer that he fears for his safety or the safety of others is not enough; there must be objective factors to justify such a concern". [23]

The second is active resistance. Given the officer's presence and verbal commands, the suspect is left with the decision to comply or actively resist. Several definitions are available to choose from. The WLEA defines active resistance as "Some physical or mechanical means willfully used to resist," and is based on the premise that resistance is an act of the subject's will.[24] The ninth circuit court of appeals has even provided guidance, "Resistance, however, should not be understood as a binary state, with resistance being either completely passive or active. Rather, it runs the gamut from the purely passive protestor who simply refuses to stand, to the individual who is physically assaulting the officer." [25]

The Supreme Court in *Graham* gave the directive to post analysis fact finders, "Reasonableness of particular use of force must be judged from perspective of reasonable officer on the scene, and the calculus of reasonableness must allow for fact that police

officers are often forced to make split-second judgments, in circumstances that are tense, uncertain and rapidly evolving, about amount of force that is necessary in a particular situation."[26] Although not a factor, the pacing of the event for an officer making a decision to use force can determine the difference between an imminent threat versus an immediate threat.

For example, depending on the totality of circumstances, a suspect walking towards an officer with a baseball bat versus a suspect running towards the officer is a significant element in making a decision. After all, if the fact finder must allow for split-second decisions, as it provides a means to articulate the totality of the circumstances for the written report.

The final decision-making factor is the severity of the crime at issue. It is important to keep this factor in context, as it is the crime that is causing the officer to use force at the moment. For example, the officer is dispatched and arrives on scene to a disturbance without known weapons. As the officer investigates, a suspect escalates the situation by drawing a knife and threatening the officer. The latter is the crime at issue, not the disturbance that brought the officer on scene.

❖ Conclusion

Choosing to adopt the amendment-based approach to use-of-force training program that includes a correlating policy is the decision of the agency administrator. There is another viable way of training use-of-force versus the traditional continuum style. The courts do not recognize a force continuum when analyzing the reasonableness of an officer's use-of-force was reasonable under the 4th Amendment.

The amendment-based approach to use-of-force training allows the officer and agency a unified methodology with the adjudication process. With product risk and safety warnings directing officers to their agency policy for when to use force options, there is potential municipal liability without an operational plan for an agency's use-of-force training program. Policy guides the officer's decisions and municipalities act through official policy makers. If a person has proof their deprivation of constitutional rights was caused by a policy that approved an unconstitutional practice, or a policy that is deliberately indifferent to a known risk, liability attaches. [27]

Notes:

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3. Gregory Connor, "Understanding and Application of Force Alternatives: Overview," www.use-of-force.com (Accessed Feb. 22, 2012)
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8. *Weigle v. Broad*, 544 F.3d 1143 (10th Cir. 2008).
9. *McClish v. Evans*, 2009 U.S. Dist. Lexis 80666 (E.D. Cal. Aug. 21, 2009).
10. *Rochin v. California*, 342 U.S. 165, 172 (1952); *Tennessee v. Garner*, 471 U.S. 1, 7 (1985).
11. *Johnson v. Glick*, 481 F.2d 1028 (1973).
12. *Tennessee v. Garner*, 471 U.S. 1, 7 (1985).
13. *Graham v. Connor*, 490 U.S. 386, 394 (1989).
14. Bell v. Wolfish, 441 U.S. 520, 559, 99 S.Ct. 1861 (1979).
15. *Graham v. Connor*, 490 U.S. 386, 394 (1989).
16. *Scott v. Harris*, 433 F. 3d 807 (2007).
17. *Brooks v. Gaenzle*, 614 F.3d 1213 (2010).
18. *Tennessee v. Garner*, 471 U.S. 1, 7 (1985).
19. *Forrett v. Richardson*, 112 F. 3d 416, citing Brower v. County of Inyo, 884 F.2d 1316, 1318 (9th Cir.1989).
20. *Ridgeway v. City of Woolwich*, 924 F.Supp. 653 (1996).
21. *Graham v. Connor*, 490 U.S. 386, 394 (1989).
22. Thomas Petrowski, Use-of-Force Policies and Training – A Reasoned Approach, FBI Law Enforcement Bulletin, Nov. 2002, p. 28.
23. *Deorle v. Rutherford*, 272 F.3d 1272 (9th Cir. 2001).
24. Wyoming Law Enforcement Academy, Use-of-force training curriculum (2011).

25. *Bryan v. McPherson*, 590 F.3d 767; rehearing en banc denied, 630 F.3d 805 (2009).
26. *Graham v. Connor*, 490 U.S. 386, 394 (1989).
27. Klotter, J., Kanovitz, M., "Constitutional Law (8th edit., Anderson Pub. Co, 1999) 446-448.

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Tennessee v. Garner, 471 U.S. 1 (1985)

Tennessee v. Garner

No. 83-1035

Argued October 30, 1984

Decided March 27, 1985*

471 U.S. 1

APPEAL FROM THE UNITED STATES COURT OF APPEALS FOR THE

SIXTH CIRCUIT

Syllabus

A Tennessee statute provides that, if, after a police officer has given notice of an intent to arrest a criminal suspect, the suspect flees or forcibly resists, "the officer may use all the necessary means to effect the arrest." Acting under the authority of this statute, a Memphis police officer shot and killed appellee-respondent Garner's son as, after being told to halt, the son fled over a fence at night in the backyard of a house he was suspected of burglarizing. The officer used deadly force despite being "reasonably sure" the suspect was unarmed and thinking that he was 17 or 18 years old, and of slight build. The father subsequently brought an action in Federal District Court, seeking damages under 42 U.S.C. § 1983 for asserted violations of his son's constitutional rights. The District Court held that the statute and the officer's actions were constitutional. The Court of Appeals reversed.

Held: The Tennessee statute is unconstitutional insofar as it authorizes the use of deadly force against, as in this case, an apparently unarmed, nondangerous fleeing suspect; such force may not be used unless necessary to prevent the escape and the officer has probable cause to believe that the suspect poses a significant threat of death or serious physical injury to the officer or others. Pp. 497 U. S. 7-22.

Page 471 U. S. 2

(a) Apprehension by the use of deadly force is a seizure subject to the Fourth Amendment's reasonableness requirement. To determine whether such a seizure is reasonable, the extent of the intrusion on the suspect's rights under that Amendment must be balanced against the governmental interests in effective law enforcement. This balancing process demonstrates that, notwithstanding probable cause to seize a suspect, an officer may not always do so by killing him. The use of deadly force to prevent the escape of all felony suspects, whatever the circumstances, is constitutionally unreasonable. Pp. 471 U. S. 7-12.

(b) The Fourth Amendment, for purposes of this case, should not be construed in light of the common law rule allowing the use of whatever force is necessary to effect the arrest of a fleeing felon. Changes in the legal and technological context mean that that rule is distorted almost beyond recognition when literally applied. Whereas felonies were formerly capital crimes, few are now, or can be, and many crimes classified as misdemeanors, or nonexistent, at common law are now felonies. Also, the common law rule developed at a time when weapons were rudimentary. And, in light of the varied rules adopted in the States indicating a long-term movement away from the common law rule, particularly in the police departments themselves, that rule is a dubious indicium of the constitutionality of the Tennessee statute. There is no indication that holding a police practice such as that authorized by the statute unreasonable will severely hamper effective law enforcement. Pp. 471 U. S. 12-20.

(c) While burglary is a serious crime, the officer in this case could not reasonably have believed that the suspect -- young, slight, and unarmed -- posed any threat. Nor does the fact that an unarmed suspect has broken into a dwelling at night automatically mean he is dangerous. Pp. 471 U. S. 20-22.

710 F.2d 240, affirmed and remanded.

WHITE, J., delivered the opinion of the Court, in which BRENNAN, MARSHALL, BLACKMUN, POWELL, and STEVENS, JJ., joined. O'CONNOR, J., filed a dissenting opinion, in which BURGER, C.J., and REHNQUIST, J., joined, *post* p. 471 U. S. 22.

Page 471 U. S. 3

JUSTICE WHITE delivered the opinion of the Court.

This case requires us to determine the constitutionality of the use of deadly force to prevent the escape of an apparently unarmed suspected felon. We conclude that such force may not be used unless it is necessary to prevent the escape and the officer has probable cause to believe that the suspect poses a significant threat of death or serious physical injury to the officer or others.

I

At about 10:45 p. m. on October 3, 1974, Memphis Police Officers Elton Hymon and Leslie Wright were dispatched to answer a "prowler inside call." Upon arriving at the scene, they saw a woman standing on her porch and gesturing toward the adjacent house. [Footnote 1] She told them she had heard glass breaking and that "they" or "someone" was breaking in next door. While Wright radioed the dispatcher to say that they were on the scene, Hymon went behind the house. He heard a door slam and saw someone run across the backyard. The fleeing suspect, who was appellee-respondent's decedent, Edward Garner, stopped at a 6-feet-high chain link fence at the edge of the yard. With the aid of a flashlight, Hymon was able to see Garner's face and hands. He saw no sign of a weapon, and, though not certain, was "reasonably sure" and "figured" that Garner was unarmed. App. 41, 56; Record 219. He thought Garner was 17 or 18 years old and

Page 471 U. S. 4

about 5' 5" or 5' 7" tall. [Footnote 2] While Garner was crouched at the base of the fence, Hymon called out "police, halt" and took a few steps toward him. Garner then began to climb over the fence. Convinced that, if Garner made it over the fence, he would elude capture, [Footnote 3] Hymon shot him. The bullet hit Garner in the back of the head. Garner was taken by ambulance to a hospital, where he died on the operating table. Ten dollars and a purse taken from the house were found on his body. [Footnote 4]

In using deadly force to prevent the escape, Hymon was acting under the authority of a Tennessee statute and pursuant to Police Department policy. The statute provides that

"[i]f, after notice of the intention to arrest the defendant, he either flee or forcibly resist, the officer may use all the necessary means to effect the arrest."

Tenn.Code Ann.

Page 471 U. S. 5

§ 40-7-108 (1982). [Footnote 5] The Department policy was slightly more restrictive than the statute, but still allowed the use of deadly force in cases of burglary. App. 140-144. The incident was reviewed by the Memphis Police Firearm's Review Board and presented to a grand jury. Neither took any action. *Id.* at 57.

Garner's father then brought this action in the Federal District Court for the Western District of Tennessee, seeking damages under 42 U.S.C. § 1983 for asserted violations of Garner's constitutional rights. The complaint alleged that the shooting violated the Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments of the United States Constitution. It named as defendants Officer Hymon, the Police Department, its Director, and the Mayor and city of Memphis. After a 3-day bench trial, the District Court entered judgment for all defendants. It dismissed the claims against the Mayor and the Director for lack of evidence. It then concluded that Hymon's actions were authorized by the Tennessee statute, which in turn was constitutional. Hymon had employed the only reasonable and practicable means of preventing Garner's escape. Garner had "recklessly and heedlessly attempted to vault over the fence to escape, thereby assuming the risk of being fired upon." App. to Pet. for Cert. A10.

The Court of Appeals for the Sixth Circuit affirmed with regard to Hymon, finding that he had acted in good faith reliance on the Tennessee statute, and was therefore within the scope of his qualified immunity. 600 F.2d 52 (1979). It remanded for reconsideration of the possible liability of the city, however, in light of *Monell v. New York City Dept. of Social Services,* 436 U. S. 658 (1978), which had come down after the District Court's decision. The District Court was

Page 471 U. S. 6

directed to consider whether a city enjoyed a qualified immunity, whether the use of deadly force and hollow point bullets in these circumstances was constitutional, and whether any unconstitutional municipal conduct flowed from a "policy or custom" as required for liability under *Monell.* 600 F.2d 54-55.

The District Court concluded that *Monell* did not affect its decision. While acknowledging some doubt as to the possible immunity of the city, it found that the statute, and Hymon's actions, were constitutional. Given this conclusion, it declined to consider the "policy or custom" question. App. to Pet. for Cert. A37-A39.

The Court of Appeals reversed and remanded. 710 F.2d 240 (1983). It reasoned that the killing of a fleeing suspect is a "seizure" under the Fourth Amendment, [Footnote 6] and is therefore constitutional only if "reasonable." The Tennessee statute failed as applied to this case, because it did not adequately limit the use of deadly force by distinguishing between felonies of different magnitudes -- "the facts, as found, did not justify the use of deadly force under the Fourth Amendment." *Id.* at 246. Officers cannot resort to deadly force unless they

"have probable cause . . . to believe that the suspect [has committed a felony and] poses a threat to the safety of the officers or a danger to the community if left at large."

Ibid. [Footnote 7]

Page 471 U. S. 7

The State of Tennessee, which had intervened to defend the statute, *see* 28 U.S.C. § 2403(b), appealed to this Court. The city filed a petition for certiorari. We noted probable jurisdiction in the appeal, and granted the petition. 465 U.S. 1098 (1984).

II

Whenever an officer restrains the freedom of a person to walk away, he has seized that person. *United States v. Brignoni-Ponce,* 422 U. S. 873, 422 U. S. 878 (1975). While it is not always clear just when minimal police interference becomes a seizure, *see United States v. Mendenhall,* 446 U. S. 544 (1980), there can be no question that apprehension by the use of deadly force is a seizure subject to the reasonableness requirement of the Fourth Amendment.

A

A police officer may arrest a person if he has probable cause to believe that person committed a crime. *E.g., United States v. Watson,* 423 U. S. 411 (1976). Petitioners and appellant argue that, if this requirement is satisfied, the Fourth Amendment has nothing to say about how that seizure is made. This submission ignores the many cases in which this Court, by balancing the extent of the intrusion against the need for it, has examined the reasonableness of

Page 471 U. S. 8

the manner in which a search or seizure is conducted. To determine the constitutionality of a seizure,

"[w]e must balance the nature and quality of the intrusion on the individual's Fourth Amendment interests against the importance of the governmental interests alleged to justify the intrusion."

United States v. Place, 462 U. S. 696, 462 U. S. 703 (1983); *see Delaware v. Prouse,* 440 U. S. 648, 440 U. S. 654 (1979); *United States v. Martinez-Fuerte,* 428 U. S. 543, 428 U. S. 555 (1976). We have described "the balancing of competing interests" as "the key principle of the Fourth Amendment." *Michigan v. Summers,* 452 U. S. 692, 452 U. S. 700, n. 12 (1981). *See also Camara v. Municipal Court,* 387 U. S. 523, 387 U. S. 536-537 (1967). Because one of the factors is the extent of the intrusion, it is plain that reasonableness depends on not only when a seizure is made, but also how it is carried out. *United States v. Ortiz,* 422 U. S. 891, 422 U. S. 895 (1975); *Terry v. Ohio,* 392 U. S. 1, 392 U. S. 28-29 (1968).

Applying these principles to particular facts, the Court has held that governmental interests did not support a lengthy detention of luggage, *United States v. Place, supra,* an airport seizure not "carefully tailored to its underlying justification," *Florida v. Royer,* 460 U. S. 491, 460 U. S. 500 (1983) (plurality opinion), surgery under general anesthesia to obtain evidence, *Winston v. Lee,* 471 U. S. 753 (1985), or detention for fingerprinting without probable cause, *Davis v. Mississippi,* 394 U. S. 721 (1969); *Hayes v. Florida,* 471 U. S. 811 (1985). On the other hand, under the same approach it has upheld the taking of fingernail scrapings from a suspect, *Cupp v. Murphy,* 412 U. S. 291 (1973), an unannounced entry into a home to prevent the destruction of evidence, *Ker v. California,* 374 U. S. 23 (1963), administrative housing inspections without probable cause to believe that a code violation will be found, *Camara v. Municipal Court, supra,* and a blood test of a drunken-driving suspect, *Schmerber v. California,* 384 U. S. 757 (1966). In each of these cases, the question was whether

Page 471 U. S. 9

the totality of the circumstances justified a particular sort of search or seizure.

B

The same balancing process applied in the cases cited above demonstrates that, notwithstanding probable cause to seize a suspect, an officer may not always do so by killing him. The intrusiveness of a seizure by means of deadly force is unmatched. The suspect's fundamental interest in his own life need not be elaborated upon. The use of deadly force also frustrates the interest of the individual, and of society, in judicial determination of guilt and punishment. Against these interests are ranged governmental interests in effective law enforcement. [Footnote 8] It is argued that overall violence will be reduced by encouraging the peaceful submission of suspects who know that they may be shot if they flee. Effectiveness in making arrests requires the resort to deadly

Page 471 U. S. 10

force, or at least the meaningful threat thereof. "Being able to arrest such individuals is a condition precedent to the state's entire system of law enforcement." Brief for Petitioners 14.

Without in any way disparaging the importance of these goals, we are not convinced that the use of deadly force is a sufficiently productive means of accomplishing them to justify the killing of nonviolent suspects. *Cf. Delaware v. Prouse, supra,* at 440 U. S. 659. The use of deadly force is a self-defeating way of apprehending a suspect and so setting the criminal justice mechanism in motion. If successful, it guarantees that that mechanism will not be set in motion. And while the meaningful threat of deadly force might be thought to lead to the arrest of more live suspects by discouraging escape attempts, [Footnote 9] the presently available evidence does not support this thesis. [Footnote 10] The fact is that a majority of police departments

Page 471 U. S. 11

in this country have forbidden the use of deadly force against nonviolent suspects. *See infra* at 471 U. S. 18-19. If those charged with the enforcement of the criminal law have abjured the use of deadly force in arresting nondangerous felons, there is a substantial basis for doubting that the use of such force is an essential attribute of the arrest power in all felony cases. *See Schumann v. McGinn,* 307 Minn. 446, 472, 240 N.W.2d 525, 540 (1976) (Rogosheske, J., dissenting in part). Petitioners and appellant have not persuaded us that shooting nondangerous fleeing suspects is so vital as to outweigh the suspect's interest in his own life.

The use of deadly force to prevent the escape of all felony suspects, whatever the circumstances, is constitutionally unreasonable. It is not better that all felony suspects die than that they escape. Where the suspect poses no immediate threat to the officer and no threat to others, the harm resulting from failing to apprehend him does not justify the use of deadly force to do so. It is no doubt unfortunate when a suspect who is in sight escapes, but the fact that the police arrive a little late or are a little slower afoot does not always justify killing the suspect. A police officer may not seize an unarmed, nondangerous suspect by shooting him dead. The Tennessee statute is unconstitutional insofar as it authorizes the use of deadly force against such fleeing suspects.

It is not, however, unconstitutional on its face. Where the officer has probable cause to believe that the suspect poses a threat of serious physical harm, either to the officer or to others, it is not constitutionally unreasonable to prevent escape by using deadly force. Thus, if the suspect threatens the officer with a weapon or there is probable cause to believe that he has committed a crime involving the infliction or threatened infliction of serious physical harm, deadly force may be used if necessary to prevent escape, and if, where

Page 471 U. S. 12

feasible, some warning has been given. As applied in such circumstances, the Tennessee statute would pass constitutional muster.

III

A

It is insisted that the Fourth Amendment must be construed in light of the common law rule, which allowed the use of whatever force was necessary to effect the arrest of a fleeing felon, though not a misdemeanant. As stated in Hale's posthumously published Pleas of the Crown:

"[I]f persons that are pursued by these officers for felony or the just suspicion thereof . . . shall not yield themselves to these officers, but shall either resist or fly before they are apprehended or being apprehended shall rescue themselves and resist or fly, so that they cannot be otherwise apprehended, and are upon necessity slain therein, because they cannot be otherwise taken, it is no felony."

2 M. Hale, Historia Placitorum Coronae 85 (1736). *See also* 4 W. Blackstone, Commentaries *289. Most American jurisdictions also imposed a flat prohibition against the use of deadly force to stop a fleeing misdemeanant, coupled with a general privilege to use such force to stop a fleeing felon. *E.g., Holloway v. Moser,* 193 N.C. 185, 136 S.E. 375 (1927); *State v. Smith,* 127 Iowa 534, 535, 103 N.W. 944, 945 (1905); *Reneau v. State,* 70 Tenn. 720 (1879); *Brooks v. Commonwealth,* 61 Pa. 352 (1869); *Roberts v. State,* 14 Mo. 138 (1851); *see generally* R. Perkins & R. Boyce, Criminal Law 1098-1102 (3d ed.1982); Day, Shooting the Fleeing Felon: State of the Law, 14 Crim.L.Bull. 285, 286-287 (1978); Wilgus, Arrest Without a Warrant, 22 Mich.L.Rev. 798, 807-816 (1924). *But see Storey v. State,* 71 Ala. 329 (1882); *State v. Bryant,* 65 N.C. 327, 328 (1871); *Caldwell v. State,* 41 Tex. 86 (1874).

Page 471 U. S. 13

The State and city argue that, because this was the prevailing rule at the time of the adoption of the Fourth Amendment and for some time thereafter, and is still in force in some States, use of deadly force against a fleeing felon must be "reasonable." It is true that this Court has often looked to the common law in evaluating the reasonableness, for Fourth Amendment purposes, of police activity. *See, e.g., United States v. Watson,* 423 U. S. 411, 423 U. S. 418-419 (1976); *Gersten v. Pugh,* 420 U. S. 103, 420 U. S. 111, 420 U. S. 114 (1975); *Carroll v. United States,* 267 U. S. 132, 267 U. S. 149-153 (1925). On the other hand, it

"has not simply frozen into constitutional law those law enforcement practices that existed at the time of the Fourth Amendment's passage."

Payton v. New York, 445 U. S. 573, 445 U. S. 591, n. 33 (1980). Because of sweeping change in the legal and technological context, reliance on the common law rule in this case would be a mistaken literalism that ignores the purposes of a historical inquiry.

B

It has been pointed out many times that the common law rule is best understood in light of the fact that it arose at a time when virtually all felonies were punishable by death. [Footnote 11]

"Though effected without the protections and formalities of an orderly trial and conviction, the killing of a resisting or

Page 471 U. S. 14

fleeing felon resulted in no greater consequences than those authorized for punishment of the felony of which the individual was charged or suspected."

American Law Institute, Model Penal Code § 3.07, Comment 3, p. 56 (Tentative Draft No. 8, 1958) (hereinafter Model Penal Code Comment). Courts have also justified the common law rule by emphasizing the relative dangerousness of felons. *See, e.g., Schumann v. McGinn,* 307 Minn. at 458, 240 N.W.2d at 533; *Holloway v. Moser, supra,* at 187, 136 S.E. at 376 (1927).

Neither of these justifications makes sense today. Almost all crimes formerly punishable by death no longer are or can be. *See, e.g., Enmund v. Florida,* 458 U. S. 782 (1982); *Coker v. Georgia,* 433 U. S. 584 (1977). And while in earlier times "the gulf between the felonies and the minor offences was broad and deep," 2 Pollock & Maitland 467, n. 3; *Carroll v. United States, supra,* at 267 U. S. 158, today the distinction is minor, and often arbitrary. Many crimes classified as misdemeanors, or nonexistent, at common law are now felonies. Wilgus, 22 Mich.L.Rev. at 572-573. These changes have undermined the concept, which was questionable to begin with, that use of deadly force against a fleeing felon is merely a speedier execution of someone who has already forfeited his life. They have also made the assumption that a "felon" is more dangerous than a misdemeanant untenable. Indeed, numerous misdemeanors involve conduct more dangerous than many felonies. [Footnote 12]

There is an additional reason why the common law rule cannot be directly translated to the present day. The common law rule developed at a time when weapons were rudimentary. Deadly force could be inflicted almost solely in a hand-to-hand struggle during which, necessarily, the safety

Page 471 U. S. 15

of the arresting officer was at risk. Handguns were not carried by police officers until the latter half of the last century. L. Kennett & J. Anderson, The Gun in America 150-151 (1975). Only then did it become possible to use deadly force from a distance as a means of apprehension. As a practical matter, the use of deadly force under the standard articulation of the common law rule has an altogether different meaning -- and harsher consequences -- now than in past centuries. *See* Wechsler & Michael, A Rationale for the Law of Homicide: I, 37 Colum.L.Rev. 701, 741 (1937). [Footnote 13]

One other aspect of the common law rule bears emphasis. It forbids the use of deadly force to apprehend a misdemeanant, condemning such action as disproportionately severe. *See Holloway v. Moser,* 193 N.C., at 187, 136 S.E. at 376; *State v. Smith,* 127 Iowa at 535, 103 N.W. at 945. *See generally* Annot., 83 A.L.R. 3d 238 (1978).

In short, though the common law pedigree of Tennessee's rule is pure on its face, changes in the legal and technological context mean the rule is distorted almost beyond recognition when literally applied.

C

In evaluating the reasonableness of police procedures under the Fourth Amendment, we have also looked to prevailing

Page 471 U. S. 16

rules in individual jurisdictions. *See, e.g., United States v. Watson,* 423 U.S. at 423 U. S. 421-422. The rules in the States are varied. *See generally* Comment, 18 Ga.L.Rev. 137, 140-144 (1983). Some 19 States have codified the common law rule, [Footnote 14] though in two of these the courts have significantly limited the statute. [Footnote 15] Four States, though without a relevant statute, apparently retain the common law rule. [Footnote 16] Two States have adopted the Model Penal Code's

Page 471 U. S. 17

provision verbatim. [Footnote 17] Eighteen others allow, in slightly varying language, the use of deadly force only if the suspect has committed a felony involving the use or threat of physical or deadly force, or is escaping with a deadly weapon, or is likely to endanger life or inflict serious physical injury if not arrested. [Footnote 18] Louisiana and Vermont, though without statutes or case law on point, do forbid the use of deadly force to prevent any but violent felonies. [Footnote 19] The remaining States either have no relevant statute or case law or have positions that are unclear. [Footnote 20]

Page 471 U. S. 18

It cannot be said that there is a constant or overwhelming trend away from the common law rule. In recent years, some States have reviewed their laws and expressly rejected abandonment of the common law rule. [Footnote 21] Nonetheless, the long-term movement has been away from the rule that deadly force may be used against any fleeing felon, and that remains the rule in less than half the States.

This trend is more evident and impressive when viewed in light of the policies adopted by the police departments themselves. Overwhelmingly, these are more restrictive than the common law rule. C. Milton, J. Halleck, J. Lardner, & G. Abrecht, Police Use of Deadly Force 45-46 (1977). The Federal Bureau of Investigation and the New York City Police Department, for example, both forbid the use of firearms except when necessary to prevent death or grievous bodily harm. *Id.* at 40-41; App. 83. For

accreditation by the Commission on Accreditation for Law Enforcement Agencies, a department must restrict the use of deadly force to situations where

"the officer reasonably believes that the action is in defense of human life . . . or in defense of any person in immediate danger of serious physical injury."

Commission on Accreditation for Law Enforcement Agencies, Inc., Standards for Law Enforcement Agencies 1-2 (1983) (italics deleted). A 1974 study reported that the police department regulations in a majority of the large cities of the United States allowed the firing of a weapon only when a

Page 471 U. S. 19

felon presented a threat of death or serious bodily harm. Boston Police Department, Planning & Research Division, The Use of Deadly Force by Boston Police Personnel (1974), cited in *Mattis v. Schnarr,* 547 F.2d 1007, 1016, n.19 (CA8 1976), *vacated as moot sub nom. Ashcroft v. Mattis,* 431 U. S. 171 (1977). Overall, only 7.5% of departmental and municipal policies explicitly permit the use of deadly force against any felon; 86.8% explicitly do not. K. Matulia, A Balance of Forces: A Report of the International Association of Chiefs of Police 161 (1982) (table). *See also* Record 1108-1368 (written policies of 44 departments). *See generally* W. Geller & K. Karales, Split-Second Decisions 33-42 (1981); Brief for Police Foundation *et al.* as *Amici Curiae.* In light of the rules adopted by those who must actually administer them, the older and fading common law view is a dubious indicium of the constitutionality of the Tennessee statute now before us.

D

Actual departmental policies are important for an additional reason. We would hesitate to declare a police practice of long standing "unreasonable" if doing so would severely hamper effective law enforcement. But the indications are to the contrary. There has been no suggestion that crime has worsened in any way in jurisdictions that have adopted, by legislation or departmental policy, rules similar to that announced today. *Amici* note that,

"[a]fter extensive research and consideration, [they] have concluded that laws permitting police officers to use deadly force to apprehend unarmed, non-violent fleeing felony suspects actually do not protect citizens or law enforcement officers, do not deter crime or alleviate problems caused by crime, and do not improve the crime-fighting ability of law enforcement agencies."

Id. at 11. The submission is that the obvious state interests in apprehension are not sufficiently served to warrant the use of lethal weapons against all fleeing felons. *See supra* at 471 U. S. 10-11, and n. 10.

Page 471 U. S. 20

Nor do we agree with petitioners and appellant that the rule we have adopted requires the police to make impossible, split-second evaluations of unknowable facts. *See* Brief for Petitioners 25; Brief for Appellant 11. We do not deny the practical difficulties of attempting to assess the suspect's dangerousness. However, similarly difficult judgments must be made by the police in equally uncertain circumstances. *See, e.g., Terry v. Ohio,* 392 U.S. at 392 U. S. 20, 392 U. S. 27. Nor is there any indication that, in States that allow the use of deadly force only against dangerous suspects, *see* nn. 15 17-19 *supra,* the standard has been difficult to apply or has led to a rash of litigation involving inappropriate second-guessing of police officers' split-second decisions. Moreover, the highly technical felony/misdemeanor distinction is equally, if not more, difficult to apply in the field. An officer is in no position to know, for example, the precise value of property stolen, or whether the crime was a first or second offense. Finally, as noted above, this claim must be viewed with suspicion in light of the similar self-imposed limitations of so many police departments.

IV

The District Court concluded that Hymon was justified in shooting Garner because state law allows, and the Federal Constitution does not forbid, the use of deadly force to prevent the escape of a fleeing felony suspect if no alternative means of apprehension is available. *See* App. to Pet. for Cert. A9-A11, A38. This conclusion made a determination of Garner's apparent dangerousness unnecessary. The court did find, however, that Garner appeared to be unarmed, though Hymon could not be certain that was the case. *Id.* at A4, A23. *See also* App. 41, 56; Record 219. Restated in Fourth Amendment terms, this means Hymon had no articulable basis to think Garner was armed.

In reversing, the Court of Appeals accepted the District Court's factual conclusions and held that "the facts, as found, did not justify the use of deadly force." 710 F.2d 246.

Page 471 U. S. 21

We agree. Officer Hymon could not reasonably have believed that Garner -- young, slight, and unarmed -- posed any threat. Indeed, Hymon never attempted to justify his actions on any basis other than the need to prevent an escape. The District Court stated in passing that "[t]he facts of this case did not indicate to Officer Hymon that Garner was *nondangerous.'" App. to Pet. for Cert. A34. This conclusion is not explained, and seems to be based solely on the fact that Garner had broken into a house at night. However, the fact that Garner was a suspected burglar could not, without regard to the other circumstances, automatically justify the use of deadly force. Hymon did not have probable cause to believe that Garner, whom he correctly believed to be unarmed, posed any physical danger to himself or others.*

The dissent argues that the shooting was justified by the fact that Officer Hymon had probable cause to believe that Garner had committed a nighttime burglary. *Post* at 471 U. S. 29, 471 U. S. 32. While we agree that burglary is a serious crime, we cannot agree that it is so dangerous as automatically to justify the use of deadly force. The FBI classifies burglary as a "property," rather than a "violent,"

crime. *See* Federal Bureau of Investigation, Uniform Crime Reports, Crime in the United States 1 (1984). [Footnote 22] Although the armed burglar would present a different situation, the fact that an unarmed suspect has broken into a dwelling at night does not automatically mean he is physically dangerous. This case demonstrates as much. *See also Solem v. Helm,* 463 U. S. 277, 463 U. S. 296-297, and nn. 22-23 (1983). In fact, the available statistics demonstrate that burglaries only rarely involve physical violence. During the 10-year period from 1973-1982, only 3.8% of all burglaries involved violent crime. Bureau of Justice Statistics, House

Page 471 U. S. 22

hold Burglary 4 (1985). [Footnote 23] *See also* T. Reppetto, Residential Crime 17, 105 (1974); Conklin & Bittner, Burglary in a Suburb, 11 Criminology 208, 214 (1973).

V

We wish to make clear what our holding means in the context of this case. The complaint has been dismissed as to all the individual defendants. The State is a party only by virtue of 28 U.S.C. § 2403(b), and is not subject to liability. The possible liability of the remaining defendants -- the Police Department and the city of Memphis -- hinges on *Monell v. New York City Dept. of Social Services,* 436 U. S. 658 (1978), and is left for remand. We hold that the statute is invalid insofar as it purported to give Hymon the authority to act as he did. As for the policy of the Police Department, the absence of any discussion of this issue by the courts below, and the uncertain state of the record, preclude any consideration of its validity.

The judgment of the Court of Appeals is affirmed, and the case is remanded for further proceedings consistent with this opinion.

So ordered.

* Together with No. 83-1070, *Memphs Police Department et al. v. Garner et al.,* on certiorari to the same court.

[Footnote 1]

The owner of the house testified that no lights were on in the house, but that a back door light was on. Record 160. Officer Hymon, though uncertain, stated in his deposition that there were lights on in the house. *Id.* at 209.

[Footnote 2]

In fact, Garner, an eighth-grader, was 15. He was 5' 4" tall and weighed somewhere around 100 or 110 pounds. App. to Pet. for Cert. A5.

[Footnote 3]

When asked at trial why he fired, Hymon stated:

"Well, first of all it was apparent to me from the little bit that I knew about the area at the time that he was going to get away because, number 1, I couldn't get to him. My partner then couldn't find where he was because, you know, he was late coming around. He didn't know where I was talking about. I couldn't get to him because of the fence here, I couldn't have jumped this fence and come up, consequently jumped this fence and caught him before he got away because he was already up on the fence, just one leap and he was already over the fence, and so there is no way that I could have caught him."

App. 52.

He also stated that the area beyond the fence was dark, that he could not have gotten over the fence easily because he was carrying a lot of equipment and wearing heavy boots, and that Garner, being younger and more energetic, could have outrun him. *Id.* at 53-54.

[Footnote 4]

Garner had rummaged through one room in the house, in which, in the words of the owner, "[a]ll the stuff was out on the floors, all the drawers was pulled out, and stuff was scattered all over." *Id.* at 34. The owner testified that his valuables were untouched, but that, in addition to the purse and the 10 dollars, one of his wife's rings was missing. The ring was not recovered. *Id.* at 34-35.

[Footnote 5]

Although the statute does not say so explicitly, Tennessee law forbids the use of deadly force in the arrest of a misdemeanant. *See Johnson v. State,* 173 Tenn. 134, 114 S.W.2d 819 (1938).

[Footnote 6]

"The right of the people to be secure in their persons . . . against unreasonable searches and seizures, shall not be violated. . . ." U.S.Const., Amdt. 4.

[Footnote 7]

The Court of Appeals concluded that the rule set out in the Model Penal Code "accurately states Fourth Amendment limitations on the use of deadly force against fleeing felons." 710 F.2d 247. The relevant portion of the Model Penal Code provides:

"The use of deadly force is not justifiable . . . unless (i) the arrest is for a felony; and (ii) the person effecting the arrest is authorized to act as a peace officer or is assisting a person whom he believes to

be authorized to act as a peace officer; and (iii) the actor believes that the force employed creates no substantial risk of injury to innocent persons; and (iv) the actor believes that (1) the crime for which the arrest is made involved conduct including the use or threatened use of deadly force; or (2) there is a substantial risk that the person to be arrested will cause death or serious bodily harm if his apprehension is delayed."

American Law Institute, Model Penal Code § 3.07(2)(b) (Proposed Official Draft 1962).

The court also found that "[a]n analysis of the facts of this case under the Due Process Clause" required the same result, because the statute was not narrowly drawn to further a compelling state interest. 710 F.2d 246-247. The court considered the generalized interest in effective law enforcement sufficiently compelling only when the the suspect is dangerous. Finally, the court held, relying on *Owen v. City of Independence,* 445 U. S. 622 (1980), that the city was not immune.

[Footnote 8]

The dissent emphasizes that subsequent investigation cannot replace immediate apprehension. We recognize that this is so, *see* n 13, *infra;* indeed, that is the reason why there is any dispute. If subsequent arrest were assured, no one would argue that use of deadly force was justified. Thus, we proceed on the assumption that subsequent arrest is not likely. Nonetheless, it should be remembered that failure to apprehend at the scene does not necessarily mean that the suspect will never be caught.

In lamenting the inadequacy of later investigation, the dissent relies on the report of the President's Commission on Law Enforcement and Administration of Justice. It is worth noting that, notwithstanding its awareness of this problem, the Commission itself proposed a policy for use of deadly force arguably even more stringent than the formulation we adopt today. *See* President's Commission on Law Enforcement and Administration of Justice, Task Force Report: The Police 189 (1967). The Commission proposed that deadly force be used only to apprehend

"perpetrators who, in the course of their crime, threatened the use of deadly force, or if the officer believes there is a substantial risk that the person whose arrest is sought will cause death or serious bodily harm if his apprehension is delayed."

In addition, the officer would have "to know, as a virtual certainty, that the suspect committed an offense for which the use of deadly force is permissible." *Ibid.*

[Footnote 9]

We note that the usual manner of deterring illegal conduct -- through punishment -- has been largely ignored in connection with flight from arrest. Arkansas, for example, specifically excepts flight from arrest from the offense of "obstruction of governmental operations." The commentary notes that this

"reflects the basic policy judgment that, absent the use of force or violence, a mere attempt to avoid apprehension by a law enforcement officer does not give rise to an independent offense."

Ark.Stat.Ann. § 41-2802(3)(a) (1977) and commentary. In the few States that do outlaw flight from an arresting officer, the crime is only a misdemeanor. *See, e.g.,* Ind.Code § 35-44-3-3 (1982). Even forceful resistance, though generally a separate offense, is classified as a misdemeanor. *E.g.,* Ill.Rev.Stat., ch. 38, 1131-1 (1984); Mont.Code Ann. § 45-7-301 (1984); N.H.Rev.Stat.Ann. § 642:2 (Supp.1983); Ore.Rev.Stat. § 162.315 (1983).

This lenient approach does avoid the anomaly of automatically transforming every fleeing misdemeanant into a fleeing felon -- subject, under the common law rule, to apprehension by deadly force -- solely by virtue of his flight. However, it is in real tension with the harsh consequences of flight in cases where deadly force is employed. For example, Tennessee does not outlaw fleeing from arrest. The Memphis City Code does, § 22-34.1 (Supp. 17, 1971), subjecting the offender to a maximum fine of $50, § 1-8 (1967). Thus, Garner's attempted escape subjected him to (a) a $50 fine, and (b) being shot.

[Footnote 10]

See Sherman, Reducing Police Gun Use, in Control in the Police Organization 98, 120-123 (M. Punch ed.1983); Fyfe, Observations on Police Deadly Force, 27 Crime & Delinquency 376, 378-381 (1981); W. Geller & K. Karales, Split-Second Decisions 67 (1981); App. 84 (affidavit of William Bracey, Chief of Patrol, New York City Police Department). *See generally* Brief for Police Foundation *et al.* as *Amici Curiae.*

[Footnote 11]

The roots of the concept of a "felony" lie not in capital punishment but in forfeiture. 2 F. Pollock & F. Maitland, The History of English Law 465 (2d ed.1909) (hereinafter Pollock & Maitland). Not all felonies were always punishable by death. *See id.* at 466-467, n. 3. Nonetheless, the link was profound. Blackstone was able to write:

"The idea of felony is indeed so generally connected with that of capital punishment that we find it hard to separate them; and to this usage the interpretations of the law do now conform. And therefore if a statute makes any new offence felony, the law implies that is shall be punished with death, *viz.* by hanging, as well as with forfeiture. . . ."

4 W. Blackstone, Commentaries *98. *See also* R. Perkins & R. Boyce, Criminal Law 14-15 (3d ed.1982); 2 Pollock & Maitland 511.

[Footnote 12]

White-collar crime, for example, poses a less significant physical threat than, say, drunken driving. *See Welsh v. Wisconsin,* 466 U. S. 740 (1984); *id.* at 466 U. S. 755 (BLACKMUN, J., concurring). *See* Model Penal Code Comment at 57.

[Footnote 13]

It has been argued that sophisticated techniques of apprehension and increased communication between the police in different jurisdictions have made it more likely that an escapee will be caught than was once the case, and that this change has also reduced the "reasonableness" of the use of deadly force to prevent escape. *E.g.,* Sherman, Execution Without Trial: Police Homicide and the Constitution, 33 Vand.L.Rev. 71, 76 (1980). We are unaware of any data that would permit sensible evaluation of this claim. Current arrest rates are sufficiently low, however, that we have some doubt whether, in past centuries, the failure to arrest at the scene meant that the police had missed their only chance in a way that is not presently the case. In 1983, 21% of the offenses in the Federal Bureau of Investigation crime index were cleared by arrest. Federal Bureau of Investigation, Uniform Crime Reports, Crime in the United States 159 (1984). The clearance rate for burglary was 15%. *Ibid.*

[Footnote 14]

Ala.Code § 13A-3-27 (1982); Ark.Stat.Ann. § 41-510 (1977); Cal.Penal Code Ann. § 196 (West 1970); Conn.Gen.Stat. § 53a-22 (1972); Fla.Stat. § 776.05 (1983); Idaho Code § 19-610 (1979); Ind.Code § 35-41-3-3 (1982); Kan.Stat.Ann. § 21-3215 (1981); Miss.Code Ann. § 97-3-15(d) (Supp.1984); Mo.Rev.Stat. § 563.046 (1979); Nev.Rev.Stat. § 200.140 (1983); N.M.Stat.Ann. § 30-2-6 (1984); Okla.Stat., Tit. 21, § 732 (1981); R.I.Gen.Laws § 12-7-9 (1981); S.D.Codified Laws §§ 22-16-32, 22-16-33 (1979); Tenn.Code Ann. § 40-7-108 (1982); Wash.Rev.Code § 9A.16.040(3) (1977). Oregon limits use of deadly force to violent felons, but also allows its use against any felon if "necessary." Ore.Rev.Stat. § 161.239 (1983). Wisconsin's statute is ambiguous, but should probably be added to this list. Wis.Stat. § 939.45(4) (1981-1982) (officer may use force necessary for "a reasonable accomplishment of a lawful arrest"). *But see Clark v. Ziedonis,* 368 F.Supp. 544 (ED Wis.1973), *aff'd on other grounds,* 513 F.2d 79 (CA7 1975).

[Footnote 15]

In California, the police may use deadly force to arrest only if the crime for which the arrest is sought was "a forcible and atrocious one which threatens death or serious bodily harm," or there is a substantial risk that the person whose arrest is sought will cause death or serious bodily harm if apprehension is delayed. *Kortum v. Alkire,* 69 Cal.App.3d 325, 333, 138 Cal.Rptr. 26, 30-31 (1977). *See also People v. Ceballos,* 12 Cal.3d 470, 476-484, 526 P.2d 241, 245-250 (1974); *Long Beach Police Officers Assn. v. Long Beach,* 61 Cal.App.3d 364, 373-374, 132 Cal.Rptr. 348, 353-354 (1976). In Indiana, deadly force may be used only to prevent injury, the imminent danger of injury or force, or the threat of force. It is not permitted simply to prevent escape. *Rose v. State,* 431 N.E.2d 521 (Ind.App.1982).

[Footnote 16]

These are Michigan, Ohio, Virginia, and West Virginia. *Werner v. Hartfelder,* 113 Mich.App. 747, 318 N.W.2d 825 (1982); *State v. Foster,* 60 Ohio Misc. 46, 59-66, 396 N.E.2d 246, 255-258 (Com.Pl.1979) (citing cases); *Berr v. Hamman,* 203 Va. 596, 125 S.E.2d 851 (1962); *Thompson v. Norfolk & W. R. Co.,* 116 W.Va. 705, 711-712, 182 S.E. 880, 883-884 (1935)

[Footnote 17]

Haw.Rev.Stat. § 703-307 (1976); Neb.Rev.Stat. § 28-1412 (1979). Massachusetts probably belongs in this category. Though it once rejected distinctions between felonies, *Uraneck v. Lima,* 359 Mass. 749, 750, 269 N.E.2d 670, 671 (1971), it has since adopted the Model Penal Code limitations with regard to private citizens, *Commonwealth v. Klein,* 372 Mass. 823, 363 N.E.2d 1313 (1977), and seems to have extended that decision to police officers, *Julian v. Randazzo,* 380 Mass. 391, 403 N.E.2d 931 (1980).

[Footnote 18]

Alaska Stat.Ann. § 11.81.370(a) (1983); Ariz.Rev.Stat.Ann. § 13-410 (1978); Colo.Rev.Stat. § 18-1-707 (1978); Del.Code Ann., Tit. 11, § 467 (1979) (felony involving physical force and a substantial risk that the suspect will cause death or serious bodily injury or will never be recaptured); Ga.Code § 16-3-21(a) (1984); Ill.Rev.Stat., ch. 38, ¦ 7-5 (1984); Iowa Code § 804.8 (1983) (suspect has used or threatened deadly force in commission of a felony, or would use deadly force if not caught); Ky.Rev.Stat. § 503.090 (1984) (suspect committed felony involving use or threat of physical force likely to cause death or serious injury, and is likely to endanger life unless apprehended without delay); Me.Rev.Stat.Ann., Tit. 17-A, § 107 (1983) (commentary notes that deadly force may be used only "where the person to be arrested poses a threat to human life"); Minn.Stat. § 609.066 (1984); N.H.Rev.Stat.Ann. § 627:5(II) (Supp.1983); N.J.Stat.Ann. § 2C-3-7 (West 1982); N.Y. Penal Law § 35.30 (McKinney Supp.1984-1985); N.C.Gen.Stat. § 15A-401 (1983); N.D.Cent.Code § 12.1-05-07.2.d (1976); 18 Pa.Cons.Stat. § 508 (1982); Tex.Penal Code Ann. § 9.51(c) (1974); Utah Code Ann. § 76-2-404 (1978).

[Footnote 19]

See La.Rev.Stat.Ann. § 14:20(2) (West 1974); Vt.Stat.Ann., Tit. 13, § 2305 (1974 and Supp.1984). A Federal District Court has interpreted the Louisiana statute to limit the use of deadly force against fleeing suspects to situations where "life itself is endangered or great bodily harm is threatened." *Sauls v. Hutto,* 304 F.Supp. 124, 132 (ED La.1969).

[Footnote 20]

These are Maryland, Montana, South Carolina, and Wyoming. A Maryland appellate court has indicated, however, that deadly force may not be used against a felon who "was in the process of

fleeing and, at the time, presented no immediate danger to . . . anyone. . . ." *Giant Food, Inc. v. Scherry,* 51 Md.App. 586, 589, 596, 444 A.2d 483, 486, 489 (1982).

[Footnote 21]

In adopting its current statute in 1979, for example, Alabama expressly chose the common law rule over more restrictive provisions. Ala.Code § 13A-3-27, Commentary, pp. 67-63 (1982). Missouri likewise considered but rejected a proposal akin to the Model Penal Code rule. *See Mattis v. Schnarr,* 547 F.2d 1007, 1022 (CA8 1976) (Gibson, C.J., dissenting), *vacated as moot sub nom. Ashcroft v. Mattis,* 431 U. S. 171 (1977). Idaho, whose current statute codifies the common law rule, adopted the Model Penal Code in 1971, but abandoned it in 1972.

[Footnote 22]

In a recent report, the Department of Corrections of the District of Columbia also noted that "there is nothing inherently dangerous or violent about the offense," which is a crime against property. D.C. Department of Corrections, Prisoner Screening Project 2 (1985).

[Footnote 23]

The dissent points out that three-fifths of all rapes in the home, three-fifths of all home robberies, and about a third of home assaults are committed by burglars. *Post* at 471 U. S. 26-27. These figures mean only that, if one knows that a suspect committed a rape in the home, there is a good chance that the suspect is also a burglar. That has nothing to do with the question here, which is whether the fact that someone has committed a burglary indicates that he has committed, or might commit, a violent crime.

The dissent also points out that this 3.8% adds up to 2.8 million violent crimes over a 10-year period, as if to imply that today's holding will let loose 2.8 million violent burglars. The relevant universe is, of course, far smaller. At issue is only that tiny fraction of cases where violence has taken place and an officer who has no other means of apprehending the suspect is unaware of its occurrence.

JUSTICE O'CONNOR, with whom THE CHIEF JUSTICE and JUSTICE REHNQUIST join, dissenting.

The Court today holds that the Fourth Amendment prohibits a police officer from using deadly force as a last resort to

Page 471 U. S. 23

apprehend a criminal suspect who refuses to halt when fleeing the scene of a nighttime burglary. This conclusion rests on the majority's balancing of the interests of the suspect and the public interest in effective law enforcement. *Ante* at 471 U. S. 8. Notwithstanding the venerable common law rule authorizing the use of deadly force if necessary to apprehend a fleeing felon, and continued

acceptance of this rule by nearly half the States, *ante* at 471 U. S. 14, 471 U. S. 16-17, the majority concludes that Tennessee's statute is unconstitutional inasmuch as it allows the use of such force to apprehend a burglary suspect who is not obviously armed or otherwise dangerous. Although the circumstances of this case are unquestionably tragic and unfortunate, our constitutional holdings must be sensitive both to the history of the Fourth Amendment and to the general implications of the Court's reasoning. By disregarding the serious and dangerous nature of residential burglaries and the longstanding practice of many States, the Court effectively creates a Fourth Amendment right allowing a burglary suspect to flee unimpeded from a police officer who has probable cause to arrest, who has ordered the suspect to halt, and who has no means short of firing his weapon to prevent escape. I do not believe that the Fourth Amendment supports such a right, and I accordingly dissent.

I

The facts below warrant brief review because they highlight the difficult, split-second decisions police officers must make in these circumstances. Memphis Police Officers Elton Hymon and Leslie Wright responded to a late-night call that a burglary was in progress at a private residence. When the officers arrived at the scene, the caller said that "they" were breaking into the house next door. App. in No. 81-5605 (CA6), p. 207. The officers found the residence had been forcibly entered through a window, and saw lights

Page 471 U. S. 24

on inside the house. Officer Hymon testified that, when he saw the broken window, he realized "that something was wrong inside," *id.* at 656, but that he could not determine whether anyone -- either a burglar or a member of the household -- was within the residence. *Id.* at 209. As Officer Hymon walked behind the house, he heard a door slam. He saw Edward Eugene Garner run away from the house through the dark and cluttered backyard. Garner crouched next to a 6-foot-high fence. Officer Hymon thought Garner was an adult, and was unsure whether Garner was armed because Hymon "had no idea what was in the hand [that he could not see] or what he might have had on his person." *Id.* at 658-659. In fact, Garner was 15 years old and unarmed. Hymon also did not know whether accomplices remained inside the house. *Id.* at 657. The officer identified himself as a police officer and ordered Garner to halt. Garner paused briefly and then sprang to the top of the fence. Believing that Garner would escape if he climbed over the fence, Hymon fired his revolver and mortally wounded the suspected burglar.

Appellee-respondent, the deceased's father, filed a 42 U.S.C. § 1983 action in federal court against Hymon, the city of Memphis, and other defendants, for asserted violations of Garner's constitutional rights. The District Court for the Western District of Tennessee held that Officer Hymon's actions were justified by a Tennessee statute that authorizes a police officer to "use all the necessary means to effect the arrest," if "after notice of the intention to arrest the defendant, he either flee or forcibly resist." Tenn.Code Ann. § 40-7-108 (1982). As construed by the Tennessee courts, this statute allows the use of deadly force only if a police officer has probable cause to believe that a person has committed a

felony, the officer warns the person that he intends to arrest him, and the officer reasonably believes that no means less than such force will prevent the escape. *See, e.g., Johnson v. State,* 173 Tenn. 134, 114 S.W.2d

Page 471 U. S. 25

(1938). The District Court held that the Tennessee statute is constitutional, and that Hymon's actions, as authorized by that statute, did not violate Garner's constitutional rights. The Court of Appeals for the Sixth Circuit reversed on the grounds that the Tennessee statute "authorizing the killing of an unarmed, nonviolent fleeing felon by police in order to prevent escape" violates the Fourth Amendment and the Due Process Clause of the Fourteenth Amendment. 710 F.2d 240, 244 (1983).

The Court affirms on the ground that application of the Tennessee statute to authorize Officer Hymon's use of deadly force constituted an unreasonable seizure in violation of the Fourth Amendment. The precise issue before the Court deserves emphasis, because both the decision below and the majority obscure what must be decided in this case. The issue is not the constitutional validity of the Tennessee statute on its face or as applied to some hypothetical set of facts. Instead, the issue is whether the use of deadly force by Officer Hymon under the circumstances of this case violated Garner's constitutional rights. Thus, the majority's assertion that a police officer who has probable cause to seize a suspect "may not always do so by killing him," *ante* at 471 U. S. 9, is unexceptionable, but also of little relevance to the question presented here. The same is true of the rhetorically stirring statement that "[t]he use of deadly force to prevent the escape of all felony suspects, whatever the circumstances, is constitutionally unreasonable." *Ante* at 471 U. S. 11. The question we must address is whether the Constitution allows the use of such force to apprehend a suspect who resists arrest by attempting to flee the scene of a nighttime burglary of a residence.

II

For purposes of Fourth Amendment analysis, I agree with the Court that Officer Hymon "seized" Gamer by shooting him. Whether that seizure was reasonable, and therefore permitted by the Fourth Amendment, requires a careful balancing

Page 471 U. S. 26

of the important public interest in crime prevention and detection and the nature and quality of the intrusion upon legitimate interests of the individual. *United States v. Place,* 462 U. S. 696, 462 U. S. 703 (1983). In striking this balance here, it is crucial to acknowledge that police use of deadly force to apprehend a fleeing criminal suspect falls within the "rubric of police conduct . . . necessarily [involving] swift action predicated upon the on-the-spot observations of the officer on the beat." *Terry v. Ohio,* 392 U. S. 1, 392 U. S. 20 (1968). The clarity of hindsight cannot provide the standard for judging the reasonableness of police decisions made in uncertain and often dangerous circumstances. Moreover, I am far more reluctant than is the Court to conclude that the Fourth Amendment proscribes a police

practice that was accepted at the time of the adoption of the Bill of Rights and has continued to receive the support of many state legislatures. Although the Court has recognized that the requirements of the Fourth Amendment must respond to the reality of social and technological change, fidelity to the notion of *constitutional* -- as opposed to purely judicial -- limits on governmental action requires us to impose a heavy burden on those who claim that practices accepted when the Fourth Amendment was adopted are now constitutionally impermissible. *See, e.g., United States v. Watson,* 423 U. S. 411, 423 U. S. 416-421 (1976); *Carroll v. United States,* 267 U. S. 132, 267 U. S. 149-153 (1925). *Cf. United States v. Villamonte-Marquez,* 462 U. S. 579, 462 U. S. 585 (1983) (noting "impressive historical pedigree" of statute challenged under Fourth Amendment).

The public interest involved in the use of deadly force as a last resort to apprehend a fleeing burglary suspect relates primarily to the serious nature of the crime. Household burglaries not only represent the illegal entry into a person's home, but also "pos[e] real risk of serious harm to others." *Solem v. Helm,* 463 U. S. 277, 463 U. S. 315-316 (1983) (BURGER, C.J., dissenting). According to recent Department of Justice statistics,

"[t]hree-fifths of all rapes in the home,

Page 471 U. S. 27

three-fifths of all home robberies, and about a third of home aggravated and simple assaults are committed by burglars."

Bureau of Justice Statistics Bulletin, Household Burglary 1 (January 1985). During the period 1973-1982, 2.8 million such violent crimes were committed in the course of burglaries. *Ibid.* Victims of a forcible intrusion into their home by a nighttime prowler will find little consolation in the majority's confident assertion that "burglaries only rarely involve physical violence." *Ante* at 471 U. S. 21. Moreover, even if a particular burglary, when viewed in retrospect, does not involve physical harm to others, the "harsh potentialities for violence" inherent in the forced entry into a home preclude characterization of the crime as "innocuous, inconsequential, minor, or *nonviolent.'" Solem v. Helm, supra, at 463 U. S. 316 (BURGER, C.J., dissenting). See also Restatement of Torts § 131, Comment g (1934) (burglary is among felonies that normally cause or threaten death or serious bodily harm); R. Perkins & R. Boyce, Criminal Law 1110 (3d ed.1982) (burglary is dangerous felony that creates unreasonable risk of great personal harm).*

Because burglary is a serious and dangerous felony, the public interest in the prevention and detection of the crime is of compelling importance. Where a police officer has probable cause to arrest a suspected burglar, the use of deadly force as a last resort might well be the only means of apprehending the suspect. With respect to a particular burglary, subsequent investigation simply cannot represent a substitute for immediate apprehension of the criminal suspect at the scene. *See* President's Commission on Law Enforcement and Administration of Justice, Task Force Report: The Challenge of Crime in a Free Society 97 (1967). Indeed, the Captain of the Memphis Police Department testified that, in his city, if apprehension is not immediate, it is likely that the suspect will

not be caught. App. in No. 81-5605 (CA6), p. 334. Although some law enforcement agencies may choose to assume the risk that a criminal will remain at large, the

Page 471 U. S. 28

Tennessee statute reflects a legislative determination that the use of deadly force in prescribed circumstances will serve generally to protect the public. Such statutes assist the police in apprehending suspected perpetrators of serious crimes and provide notice that a lawful police order to stop and submit to arrest may not be ignored with impunity. *See, e.g., Wiley v. Memphis Police Department,* 548 F.2d 1247, 1252-1253 (CA6), *cert. denied,* 434 U.S. 822 (1977); *Jones v. Marshall,* 528 F.2d 132, 142 (CA2 1975).

The Court unconvincingly dismisses the general deterrence effects by stating that "the presently available evidence does not support [the] thesis" that the threat of force discourages escape, and that "there is a substantial basis for doubting that the use of such force is an essential attribute to the arrest power in all felony cases." *Ante* at 471 U. S. 10, 471 U. S. 11. There is no question that the effectiveness of police use of deadly force is arguable, and that many States or individual police departments have decided not to authorize it in circumstances similar to those presented here. But it should go without saying that the effectiveness or popularity of a particular police practice does not determine its constitutionality. *Cf. Spaziano v. Florida,* 468 U. S. 447, 468 U. S. 464 (1984) ("The Eighth Amendment is not violated every time a State reaches a conclusion different from a majority of its sisters over how best to administer its criminal laws"). Moreover, the fact that police conduct pursuant to a state statute is challenged on constitutional grounds does not impose a burden on the State to produce social science statistics or to dispel any possible doubts about the necessity of the conduct. This observation, I believe, has particular force where the challenged practice both predates enactment of the Bill of Rights and continues to be accepted by a substantial number of the States.

Against the strong public interests justifying the conduct at issue here must be weighed the individual interests implicated in the use of deadly force by police officers. The

Page 471 U. S. 29

majority declares that "[t]he suspect's fundamental interest in his own life need not be elaborated upon." *Ante* at 471 U. S. 9. This blithe assertion hardly provides an adequate substitute for the majority's failure to acknowledge the distinctive manner in which the suspect's interest in his life is even exposed to risk. For purposes of this case, we must recall that the police officer, in the course of investigating a nighttime burglary, had reasonable cause to arrest the suspect and ordered him to halt. The officer's use of force resulted because the suspected burglar refused to heed this command and the officer reasonably believed that there was no means short of firing his weapon to apprehend the suspect. Without questioning the importance of a person's interest in his life, I do not think this interest encompasses a right to flee unimpeded from the scene of a burglary. *Cf. Payton v. New York,* 445 U. S. 573, 445 U. S. 617, n. 14 (1980) (WHITE, J., dissenting) ("[T]he policeman's hands should not be tied merely because of the possibility that the suspect will fail to cooperate with legitimate actions by

law enforcement personnel"). The legitimate interests of the suspect in these circumstances are adequately accommodated by the Tennessee statute: to avoid the use of deadly force and the consequent risk to his life, the suspect need merely obey the valid order to halt.

A proper balancing of the interests involved suggests that use of deadly force as a last resort to apprehend a criminal suspect fleeing from the scene of a nighttime burglary is not unreasonable within the meaning of the Fourth Amendment. Admittedly, the events giving rise to this case are, in retrospect, deeply regrettable. No one can view the death of an unarmed and apparently nonviolent 15-year-old without sorrow, much less disapproval. Nonetheless, the reasonableness of Officer Hymon's conduct for purposes of the Fourth Amendment cannot be evaluated by what later appears to have been a preferable course of police action. The officer pursued a suspect in the darkened backyard of a house that from all indications had just been burglarized. The

Page 471 U. S. 30

police officer was not certain whether the suspect was alone or unarmed; nor did he know what had transpired inside the house. He ordered the suspect to halt, and when the suspect refused to obey and attempted to flee into the night, the officer fired his weapon to prevent escape. The reasonableness of this action for purposes of the Fourth Amendment is not determined by the unfortunate nature of this particular case; instead, the question is whether it is constitutionally impermissible for police officers, as a last resort, to shoot a burglary suspect fleeing the scene of the crime.

Because I reject the Fourth Amendment reasoning of the majority and the Court of Appeals, I briefly note that no other constitutional provision supports the decision below. In addition to his Fourth Amendment claim, appellee-respondent also alleged violations of due process, the Sixth Amendment right to trial by jury, and the Eighth Amendment proscription of cruel and unusual punishment. These arguments were rejected by the District Court and, except for the due process claim, not addressed by the Court of Appeals. With respect to due process, the Court of Appeals reasoned that statutes affecting the fundamental interest in life must be "narrowly drawn to express only the legitimate state interests at stake." 710 F.2d 245. The Court of Appeals concluded that a statute allowing police use of deadly force is narrowly drawn, and therefore constitutional only if the use of such force is limited to situations in which the suspect poses an immediate threat to others. *Id.* at 246-247. Whatever the validity of Tennessee's statute in other contexts, I cannot agree that its application in this case resulted in a deprivation "without due process of law." *Cf. Baker v. McCollan,* 443 U. S. 137, 443 U. S. 144-145 (1979). Nor do I believe that a criminal suspect who is shot while trying to avoid apprehension has a cognizable claim of a deprivation of his Sixth Amendment right to trial by jury. *See Cunningham v. Ellington,* 323 F.Supp. 1072, 1075-1076 (WD Tenn.1971) (three-judge court). Finally, because there is no indication that the use

Page 471 U. S. 31

of deadly force was intended to punish, rather than to capture, the suspect, there is no valid claim under the Eighth Amendment. *See Bell v. Wolfish,* 441 U. S. 520, 441 U. S. 538-539 (1979).

Accordingly, I conclude that the District Court properly entered judgment against appellee-respondent, and I would reverse the decision of the Court of Appeals.

III

Even if I agreed that the Fourth Amendment was violated under the circumstances of this case, I would be unable to join the Court's opinion. The Court holds that deadly force may be used only if the suspect

"threatens the officer with a weapon or there is probable cause to believe that he has committed a crime involving the infliction or threatened infliction of serious physical harm."

Ante at 471 U. S. 11. The Court ignores the more general implications of its reasoning. Relying on the Fourth Amendment, the majority asserts that it is constitutionally unreasonable to use deadly force against fleeing criminal suspects who do not appear to pose a threat of serious physical harm to others. *Ibid.* By declining to limit its holding to the use of firearms, the Court unnecessarily implies that the Fourth Amendment constrains the use of any police practice that is potentially lethal, no matter how remote the risk. *Cf. Los Angeles v. Lyons,* 461 U. S. 95 (1983).

Although it is unclear from the language of the opinion, I assume that the majority intends the word "use" to include only those circumstances in which the suspect is actually apprehended. Absent apprehension of the suspect, there is no "seizure" for Fourth Amendment purposes. I doubt that the Court intends to allow criminal suspects who successfully escape to return later with § 1983 claims against officers who used, albeit unsuccessfully, deadly force in their futile attempt to capture the fleeing suspect. The Court's opinion, despite its broad language, actually decides only that the

shooting of a fleeing burglary suspect who was in fact neither armed nor dangerous can support a § 1983 action.

The Court's silence on critical factors in the decision to use deadly force simply invites second-guessing of difficult police decisions that must be made quickly in the most trying of circumstances. *Cf. Payton v. New York,* 445 U.S. at 445 U. S. 619 (WHITE, J., dissenting). Police are given no guidance for determining which objects, among an array of potentially lethal weapons ranging from guns to knives to baseball bats to rope, will justify the use of deadly force. The Court also declines to outline the additional factors necessary to provide "probable cause" for believing that a suspect "poses a significant threat of death or serious physical injury," *ante* at 471 U. S. 3, when the officer has probable cause to arrest and the suspect refuses to obey an order to halt. But even if it were appropriate in this case to limit the use of deadly force to that ambiguous class of suspects, I believe the class should include nighttime residential burglars who resist arrest by attempting to flee the scene of the crime. We can expect an escalating volume of litigation as the lower courts struggle to determine if a police

officer's split-second decision to shoot was justified by the danger posed by a particular object and other facts related to the crime. Thus, the majority opinion portends a burgeoning area of Fourth Amendment doctrine concerning the circumstances in which police officers can reasonably employ deadly force.

IV

The Court's opinion sweeps broadly to adopt an entirely new standard for the constitutionality of the use of deadly force to apprehend fleeing felons. Thus, the Court "lightly brushe[s] aside," *Payton v. New York, supra,* at 445 U. S. 600, a longstanding police practice that predates the Fourth Amendment and continues to receive the approval of nearly half of the state legislatures. I cannot accept the majority's creation of a constitutional right to flight for burglary suspects

Page 471 U. S. 33

seeking to avoid capture at the scene of the crime. Whatever the constitutional limits on police use of deadly force in order to apprehend a fleeing felon, I do not believe they are exceeded in a case in which a police officer has probable cause to arrest a suspect at the scene of a residential burglary, orders the suspect to halt, and then fires his weapon as a last resort to prevent the suspect's escape into the night. I respectfully dissent.

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Legal Aspects of Training Injuries
Part One

In Part One:

* Status of the claimant
* Assumption of risk
* Pretraining injury screening
  -- The Martinelli Protocols
* Protective gear
* Effect of the "firefighters' rule"
* No legal duty to provide employees with a safe working environment
* References

In Part Two:

* Duty to provide a safe workplace
* State created danger
* Workers' compensation: exclusive remedy - product liability claims as an exception
* TASER® injury litigation
* Refusal to participate in shock exercises
* References

This short article is an overview of the topic, and is not intended to be a comprehensive review of training injury litigation. Some cases that have been litigated in federal court were lost for the lack of a cognizable federal right, although they clearly showed negligence. Section 1983 litigation requires at least a deliberate indifference to a person's rights, and absent special circumstances, ordinary negligence will not support a federal civil rights claim.

State court litigation also is fraught with impediments. To illustrate, an Illinois appellate court invalidated the release of liability signed by a firefighter applicant that was injured while performing an agility test, but then dismissed the civil action, finding that the municipality was immune from liability. White v. Village of Homewood, 628 N.E.2d 616 and 673 N.E.2d 1092 (Ill.App. 1996).

Status of the Claimant

Applicants have been injured while performing pre-entry agility tests. Pre service trainees and cadets, who are actually compensated students, have been injured or disabled before they are commissioned as peace officers or firefighters. Non-employee participants and observers also have suffered injuries.

Whether a claimant is an employee or not usually is determinative of whether a workers' compensation claim will be approved. A secondary issue is, what entity is the employer -- the agency that intends to employ the claimant, the facility or academy where the injury occurred, or another entity?

- This article does not address status issues (which are typically fact dependent) and focuses on the principles of liability.

Assumption of Risk

A California probation officer filed a negligence and intentional tort action against a training company and the instructor, for personal injuries she sustained while participating in a certified training course.

The trial court rejected the suit, based on the doctrines of primary assumption of risk and the firefighter's rule.

On appeal, the appellate panel noted that the officer's duties included physically restraining juveniles. By participating in the course, she assumed the risk that she would be injured. There was no proof that the instructor intentionally hurt her.

The appellate panel said that under the doctrine of assumption of risk and the firefighter's rule, "no duty is owed to a peace officer who is engaged in training to meet an emergency situation."

They added: "It is of no moment that plaintiff was not injured while actually restraining a violent juvenile offender, but while training to restrain a violent juvenile offender." To hold otherwise would make assumption of risk hinge upon the formality of the activity, not the activity itself.

Further, the fact that the plaintiff did not sign a written waiver, disclaimer, or consent form did not raise a triable issue of fact concerning whether the defendants increased the risk of harm. Nor did the evidence that other persons suffered injuries in the defendants' other training courses have any legal consequence.

Hamilton v. Martinelli & Assoc., #E031683, 110 Cal.App.4th 1012, 2 Cal.Rptr.3d 168, 2003 Cal. App. Lexis 1114 (4th App. Dist. 2003).

The Martinelli decision was followed by an appeal in another California case. An injured officer sued a training facility, claiming that the facility negligently failed to inform him of the risk of injury in participating in the training and failed to properly supervise the training maneuvers.

The student understood the training had to replicate real-life situations. The appellate panel wrote:

> "The maneuvers cannot successfully be learned for passing the POST examination and for eventual use by peace officers without incurring the risk of injury from practicing them. Eliminating the risk of injury inherent in the maneuvers would require eliminating the maneuvers from the class. Such a result is exactly what the doctrine of primary assumption of risk is designed to prevent. For these reasons, the nature of the activity indicates the presumption of risk doctrine applies here."

The plaintiff was an adult who voluntarily participated in the training class. No one required him to enroll and he chose to participate in the takedown activity. The appellate panel, relying on the Martinelli precedent, rejected the claim. Saville v. Sierra College, #C047923, 133 Cal.App.4th 857, 2005 Cal. App. Lexis 1843 (3rd App. Dist. 2005).

A Palo Alto reserve police officer who was not a SWAT team member, but was assigned to serve as a role player, was shot to death by a Mountain View police officer who was a Regional Team member.

Although the plaintiffs received workers' compensation death benefits from Palo Alto, their heirs filed a wrongful death action against Mountain View and the shooter. A jury returned a verdict of $3.25 million.

On appeal, a major issue was which entity was the decedent's employer. The appellate court found that while he was carrying out his role-playing duties, the deceased was sometimes supervised by Palo Alto officers and at other times by a

Mountain View officer. His role-playing included the use of a "toy gun" which had been provided to him by Palo Alto. He was paid $7.40 per hour for his services by the Regional Team.

Mountain View claimed that the Workers' Comp. Act prevented a recovery against the city. The appellate court said although "it was undisputed that Palo Alto was the deceased's general employer ... this fact did not preclude a finding that Mountain View or the Regional Team was [his] special employer."

The estate was entitled to recover for wrongful death from the shooter. But the estate was not entitled to recover against the shooter's agency, Mountain View, under respondeat superior.

Brassinga v. City of Mountain View, #H015775, 66 Cal.App.4th 195, 77 Cal.Rptr.2d 660 (6th Dist. 1998).

Two cases involved applicants. A federal court in New Mexico dismissed all claims against an employer after an applicant suffered a fatal heart attack during the pre-employment agility test. Tafoya v. Bobroff, 865 F.Supp. 742 (D.N.M. 1994).

A Texas appellate court rejected liability for an applicant for a deputy sheriff who was injured while performing a fitness course. Chapman v. Gonzales, 824 S.W.2d 685 (Tex.App. 1992).

Pretraining Injury Screening

It is a recommended practice to inquire whether a participant had had a recent surgical procedure or has known risk factors, such as high blood pressure or a history of cardiac problems.

The facility should have a video presentation depicting the kind of physical activity that participants are likely to experience, accompanied by a list of potential injuries. The video can be in DVD format or downloadable from a website.

- Ron Martinelli, Ph.D. has produced a "Training Safety Protocol" and a "Normal Injury Assessment Protocol" for use of force or a dynamic role-playing training scenario.

  These can be accessed at http://www.aele.org/martinelli-protocol.html

Protective Gear

In most, if not all states, public employers are not exempt from state laws requiring employers to furnish necessary safety equipment, at no cost to employees. {n. 1} Where workers' compensation laws provide an exclusive remedy, the failure to provide such equipment ordinarily would not create personal liability for instructors.

The failure to provide necessary safety equipment is at most, negligence. The federal civil rights act does not provide a remedy for ordinary negligence. For example, in Colorado, an officer was injured while participating in a Simunition ® training exercise. These are intended to replicate combat scenarios that a police officer might encounter, using plastic ammunition. A projectile flew up beneath the officer's plastic shield on a riot helmet and hit him in his right eye, causing partial blindness.

The manufacturer markets protective equipment, including "a face mask which provides 360-degree head coverage and fits closely around the neck and chin without gaps." The officer sued the city and chief for civil rights violations.

Reduced propellant training blank

Three different firearms instructors, on three separate occasions, told the chief that the manufacturer required its own facemasks to be worn during exercises with Simunition ® rounds. However, the chief did not authorize purchasing any of the protective equipment from Simunition's manufacturer. Instead, he authorized using riot helmets during the firearms training.

The District Court dismissed the suit on qualified immunity. A three-judge appellate court affirmed. The panel noted the Supreme Court has held that substantive due process is not a guarantor of workplace safety, citing Collins v. City of Harker Heights, 503 U.S. 115 (1992):

> "Neither the text nor the history of the Due Process Clause supports [a] claim that the governmental employer's duty to provide its employees with a safe working environment is a substantive component of the Due Process Clause."

The panel noted an important legal principle: deference to local decision-makers. They wrote:

> "Plaintiff is asking us to play Monday-morning quarterback about a decision (providing riot helmets rather than more protective face gear) that seems, at most, negligent. ...
>
> "Decisions concerning the allocation of resources to individual programs and to particular aspects of these programs involve a host of policy choices that must be made by locally elected representatives, rather than by federal judges ..."

To overcome the qualified immunity defense, the plaintiff needed to find a case "which makes it 'apparent' that 'in the light of pre-existing law' a reasonable official, in [the chief 's position] would have known that having police officers wear riot helmets rather than Simunition face masks would violate their substantive due process right of bodily integrity." The plaintiff failed in that regard. Moore v. Guthrie, #04-1435, 438 F.3d 1036, 2006 U.S. App. Lexis 4171 (10th Cir. 2006).

An injured officer or firefighter who brings a negligence action in state court also may find impediments, such as a state law requiring proof of "wanton" or willful conduct. Nevertheless, a number of state court actions have been successful.

A New York court declined to dismiss a suit brought by an injured NYPD officer She sought damages for injuries sustained while participating in police training exercise at her precinct house. While acting out the role of a perpetrator, she was flipped face down onto the floor by another officer.

She claimed that her injuries were caused by the city's failure to comply with Labor Law §27-a, which requires employers to provide and have available the appropriate and necessary safety equipment for a training exercise, including mats and protective gear.

The city was exempt from workers' compensation liability. The trial court ruled that her claim sufficiently stated a cause of action "by failing to provide her with the appropriate and necessary safety equipment, including floor padding or mats, necessary to protect her from the recognized hazards inherent in the training exercise in which she was requested to participate."

Singleton v. City of New York, #9640/06, 2006 NY Slip Op 26412, 13 Misc.3d 117, 827 N.Y.S.2d 535, 2006 N.Y. Misc. Lexis 2928 (2006)

- The Louisiana Supreme Court affirmed an over-million dollar award to a corrections officer who was injured during a baton training exercise. Cole v.

State, #01-C-2123, 825 So.2d 1134, 2002 La. Lexis 2454 (2002).

- A Louisiana appellate court affirms an award to a sheriff's deputy that was injured during an on-duty training accident. In addition to medical expenses, he received $150,000 for pain and suffering. Albert v. Farm Bur. Insur. Co., #05-0352, 916 So.2d 1238, 2005 La. App. Lexis 2329 (2005).

Firefighter's Rule

The so-called police officer and firefighter's rule precludes them from recovering damages for injuries arising out of risks peculiar to their employment. The rule is said to have originated over one hundred years ago in Gibson v. Leonard, 143 Ill. 182, 32 N.E. 182 (1892).

In its narrowest interpretation, it prevents a firefighter from recovering from a landowner or occupier who has been negligent in starting a fire. The rule has been extended, in many states, to other public safety workers who voluntarily assume the risks inherent to a dangerous occupation.

Police officers and firefighters are usually better compensated than other city workers. They often have their own retirement programs that are more generous than general municipal retirement plans.

With police officers the courts have had a more difficult time imposing the rule. A law review noted:

> "As compared to the more predictable public needs for firefighters, police calls are frequently more complex and evolving -- often making it difficult to determine whether an officer's injury relates to the original basis for the call. In fact, by the time an officer arrives at a scene, the original basis for the call may have developed into a completely unanticipated dilemma. Moreover, the actual reason for the call may be misinterpreted by a dispatcher or mistransmitted to police units in the field -- again making it difficult to determine whether a subsequent injury to an officer was the result of a reasonably predictable situation and/or the original basis for the call." 1992 Wis. L. Rev. 2031 at 2045 (1992).

In 2004, the Wisconsin Supreme Court allowed a suit by a police officer that was bitten by a dog. The "Firemen's Rule" did not apply to this kind of injury. A majority of the justices held that the policy considerations underlying the rule did not support extending it to police officers injured on the job. Police officers, like firefighters, serve the public in time of need, but there are many differences between them, the majority noted.

• Firefighters know they are exposed to danger when they are called to fight a fire, whereas police officers on patrol are not directed to a single hazard, and respond to many circumstances.

• Firefighters receive specialized training to fight fires, whereas police officers receive no specialized training to capture stray dogs, and doing so is not a central focus of their day's activities.

A dissenting justice said that to allow recovery for the acts of negligence that cause the need for a police officer's services places too great a burden on members of the public who are entitled to police protection. Cole v. Hubanks, #02-1416, 2004 WI 74, 681 N.W.2d 147, 2004 Wisc. Lexis 437 (2004).

Notes:

1. A few examples include:
Properly fitting protective clothing: Wedow v. City of Kansas City, #04-1443, 442 F.3d 661; 97 FEP Cases (BNA) 121, 2006 U.S. App. Lexis 7297 (8th Cir. 2006); *Rain gear*: Sacramento Co. Deputy Sheriff's Assn. v. Co. of Sacramento, 220 Cal.App. 3d 280; 269 Cal.Rptr. 6, 1990 Cal. App. Lexis 443 (3rd Dist. 1990); *Firearms*: Oakland Police Officers Assn. v. City of Oakland, 30 Cal.App.3d 96, 1973 Cal.App. Lexis 1140, 106 Cal.Rptr. 134 (App. 1973).

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Are You Liable for Trainees' Injuries Caused by Your Alleged Negligence?, 9 (1) Michael P. Stone - Training Bulletin (Jan. 2006). *Contains the Martinelli Training Safety Protocol.*

Comment: Where There's Smoke, There's the Firefighter's Rule: Containing the Conflagration After One Hundred Years, by David Strauss, 1992 Wis. L. Rev. 2031 (1992).

Simunition ® is a trademarked product line of General Dynamics Ordnance and Tactical Systems-Canada Inc., http://www.gd-ots.com/

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Legal Aspects of Training Injuries
Part Two

In Part One:

* Status of the claimant
* Assumption of risk
* Pretraining injury screening
* Protective gear
* Effect of the "firefighters' rule"
* Notes & references

In Part Two:

* Duty to provide a safe workplace
* State created danger
* Workers' compensation: exclusive remedy and exceptions
* TASER® injury litigation
* Refusal to participate in shock exercises
* Releases & waivers
* Notes & references

As mentioned in Part One, this short article is an overview of the topic, and is not intended to be a comprehensive review of training injury litigation.

Duty to Provide a Safe Workplace

In 1992, the Supreme Court held that the Constitution does not require a public agency to provide a safe workplace for public employees. Justice Stevens wrote, in a rare, unanimous opinion:

> "Neither the text nor the history of the Due Process Clause supports petitioner's claim that the governmental employer's duty to provide its employees with a safe working environment is a substantive component of the Due Process Clause. ....
>
> "In sum, we conclude that the Due Process Clause does not impose an independent federal obligation upon municipalities to provide certain minimal levels of safety and security in the workplace and the city's alleged failure to train or to warn its sanitation department employees was not arbitrary in a constitutional sense." 503 U.S. 115 at 126, 131.

Collins v. City of Harker Heights, #90-1279, 503 U.S. 115 (1992).

A recent example of the holding in Harker Heights is a case where the Seventh Circuit denied recovery to a bailiff that had sued the county after a criminal defendant shot him. The panel wrote:

> "[He] was paid to protect judges and the public from the likes of [his attacker]. To the extent this exposed him to a personal risk he took it willingly, in exchange for pay and fringe benefits. ... Neither the text nor the history of the Due Process Clause supports a claim that the governmental employer's duty to provide its employees with a safe working environment is a substantive component of the Due Process Clause."

Witkowski v. Milwaukee Co., #06-3627, 480 F.3d 511, 2007 U.S. App. Lexis 5761 (7th Cir. 2007).

On the other hand, a federal or state statute can support a damage claim. Common examples of this are sexual harassment claims, where agency officials have tolerated a sexually hostile environment.

In the area of training injuries, a worker would have to allege a violation of a state or federal law and prove that this was the proximate cause of the injury suffered. One such example was mentioned in Part One of this article: Singleton v. City of New York, #9640/06, 2006 NY Slip Op 26412, 13 Misc.3d 117, 827 N.Y.S.2d 535, 2006 N.Y. Misc. Lexis 2928 (2006).

State Created Danger

What if a public entity "creates" the danger, and a death or injury results?

Although the defendants prevailed in the Supreme Court's decision in DeShaney

v. Winnebago Co. Dept. of Social Services, 489 U.S. 189 (1989) proponents of the "state created danger" theory rely on a small part of Chief Justice Rehnquist's opinion:

> "While the State may have been aware of the dangers that [the Petitioner] faced in the free world, it played no part in their creation, nor did it do anything to render him any more vulnerable to them." [489 U.S. 202]

Since 1989, every circuit has accepted the doctrine except for the Fifth Circuit, and it has not rejected it. An early example of the doctrine is L.W. v. Grubbs, 974 F.2d 119 (9th Cir. 1992).

Oregon prison officials placed a nurse in danger by assigning a violent sex offender inmate to work with her alone in the prison clinic. The panel noted that the nurse was "not seeking to hold Defendants liable for [the inmate's] violent proclivities. Rather, [she] seeks to make Defendants answer for their acts that independently created the opportunity for and facilitated [his] assault on her."

The Supreme Court's decision in City of Harker Heights was not applicable, because the nurse alleged that "the Defendants took affirmative steps to place her at significant risk, and that they knew of the risks."

What if the state created danger is an unsafe training exercise?

Jailers at the Shelby County Jail in Memphis, TN, spent between ten and thirty minutes believing that they were being held hostage by two gunmen that had taken over the jail's second-floor control room.

Unknown to them, their superiors planned a mock takeover as a "training exercise" designed to test the security of the jail.

Other jailers witnessed the events unfolding in the control room and believed the hostage scenario to be real. Two of these jailers called family members, reporting that inmates were going to kill them.

The jailers who were in the control room, along with others subjected to the mock takeover, sued the officers who planned and carried out the exercise, claiming violations of various state and federal laws, including the Fourth Amendment prohibition against unreasonable seizures.

The District Court refused to dismiss the civil action, and the superiors appealed. The Sixth Circuit reversed, noting that the plaintiffs failed to cite any case, statute, rule, regulation, or other authority that would have put the defendants on notice that by conducting a training exercise that interfered with the jailers' freedom of movement, they were unreasonably seizing the jailers.

Although the defendants' actions may have supported a claim of unreasonable seizure, such a claim was not clearly established with respect to the law enforcement training situation. The appellate panel ruled that the defendants were entitled to summary judgment on the basis of qualified immunity.

In no way did the appellate court exonerate jail officials. They said, "We have no difficulty in assuming that defendants' actions violated plaintiffs' Fourth Amendment right to be free from unreasonable seizures." But there was, until this case, no precedent that would have put the supervisors on notice that the training exercise was unlawful.

Humes v. Gilless, #03-5630, 108 Fed. Appx. 266, 2004 U.S. App. Lexis 16599 (6th Cir. 2004) reversing 154 F.Supp.2d 1353 (W.D. Tenn. 2001).

Workers' Compensation: Exclusive Remedy and Exceptions

Generally, a worker's compensation claim is a "no fault" recovery. The employee loses the right to sue the employer for damages, but the defenses of contributory negligence and assumption of risk cannot be raised by management.

Each state is free to fashion exceptions and defenses to compensation claims. If a county sheriff's deputy is injured by a municipal police officer, the deputy can sue the officer and city because there are different employers.

- *Example*: A California municipality and a police officer, who allegedly struck another officer during a baton training exercise, resulting in a disabling injury, were found liable for $2.35 million in damages. The suit claimed there was negligent supervision by the city. Hamilton v. City of Brawley, #84701 (Imperial Co. Super. Ct., 11/24/1997) summarized at 41 ATLA L. Rptr. 94

(April 1998). {N. 1}

If one officer harms another while engaged in "horseplay" during a training session, the agency might escape liability and the errant officer might be exclusively liable. That is because workers' compensation liability and indemnity rights are limited to those acts which arise from the "scope and course" of an employee's duties.

- *Example*: A New York appellate court held that a sheriff's lieutenant was not acting within the scope of his employment when he allegedly injured a deputy sheriff at a defensive tactics training program. He had placed the deputy in a neck restraint, causing him to fall. The lieutenant was not entitled to defense and indemnification by the county that employed them. Riehle v. County of Cattaraugus, #04-01149, 17 A.D.3d 1029, 794 N.Y. Supp.2d 186, 2005 N.Y. App. Div. Lexis 4595 (4th Dept. 2005).

Generally, compensation laws do not prevent an injured employee from suing a manufacturer for product liability, although the compensation fund might have a right to subrogate to the extent of benefits paid and those which are anticipated. Subrogation would reduce the amount the employee might retain, if the claim against the manufacturer is successful. {N. 2}

If the manufacturer alleges that the injury was the result of a poorly designed training session, rather than a product defect, a secondary lawsuit is likely to be filed (known as an impleader or third-party claim).

- *Example*: The estate of a Chicago firefighter, who was killed after jumping into an inflatable "Life Cube" during a training exercise, sued the manufacturer and distributor. The defendants, in turn, were entitled to implead the city. McNamee v. Federated Equipment & Supply v. Chicago, #1-96-1825, 286 Ill. App.3d 806, 677 N.E.2d 8 (1st Dist. 1997). {N. 3}

TASER® Injury Litigation

All less lethal weapons have three problems:

1. They are not always effective, for a variety of reasons; {N. 4}
2. Suspects are sometimes injured;
3. Officers are sometimes injured.

The TASER® has been on the market for many years, but it was not until a change of management that the product was dramatically improved. Now more than a quarter million law enforcement and correctional officers use the device.

Many agencies that used OC insisted that officers get sprayed, so that they could understand the effects of pepper spray. Some of those agencies used the same reasoning when they adopted TASERs and insisted that officers receive an electrical shock. This has resulted in litigation against the manufacturer.

Some of the allegations raised against the manufacturer of the TASER include the following:

1. The failure to properly design and adequately test the device so as to prevent injury to participants; and

2. The concealment of risks and hazards associated with the device; and

3. The failure to provide adequate warnings that participants are exposed to serious injury; and

4. The breach of an implied promise of fitness.

Typical civil actions generally allege either an injury from a fall or a burn on the arm; here are a few examples:

- In November 2003, a Las Vegas Metro officer allegedly "suffered a burn where the TASER® M26's lead was attached" via alligator clips, which "became seriously infected," causing "permanent injury." Lewandowski v. TASER International, #2:06-CV-00146 (D.Nev., filed 2006). The infection was diagnosed as *necrotizing fasciitis.* {N. 5}

- Also in November 2003, another Las Vegas Metro officer allegedly "struck the floor, causing injury to her face, neck and back," resulting in "ongoing and severe pain" in her jaw, back and arms, and "was forced to undergo multiple surgeries and medical procedures." Peterson v. TASER International, #2:06-CV-00145 (D.Nev., filed 2006). {N. 6}

- On December 5, 2003, a third Las Vegas Metro officer allegedly "suffered permanent injuries and damages to his right arm and shoulder." Cook v.

TASER International, #2:04-cv-01325 (Removed to D. Nev. 2004); #A490657, Clark Co. Nev. Dist. Ct. (filed 2004). The case has been dismissed.

- A Worthington, Ohio, police officer, claimed that she "incurred serious and permanent injuries to her body, including ... a right rotator cuff injury with right supraspinatus tear, requiring a right rotator cuff repair and a right shoulder arthroscopy," (while kneeling on a rubber mat and linking arms with officers kneeling down next to her on both sides, between other officers). Stevens v. TASER International, #2:04-CV-1044 (Filed S.D. Ohio 2004). The case was settled (PACER Doc. 34, filed 5/5/2006). {N. 7}

Officers have been inadvertently sprayed with OC by their colleagues, and intentionally sprayed by citizens and suspects. Although unpleasant, they can still move and otherwise react. If shocked with an electronic weapon, they cannot move or react until the charge stops. TASER International does not even require that certified instructors receive a shock.

- ***Trainers are now questioning whether training shocks are useful.*** See Chief Bert DuVernay's article, TASER® Shocks in Training, 7 (1) ILEETA Use of Force Journal 23 (Jan.-Mar. 2007).

Refusal to Participate in Shock Exercises

Whenever a peace officer or firefighter refuses to participate in a training exercise that is perceived as dangerous, management is likely to initiate disciplinary charges for insubordination. Even if the employee is a member of a bargaining unit and management unilaterally adopts the device, the appropriate response is to "obey and grieve." ***An employee risks termination if he or she is not successful in challenging a direct order.*** {N. 8}

If officers are represented by a certified bargaining unit, the union can challenge the procedure, and if unsuccessful, file an Unfair Labor Practice charge with the state's public employee relations board or commission.

Generally, the selection of a lethal or less-lethal weapon is a management prerogative. San Jose POA v. City of San Jose, 144 Cal.Rptr. 638, 78 Cal.3rd 935 (Cal.App. 1978) [a police dept's firearms use and deadly force policy is not a negotiable issue in California].

However, the implementation of a weapons policy is usually a mandatory subject of bargaining, ***especially if safety issues are raised***. Claremont POA v. City of Claremont, #S120546, 39 Cal. 4th 623, 47 Cal.Rptr.3d 69, 2006 Cal. Lexis 9518 (Cal. 2006) [although California public agencies have a unilateral right to establish

policy, management may be required to meet-and-confer with the union over implementation of the policy]. {N. 9}

Individual officers can judicially challenge an unsafe practice by seeking injunctive relief. For example, in a civil action brought by six military members, a federal court issued a preliminary injunction to halt controversial anthrax inoculations. Doe v. Rumsfeld, 297 F.Supp.2d 119 (D.D.C. 2003). The court said:

> "The women and men of our armed forces put their lives on the line every day to preserve and safeguard the freedoms that all Americans cherish and enjoy. Absent an informed consent or presidential waiver, the United States cannot demand that members of the armed forces also serve as guinea pigs for experimental drugs."

Releases & Waivers

A release and/or waiver of liability is generally enforceable if the injured party voluntarily participates in a potentially hazardous activity. {N. 10} One court noted that unless the release or waiver is contrary to public policy, it will be enforced in the absence of fraud, willful or wanton conduct, illegality, or disparity in the bargaining position of the parties. Masciola v. Chicago Metro. Ski Council, 628 N.E.2d 1067, 257 Ill.App.3d 313 (1993).

An employer does not have explain the scope of the release. Devera v. Smithsonian, #20 06-3354, 2007 U.S. App. Lexis 3142 (Fed. Cir. 2007).

A release is just a contractual promise to forbear from initiating a claim. Contracts require either a mutuality of obligation or the offer and acceptance of a significant benefit. A common example is a citizen ride-along waiver. A ***citizen*** is able to directly observe police activity and receives an educational benefit.

It is another matter when an ***employee*** is required to attend a training program and the instructor demands a signed release. For example, the Michigan Employment Relations Commission annulled a management requirement that police officers must sign a liability release form when they submit to an involuntary psychological examination. City of Oak Park and P.O.A. of Mich., 1997 MPER (*LRP*) Lexis 12 (Mich.Emp.Rel.Cmsn.).

Notes:

1. Although the judgment was appealed, there is no published opinion; an order issued 6/5/2000 reads, "Upon written request filed by appellant City of Brawley ...

the appeal of City of Brawley (Brawley Police Department) only is dismissed and the remittitur is ordered to issue immediately ...," Docket #D030285 (Cal. App. 4th Dist. Div 1).

2. "Such city or village may have or claim a lien upon any judgment or fund out of which such representative might be compensated from such third party, for any moneys paid out of such award or allowance previous to such judgment or settlement." Illinois Pension Code and Workers' Compensation Act, 820 ILCS 305/5, Sec. 22-308.

3. The German manufacturer, *Deutsche Schlauchboot*, had placed a German language label on the device warning that it was to be used only to catch jumping or falling persons in emergency rescue situations, and was not to be used for exercise, training, or sport-jumping. The U.S. distributor replaced the German language warning label with a warning, in English, that the product was to be used only in emergency rescue situations.

4. See, Type of Less Lethal Weapon and Level of Success, Tables 4 & 5, in TASER and Less Lethal Weapons: An Exploratory Analysis of Deployments and Effectiveness, C. Mesloh, et al., 5 (5) Law Enforcement Executive Forum 74 (2005) and Injury-Based Use-of-Force Chart (LAPD study), Greg Meyer, excerpts from a Master's thesis (1992).

5. Necrotizing fasciitis or *fasciitis necroticans*, is a gas-forming, fulminating, bacterial infection of the superficial and deep fascia, resulting in thrombosis of the subcutaneous vessels and gangrene of the underlying tissues. This supposedly is the only known incident of an officer suffering necrotizing fasciitis allegedly from a TASER®.

6. Michael Brave, TASER's attorney, stated that the plaintiff was kneeling on a rubber mat and had linked arms with officers that were kneeling down next to her on both sides.

7. See note 6.

8. An arbitrator sustained an 84-hour disciplinary suspension for a corrections officer who refused to fully participate in a training course. Alaska Dept. of Corrections and the Public Safety Employees Assn., 117 LA (*BNA*) 674, Alaska Case #01-C327, PSEA Case #01-01C (Henner,2002).

9. *Also see*, City of Ansonia and IBPO L-457, Case #MPP-14,356, Decis. #2995 (Conn. Lab. Rel. Bd. 1992) [state labor board stayed a directive that officers carry their firearms with the safety in the firing position; the union claimed that the

police chief jeopardized officer safety, without resorting to bargaining]; West St. Paul v. Law Enf. Labor Serv., 466 N.W.2d 27 (Minn. App. 1991) [city must bargain with union before implementing a citizen ride-along program in police vehicles because the plan could affect officer safety]; Twp. of So. Brunswick and P.B.A. L-166, #86-115, 12 NJPER (*LRP*) ¶ 17,138 (N.J. PERC 1986) [a union safety proposal specifying equipment to be maintained in police patrol vehicles was mandatorily negotiable].

10. Another form of release is called a "covenant not to sue."

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Training Liability in the Use of Deadly Force

By Jack Ryan

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Any time a law enforcement officer uses deadly force, the likelihood that a lawsuit will follow is almost a certainty. Most of these lawsuits are brought in the federal courts as civil rights claims based upon the Fourth Amendment to the United States Constitution. These actions are brought under a federal statute, 42 U.S.C. § 1983 which creates civil liability when a person, acting under color of law, violates federally protected rights of another, causing damage. Under § 1983, a governmental entity, specifically a town, city or county are not liable for all of the actions of their employees. Governmental entities are only liable in cases where some policy, custom, rule or ordinance causes the employee to commit the violation or where the entity has failed to supervise, discipline or train the employee and this failure leads to a foreseeable constitutional violation.[i]

The focus of this article is on training with respect to law enforcement's use of deadly force. The article will begin with a summary of the law with respect to law enforcement training and then proceed to the more specific area of firearms training.

The foundation case on failure to train is *City of Canton v Harris*.[ii] Geraldine Harris was arrested by the Canton Police and brought to lock-up. During the booking process she fell to the floor several times. When asked if she needed medical assistance, she responded incoherently. No medical attention was ever summoned for her. Following her release, relatives brought her to the hospital where she was treated for several emotional ailments.

During the lawsuit which followed on Harris' claims, evidence was established that shift commanders had the sole discretion to determine whether or not a detainee needed medical attention. It was further established that the shift commanders were given no training to assist them in making these medical evaluations. Harris prevailed on her claim at the trial court level, but the United States Court of Appeals for the 6th Circuit vacated the finding against the city because of the jury instructions. The 6th Circuit would have applied a standard of recklessness, intentional or gross negligence.

The United States Supreme Court held that "a municipality may be held liable under § 1983 for violations of rights guaranteed by the Federal Constitution, where violations result from the municipality's failure to adequately train its employees, only if that failure reflects a **DELIBERATE INDIFFERENCE** on the part of the municipality to the constitutional rights of its inhabitants.

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It should be noted that failure to train cases can be established in two ways. The first involves a lack of training in an area where there is a patently obvious need for training, for example an officer who is untrained in deadly force unreasonably shoots someone. The second method of establishing a failure to train by an agency is to establish a pattern of conduct by officers that would put the final policymaker on notice and the policymaker failed to respond with training. Certain forms of conduct are beyond the reach of failure to train. For example, in *Walker v. City of New York,* a plaintiff who spent nineteen years in jail for a crime he did not commit brought a failure to train claim based on the department's failure to train its officers not to commit perjury.[iii] Walker's wrongful conviction was based upon perjured testimony by a police officer. The United States Court of Appeal for the 2nd Circuit asserted: *"If the conduct on which the claim is based is such that a common person would know the right response without training, there is no duty to train."* Some additional language from the Walker case provides further guidance as to when training is required. Specifically: when policy makers know "to a moral certainty that officers will confront a particular situation" and where "the situation present(s) a difficult choice or is there a history of mishandling by employees" and where "the wrong choice frequently result(s) in a deprivation of constitutional right."[iv]

Should policy makers know to a "moral certainty" that officers will be faced with making decisions on whether or not to use deadly force? Is the decision to use deadly force a difficult choice? Will the wrong choice frequently result in deprivations of a constitutional right? Decision making training with respect to the use of deadly force falls squarely within the description of a law enforcement task for which there is a patently obvious need for training.

For many years law enforcement agencies trained officers the "how to" shoot by using marksmanship courses for firearms training. Officers would stand at various distances from paper targets and take aim. As training progressed, agencies began creating combat and stress courses that incorporated officer movement, target movement and limits on the amount of time an officer would have to fire. While these courses are sufficient in training officers how to shoot; they fail in training an officer when to shoot and they fail to reflect the conditions under which most officers are required to work.

Almost 25 years ago, the courts began telling law enforcement that firearms training had to be more reflective of the conditions that officers would face while working. In Popow v. City of Margate[v], an officer in foot pursuit of a suspected kidnapper fired as the kidnapper ran down the street. As a result, the officer accidentally shot Mr. Popow, killing him. While the court's reasoning in Popow with respect to the constitutional analysis of an accidental shooting would not be followed by courts today, the court's assertions with respect to firearm's training is still being cited by courts.

In addressing the City of Margate's liability with respect to firearms training the court noted that the officer involved testified in his deposition that he was initially trained on deadly force at the police academy ten years prior to the shooting. His continued firearms training with respect to firearms consisted of going to a range twice a year. The court noted that there was no training with respect to low light conditions, moving targets or firing in residential areas. The court concluded that it was

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entirely foreseeable that an officer from the City of Margate, a largely residential area, would have to pursue a fleeing (moving) suspect at night (low-light). The court remanded the case back to the trial court after deciding that a jury could find the training provided by the City of Margate was grossly inadequate[vi]

The need for training on the "when to" shoot is now an accepted fact among the courts. Unfortunately, many police agencies, due to a lack of resources, still have not developed training in this area. The failure to have "judgment" or "decisional" training with respect to the use of deadly force is a risk that agencies cannot afford to take.

In Zuchel v. Denver,[vii] the United States Court of Appeal examined a case which began when members of the Denver Police Department responded to a disturbance call at a fast-food restaurant. Upon arrival, officers were told that the subject responsible for the disturbance had gone around the corner. As officers turned the corner they observed Zuchel, who had his back to the officers, arguing with some teenagers. Someone shouted that Zuchel had a knife. As the officers approached Zuchel turned toward the officers, at which time Officer Spinharney fired four times, killing Zuchel. A pair of fingernail clippers was found next to Zuchel. Officer Spinharney's partner testified that she was surprised when Officer Spinharney fired because she was right next to Zuchel and about to grab him.

Following a civil trial against the City of Denver, (the case against Officer Spinharney had been settled prior to trial); a jury came back with a verdict against the city for $330,000 based upon a failure to adequately train. The City of Denver appealed. In upholding the verdict, the court cited testimony by a Denver police detective as well as testimony from the plaintiff's expert on police training. The detective testified that the only "shoot-don't shoot training" that existed at the time of Zuchel's death "consisted of a lecture and a movie." The plaintiff's police practices expert testified that if the only "shoot-don't shoot" training officers received was a lecture and a movie, then the training was grossly inadequate.

In reviewing these two decisions, Popow and Zuchel, it is clearly established that law enforcement agencies must conduct firearms training on a regular basis; the firearms training must reflect the environment that officers are likely to face, i.e. moving targets, moving officers, low-light conditions and residential areas if applicable to the agency being trained; and finally agencies must conduct decision making training with respect to when to use deadly force. Annual or semi-annual qualification courses are simply insufficient for purposes of assisting officers in making deadly force decisions and for purposes of avoiding liability.

Qualification courses and other courses which emphasize speed under stress and marksmanship, without decision making skills may actually enhance liability. Noted police practices expert G. Patrick Gallagher while speaking to groups nationally has recounted the story of an agency that determined that one of their officers had been involved in a bad shooting, fortunately for the officer's intended target, the officer missed. In order to remediate the officer's mistake, the agency sent the officer to the range where he underwent re-training. As a result, his shooting skills were enhanced, but his decision-making

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skills with respect to deadly force remained unchanged. Thus, the agency now had a more skilled shooter who would more likely hit his target when he made a bad decision.

Many cases emphasize the need for enhanced decision making skills with respect to use of force decisions. Allen v. Muskogee[viii] serves as one example. In Allen, officers responded to a call of a suicidal man. Upon their arrival at the scene they observed Mr. Allen, seated alone, in his vehicle with a gun. Within 90 seconds of their arrival, the officers rushed the car in an attempt to disarm Mr. Allen, rather than isolating and negotiating with him. When the officers rushed the car, Allen made a sudden movement toward the officers leading the officers to believe they were in danger of being shot. The officers opened fire and killed Allen.

A police practices expert reviewing the case based his opinion of the department's training on the deposition of a training officer who testified that the officers' rushing of the car was consistent with their training. The expert opined that if rushing the vehicle was consistent with the department's training then the department's training was "contrary to every piece of training material in existence." As a result the court allowed the case to go forward against the agency. If the agency could have put forth documented training scenarios based upon this type of recurring incident, the plaintiff would not have been able to go fourth on this type of claim.

A recent case from the United States District Court, Rhode Island provides an example of how documented training that incorporates shoot-don't shoot may diminish or eliminate an agency's liability in a failure to train case. Young v. City of Providence[ix] involved every police department's worst nightmare. Two uniformed police officers responded to a call of two women fighting outside a late-night restaurant that was a common gathering spot after the local bars closed. When the officers arrived at the scene they observed a Hispanic male in the parking lot with a gun. One of the officers took cover behind a telephone pole and remained there throughout the ordeal. The second officer, who had completed field training by only eight days, took cover behind the passenger wheel-well of the police cruiser, using the engine block as cover. The officers ordered the man to drop the gun and get on the ground. When the man complied with the officers' commands the officer behind the cruiser no longer had a visual observation of him. The officer then left his position and moved behind the rear bumper of the suspect's vehicle in an attempt to see him.

As the officers continued shouting orders to take the Hispanic subject into custody, a second man came out of the restaurant brandishing a firearm. The second man, an African American male, wearing a heavy winter coat began approaching the Hispanic male. The officers ordered the man to drop his gun and when he failed to do so, both officers fired. Each of the officers fired, what would prove to be, fatal shots. As other officers arrived on the scene of this shooting it was learned that the African American male was an off-duty police officer, Cornel Young Jr., who was apparently going out to assist his brother officers.

In a bi-furcated trial a jury determined that the officer who fired at Officer Young from behind the telephone pole had acted reasonably while the second officer who had moved from his position of cover

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behind the police vehicle prior to the shooting had acted unreasonably. The only clear distinction between the two officers was that one arguably left a good position of cover, while the second remained in a position of cover. Prior to the case moving on to its second phase where the plaintiff was alleging that the shooting was the result of the police department's failure to train its officers, the judge issued summary judgment for the department and the training officers who were named as defendants in the suit.[x]

In dismissing all of the failure to train claims the court cited to the documented training that the police department had conducted. This training included scenario based decision making training that included shoot-don't shoot decision making. The training also included training on an interactive firearms simulator where officers would have to give verbal commands, make decisions regarding cover, and in some cases make the ultimate decision of whether to shoot or don't shoot. As a result of the documented training the court concluded that the plaintiff would not be able to succeed on a claim that the department or its trainers were deliberately indifferent with respect to firearms and deadly-force based training.[xi]

In addition to the case law, model policies on use of force direct that agencies must conduct shoot-don't training.[xii] In a lawsuit that includes a failure to properly train on deadly force, police practices experts will use these model policies to support an opinion that the generally accepted police practice or the national standard is to conduct this type of training. An agency that fails to conduct this type of training faces the possibility that liability will be found if the failure in training has led to a bad shooting.

In developing shoot-don't shoot training, agencies should try to foresee as many possible scenarios that officers are likely to face. Every possible scenario cannot be foreseen, but many can be and training should be geared to the recurring circumstances that officers must deal with. Some examples would include situations that may be de-escalated by a proper police response; response to emotionally disturbed persons; response to off-duty situations; response to suicide-by-cop situations; decision making with respect to good citizens who are in possession of firearms i.e. the store owner with a gun who is pursuing the robber from his store; vehicle involved firearms scenarios; circumstances where missed shots may endanger innocent persons; and persons turning with innocent objects in their hands.

Obviously, all of the scenarios should be conducted with varying environmental conditions such as low-lighting; residential or densely populated areas; and movement of both suspects and officers. The scenarios should also encompass a full force continuum evaluation with respect to officer response i.e. did the officer give verbal commands? Did the officer use other tools where they may have effectively resolved the event without resorting to deadly force where appropriate? Did the officer give a warning (where appropriate) before using deadly force?

In managing risk by conducting shoot-don't shoot training, agencies may consider purchasing a firearms training simulator. The current technology in these simulators has greatly advanced over the

past few years allowing training officers to escalate and de-escalate scenarios in accordance with the response of the officer involved in the training. Some of the more advanced simulators, such as Advanced Interactive Systems, AIS® simulator, have scenario authoring capability such that agencies can develop their own scenarios. An agency that does not have the resources for scenario development can also purchase canned scenarios that have been developed by their simulator's manufacturer. For example, AIS has hundreds of pre-produced scenarios, each containing numerous branching options depending on officer response, for all of the various law enforcement functions.

While no agency is immune from a lawsuit, no agency can afford to sit back in a defenseless posture. One of the most effective methods of avoiding agency liability is through proper, thorough and documented training. No agency can afford to be without such training. Proper training will undoubtedly lead to better decisions by officers as well. These better decisions also place the individual officer in a position of strength when the lawsuit is filed. Although no officer or agency likes to be served with a lawsuit, there is a great deal of satisfaction when the suit is dismissed due to the investment of the agency and officer in training and professionalism.

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CITATIONS:

[i] Note, State Government entities and state actors acting in their official capacity cannot be sued in federal court under § 1983 due to the Eleventh Amendment's bar against such suits. See E.G. Will v. Michigan Department of State Police, 491 U.S. 58 (1989).

[ii] City of Canton v Harris, 489 U.S. 378 (1989).

[iii] Walker v. City of New York, 974 F.2d 293 (2d Cir. 1992).

[iv] Id.

[v] Popow v. City of Margate, 476 F.Supp. 1237 (Dist. N.J. 1979).

[vi] Note, the standard for failure to train was set forth in City of Canton v. Harris which was decided after Popow and is a "deliberate indifference" standard.

[vii] Zuchel v. Denver, 997 F.2d 730 (10th Cir. 1993).

[viii] Allen v. Muskogee, 119 F.3d 837 (10th Cir. 1997).

[ix] Young v. City of Providence, 2004 U.S. Dist. LEXIS 1847 (R.I. 2004).

[x] Note, the case is currently under appeal to the United States Court of Appeal 1st Circuit.

[xi] Note, the author of this article was one of the defendants who was granted summary judgment in this decision.

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[xii] See International Association of Chiefs of Police Model Policy on Use of Force and the accompanying concept paper revised August 2001. ("Finally, firearms training with respect to the use of deadly force cannot be limited to routine firearm qualifications and proficiency testing. It is recommended that all officers authorized to carry firearms be required to qualify with each authorized firearm on at least a semiannual basis and preferably three times per 12 month period. But, in addition to proficiency testing, it is strongly recommended that police agencies provide (1) routine instruction and periodic testing on the agency use-of-force policy and (2) instruction and practical exercises in making decisions regarding the use of deadly force. In the latter instance, it is important that an element of firearms training include realistic use-of-force simulation exercises. This includes night and/or reduced light shooting, shooting at moving targets, strong-hand/weak-hand firing, and combat simulation shooting. Firearms training should attempt to simulate the actual environment and circumstances of foreseeable encounters in the community setting, whether urban, suburban, or rural. A variety of computer-simulation training is available together with established and recognized tactical, exertion, and stress courses. In essence, acceptable firearms training and evaluation are no longer limited to target practice. Scrutiny of firearms training will normally include an evaluation of the relevance and utility of such instruction.")

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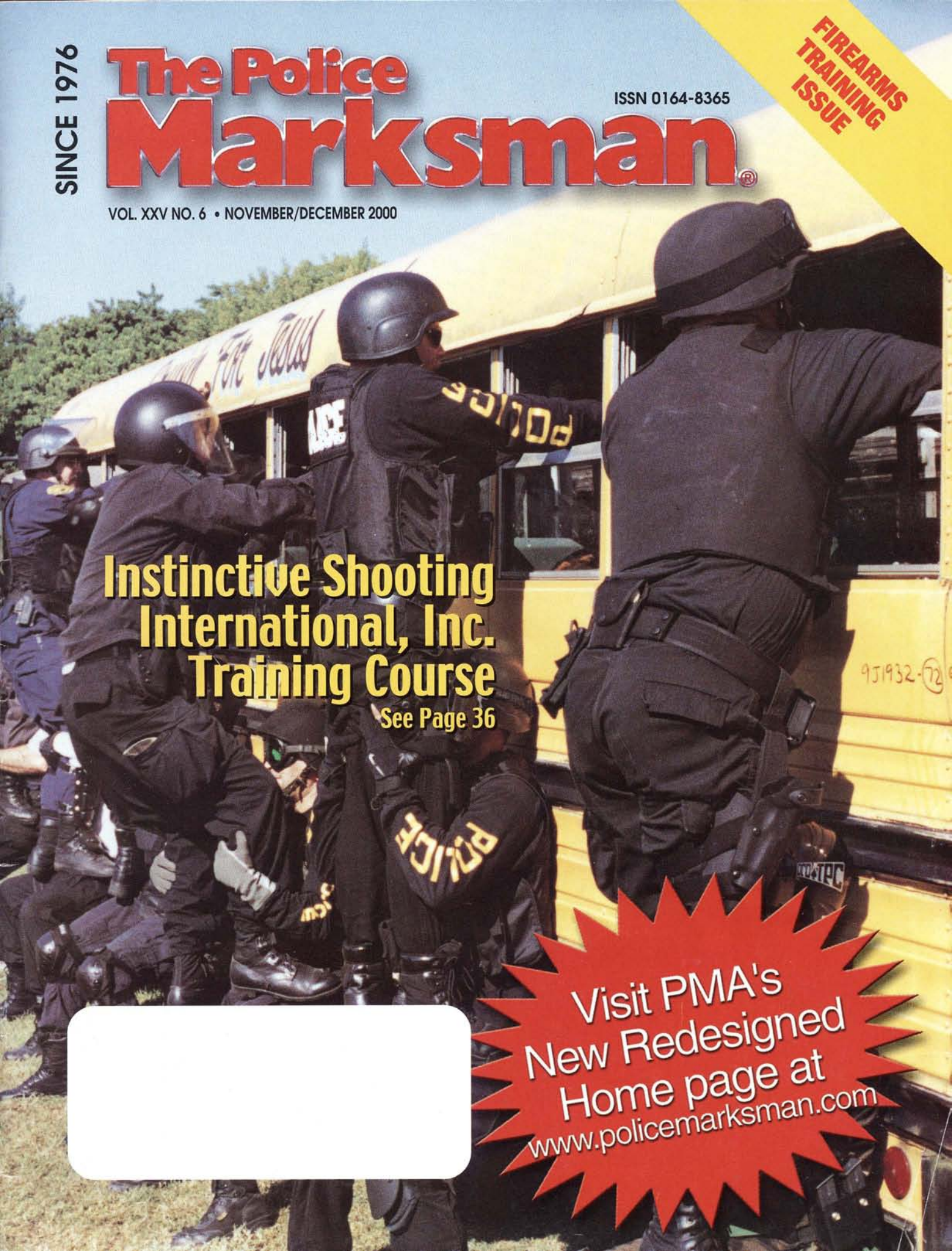

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WHY IS THE SUSPECT SHOT IN THE BACK?

Finally, Hard Data on How Fast the Suspect Can Be — in 11 Different Shooting Scenarios

By: Bill Lewinski, Ph.D

We have always known that generally action beats reaction. And, we've been able to demonstrate this in a variety of civilian and law enforcement situations. Since the invention of the shot timer, we've known how quickly officers can react in shooting situations. Now, for the first time, we have accurate, sophisticated measurements on how quickly the suspects in the street can actually do what they do in 11 different kinds of shooting scenarios. Some of you may find the results depressing, for this research proves that in the street, action really does beat reaction. For others, it will provide a clear explanation for problems, such as why so many suspects get shot in the back. Readers should find the results of this study truly amazing - the implications for law enforcement training are profound.

In a previous article in *The Police Marksman*, (September/October, 1999) Dave Grossi and I presented my research data on three movements subjects have done in officer-involved shootings. In this current research those movements have been modified to make them more consistent with some types of street shooting situations. This research also measures the time for suspect movement in 9 other street shooting situations.

It's important for readers to remember that the average officer, with his finger on the trigger, and being psychologically set, is able to "react" to a shot timer and pull the trigger of his weapon in about a quarter to a third of a second. I'm currently working on research on this topic with an entire police department, and the preliminary data indicates it is closer to a third of a second or even longer for most officers to react (at least with that department). Some officers are quicker and others are slower. Keep this "average" reaction time in mind as you read about the different motions studied, and learn just how fast the suspects action can be.

The purpose of both the current and previous research was not to replicate any specific shooting situation, for this would be functionally impossible. It was not the intent to come up with measurements that could represent all population samples, for instance from the young to old and the fit to unfit. Instead, the approach was to begin to come to an understanding of some of the time parameters of the specific motions studied, so that more intelligent conversions can be conducted regarding officer shooting situations by tactical instructors, internal affairs or shooting review boards, attorneys and judges. This is not a study on the biomechanics of shooting. For instance, in the combat tuck shooting motion, the concern was only with the time of the motion. The timer started when the subject started his motion, and ended when the camera recorded the discharge of flame from the barrel. Whether the subject pulled from the elbow or shoulder was not relevant to this study, nor whether he rolled the weapon over his belt and discharged it, or pulled it high and then dropped it low. I was simply concerned with beginning to define the time parameters so the law enforcement community can now know how fast these motions really can be.

The population for the study was 25 subjects who, for the most part, were undergraduate majors in the Law Enforcement Program at Minnesota State University, Mankato. Most of the subjects had not received firearms training or ever handled a firearm. All of the motions in the study were self initiated, and therefore were "action" motions to which an officer would presumably be "reacting." The weapon used in the study was a Smith and Wesson .22 calibre revolver, armed with black powder blanks.

Each subject did five repetitions of each motion. The motions were recorded on a Canon GL1 digital video camera in the frame mode. The speed of the camera was 30 frames per second. The camera and motions were cross matched with a digital timer that was accurate to 1/1,000 of a second. The error factor in the timing is a plus or minus 03/100ths of a second for each of the motions studied.

A more extensive statistical analysis than is presented in this article is available. However, the most important data for officers to know is the average time, and specifically the fastest time in which these motions can be done. In an actual street encounter, an officer will never know whether he is facing the fastest, slowest or just the average person. The only way an officer can ensure his survival is to prepare for, and react as if he's facing the fastest person out there. All of the motions studied here have come from actual officer-involved shootings, and reflect the real-life threats or circumstances.

1 GUN AT CONSOLE/CROSS BODY/DRIVER'S WINDOW DISCHARGE

- 15/100ths of a Second

The first motion studied simulated a vehicle stop where the suspect has a

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weapon hidden beside the right thigh/next to the console, and shoots at the officer as he approaches the driver's side door post. The subjects were instructed to hide the gun by their right thigh. Then, on their own initiative, to move the weapon from the right thigh position, across the body, point it slightly over and to the rear of the left shoulder and discharge the weapon. They were instructed to do this as quickly as possible. The average time from start to discharge was 25/100ths of a second. The fastest time for this motion, and there were several subjects who were close to this, is 15/100ths of a second, or almost twice as fast as an average officer can

pull the trigger on his weapon, if he is set with his finger on the trigger and ready to fire. If in this scenario, the "reactive" officer has his weapon drawn and in the "bootleg" position, he doesn't stand a chance to react and return fire before at least one, and more likely three or more rounds are fired in his direction.

2 GUN AT CONSOLE/CROSS BODY/PASSENGER'S WINDOW DISCHARGE

- 09/100ths of a Second

The second motion studied was another automobile simulation, where the suspect is in the front passenger's seat and has reached across his body to the console position with his right hand. The suspect

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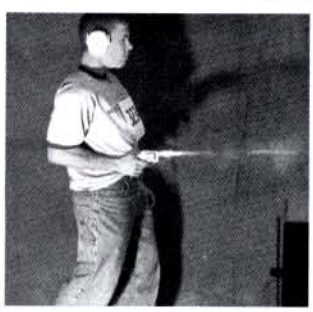
then pulls the weapon from beside the left thigh/console position, swings the barrel of his weapon across his body and back, so it is pointed to the rear of his right shoulder. He then discharges the weapon toward the passenger's side door post. This simulates a shooting on a passenger side approach, by a suspect who has a weapon hidden near the console. The average time for this motion was 26/100ths of a second, with the fastest time being 09/100ths of a second. This is three times faster than the average officer (who is set to fire) can pull the trigger.

3 GUN IN WAISTBAND/ COMBAT TUCK/ DISCHARGE

- 09/100ths of a Second



The third and fourth motion studied involved the "furtive" threatening motion where the subject reaches toward the waistband – presumably for a weapon. In this third motion, the subjects were requested to place the weapon in their waistband and then, on their own initiative, pull and fire in a very close "combat tuck" maneuver. Again, the timing started with the first frame in which movement occurred, and ended with the first frame recording the weapon discharge. This is a definite skill maneuver, and would get faster with practice, but the subjects were not allowed to practice. As is, the average time, from the start of the motion to discharge, was 23/100ths of a second, with the fastest time being 09/100ths of a second, or about three times faster than the average officer would be able to pull the trigger if he were set to react to this movement. An officer caught in the open in a "Dodge City showdown,"(with even the average subject in this study) literally would not stand a chance if the subject has his hand at his waistband, an actual weapon in that waistband, the intent to shoot, and any accuracy at all with his weapon.

4 GUN IN WAISTBAND/ ARM EXTENDED/ DISCHARGE

- 09/100ths of a Second

The fourth movement involved the same waist band position, but this time the subject was to pull the gun from the waistband, extend the arm fully and discharge the weapon. The average time for this motion was 26/100ths of a second, with the fastest being 09/100ths of a second. Again, this is three times faster than an officer who is already set with target acquisition and finger on trigger can react with a trigger pull. There was a very tight distribution on this motion and the vast majority of subjects were able to fire their weapons before the time the average officer would've reacted and fired theirs.

In a street situation involving the "furtive" move to the waistband, if the officer had a finger on the trigger and waited before firing until the average suspect initiated a movement pulling the weapon out of the waist band, the two bullets would pass each other in the air. If the suspect was as fast as some of the subjects in the study, the officer would not even be able to think of squeezing the trigger before the suspect would have fired his weapon. Further, if an officer was to wait to identify that the suspect actually did have a weapon, the fastest suspect would be able to discharge at least two rounds before the average officer could react with one. The implications for officer safety are profound.

The next series of movements involved suspects running away from an officer, and then turning back in some fashion, firing at the officer and coming back into a full run position. In my previous research, I had looked at the time to complete the full motion of turning, pointing, firing and then returning to the running position. Suspects in the street may or may not "throw shots' back at an officer in this fashion. It is equally probable for the suspect to, while running, hold the weapon pointed at an officer and fire several times before he pulls back into a full forward running position. Therefore I needed to start the timing of the motion from the point at which the suspect would no longer be a threat to the officer. Also, it seemed more important to determine when the suspect's back might be fully exposed to the officer, so the officer's round would directly enter the

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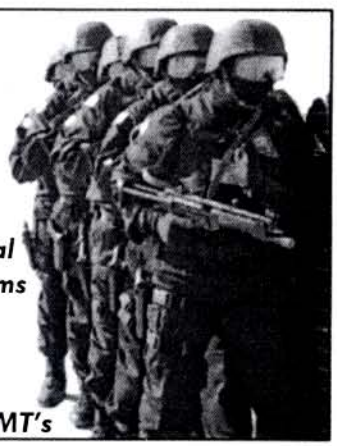
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back at an approximate 90 degree angle rather than the time in which the subject was again into a full running position. Subsequently in the next movements, (numbers 5,6, and 7) the measurements begin when the subject ceases firing, and end when the subject's back is directly exposed to the officer, so a bullet would enter at approximately a 90 angle.

5 GUN EXTENDED BACK STRONG SIDE/DROP OFF TO SQUARE BACK

- 00/100ths of a Second

The fifth movement was a recreation of a shooting scenario with a suspect running away from an officer. The weapon in in his strong arm, pointing the weapon back on his strong side, toward the officer, firing at the officer and then coming back into a full forward running position. The subject in the study was instructed to run away from the "fictional officer," point the gun back, pull the trigger and then bring the weapon back into a bent arm running position. All of this was to be done as quickly as possible. Because suspects in the street could shoot one or more rounds at an officer before returning to a full forward running motion, the timing of the movement started after the subject pulled the trigger and then moved into the "drop off" position where the barrel of the weapon would no longer be pointed directly at the officer, and subsequently no longer be an immediate, direct threat. This "drop off" position was the start of the return of the arm to a running movement, and happened in different ways. Sometime the subjects simply turned the barrel as they started to bring the weapon forward and into the arm position for running. Sometimes they dropped their hand by a few inches or twisted it away. The timing of the motion ended when the subject had returned to a "square back" running position. The "square back" position is one where the subject would be moving in a straight line directly away from the officer and in the same direction as the officer would be facing. The "square back" would be at an 80-90 degree shoulder angle to the lateral plane of the movement of the subject. In this study, in almost all subjects, the hip or waist was often "square back" to the "officer" for the full motion of rotating and shooting, and did not shift from this position, so the measurement for this study was done on only the shoulder axis. Even in the full 90 degree "square back" position almost all subjects had a slight forward lean to their upper body. The angle of forward lean was not measured in this study. All actions were completed and the measurements were done within 20 yards of the subject starting to run.

The usual time from the frame where the weapon was directly pointed back at the officer in "discharge" position to "drop off" was one frame or 03/100ths of a second. Subsequently there was very little difference in the overall time from "weapon discharge" to "square back" and "drop off" to "square back."

In this fifth movement or "strong arm back" position, the average time to go from the "drop off" position to a "square back" position was 14/100ths of a second. The fastest time was 0/100ths of a second. In other words, in the fastest return, the subject had flexible shoulders and was able to extend the arm back without much upper body rotation. From this position, the mere act of changing the direction of the barrel seemed to release the pressure on the shoulder, and let him return to a full "square back" run position immediately. In general, regardless of how fast the subject was running, he was able to return from a "weapon discharge" position to a full "square back" run position within half a stride or a little more. In some cases the subject's back was so

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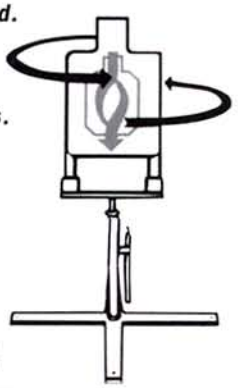

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square to the "fictional officer" as they were shooting, that even if the officer was to discharge his weapon at the subject as the subject's weapon was pointed at them, and continued to be trained at them for all intents and purposes, the bullet would still enter the subject's back at very close to 90 degrees.

6 GUN CROSS BODY/ OVER SHOULDER/DROP OFF TO SQUARE BACK

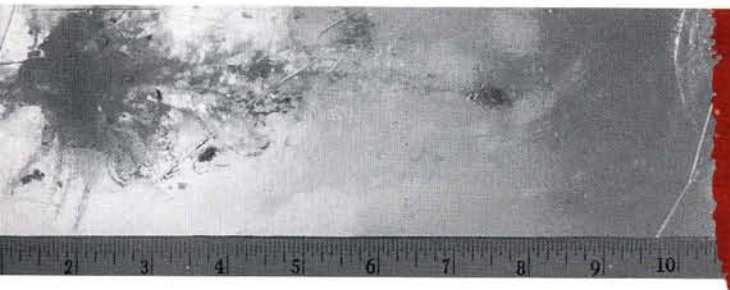
- 00/100ths of a Second

The sixth movement was a recreation of a shooting scenario with the suspect running away from an officer with the weapon in his strong arm. The suspect then looked over his weak side shoulder, brought the weapon across the body, pointed it back toward the officer, over his weak side shoulder, discharged the weapon and pulled the weapon and hand back into a bent arm run position. The subjects were instructed to do this motion as quickly as possible. The timing started from the weapon "drop off" position and ended when the subject was square backed. The drop off position here was the turning away of the barrel from the direction of the officer – however that was accomplished. The average time to return from the "drop off" position to a full "square back" position was 09/100ths of a second. Again, the fastest was 0/100ths of a second. In some subjects, the drop off of the weapon was all that was needed to return them to the position where if an officer was to hit them with a bullet at that point, the bullet would enter at an approximate 90 degree angle to the lateral plane.

7 GUN CROSS BODY/ UNDER ARM/DROP OFF TO SQUARE BACK

- 00/100ths of a Second

The seventh movement was a recreation of a shooting scenario with the suspect running away from an officer, with the weapon in his strong arm. The suspect then looks over his weak side shoulder, brings the weapon across the body and under the arm/shoulder of the weak side. The suspect then points it back toward the officer, discharges the weapon and pulls the weapon and hand back into a bent arm run position. The subjects were instructed to do this as quickly as possible. The timing started from the weapon "drop off" position and ended when the subject was square backed. The



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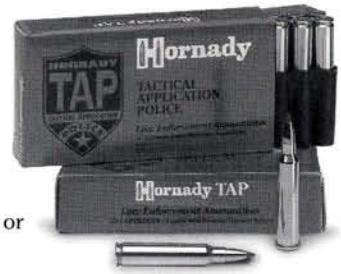

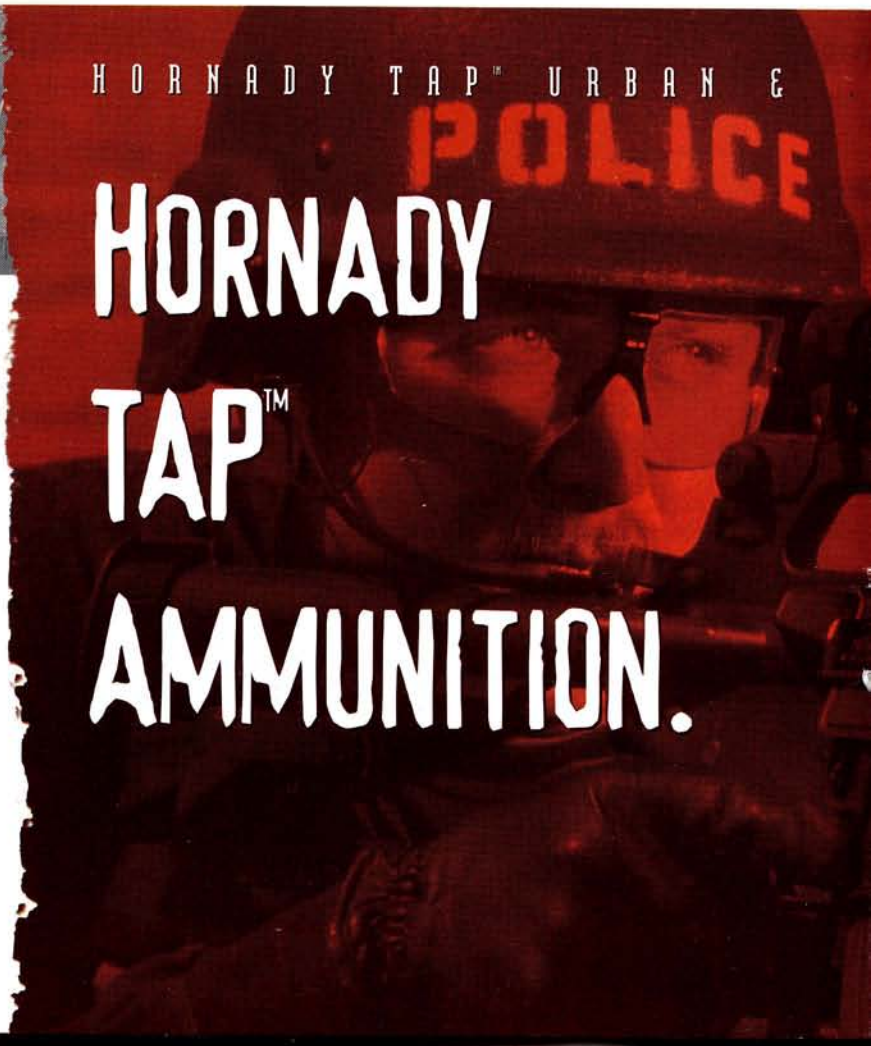

drop off position here was the turning away of the barrel from the direction of the officer – however that was accomplished. The average time to return from the "drop off" position to a full "square back" position was 13/100ths of a second. The fastest was 0/100ths of a second. Again, in some subjects, the drop off of the weapon was all that was needed to return them to the position where, if an officer was to hit them with a bullet at that point, the bullet would enter at an approximate 90 degree angle to the lateral plane.

Regardless of how the weapon was pointed back at the "fictional" officer as the subject ran away, it was apparent in most subjects that almost no hip rotation and little shoulder or upper body rotation was used to point the weapon back at the officer and shoot. The consequence of this is that any officer who shoots a subject in this position – either when the weapon is pointed at them or in immediate reaction to that pointing, will hit the subject in the back at very close to a direct 90 entry from the lateral plane of the back. This is a very different angle of entry than the average, uninformed civilian, law enforcement officer or officer of the court would expect.

8 90 DEGREE TURN/ WEAPON DISCHARGE /SQUARE BACK

- 50/100ths of a Second

The eighth movement is the 90 degree turn. In this study the subjects were positioned so they were in front of the camera and facing at a 90 degree angle to the officer/camera, with a weapon in their strong hand and positioned down by their thigh. They were instructed to do the 90 degree turn, and during this turn to actually point the weapon at the officer/camera and pull the trigger. Again, we were not studying the biomechanics of the motion, but simply beginning to establish

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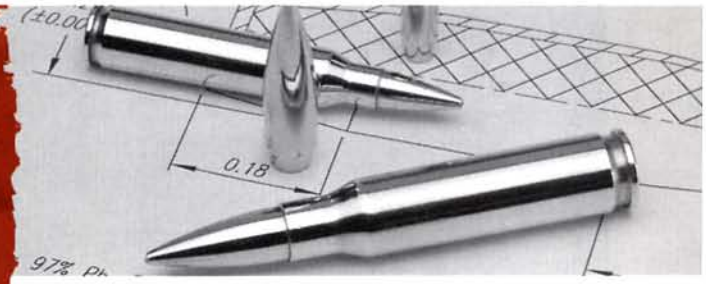

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the time parameters of the motion. It is noteworthy that, in this as well as in all the other motions studied, each person had his own unique way of doing the general movement. Some subjects raised the weapon toward the camera/officer pulled the trigger and turned; others dropped or "charged" their body then started to turn and raise the weapon, all in one motion; others started to turn first and then raised the weapon. Some subjects turned by almost spinning in place and then running away. Others ran and turned and took more than 10 yards to reach the shoulder "square back" position. The timing of the motion started with the first frame the weapon began to move as the subject started to bring it into motion from beside the thigh. The timing stopped when the subject was within 10 degrees of a full square back position facing away from the officer/camera.

In my previous study, the subjects were measured on simply turning. This study had some "street encounter" emphasis in that the subjects had a gun in hand and most accidentally swung or in some way raised the weapon at the officer/camera as they turned. This reflected a street encounter in which the suspect did not intentionally point the weapon at the officer and discharge it, but did threaten the officer. There have been an undocumented number of street encounters like this where the suspect was armed, facing or walking at a right angle to the officer, and then the suspect initiates or continues his motion into a 90 degree turning movement where they are subsequently facing or moving directly away from the officer. The suspects in these encounters invariably swing the weapon as part of the turning movement. The swing then results in the weapon, at some point, being pointed in or beginning to be pointed in the direction of the officer. The suspect never does discharge the weapon, but by the time the officer has reacted, to believing the weapon is going to be pointed and shot, the suspect has turned and is shot in the back. In my previous study, the average time for the subject to turn 90 degrees was 32/100ths of a second with the fastest being 18/100ths of a second.

Because of the more complicated and extensive motions the subjects went through in this study, the time for the 90 degree turn was relatively much greater than in previous studies but more accurately represents a more dynamic, realistic street encounter, where the suspect actually shoots at the officer. The average time for this motion in this study was 90/100ths of a second, with the fastest being 50/100ths of a second.

A second set of times was taken for each movement to assist in more clearly understanding the 90 degree turn and how it might interface with the threat to the officer and the officer's reaction time. The average time, from start of the motion to discharge and "weapon drop off," was 53/100ths of a second. The average time from weapon "drop off" to the full square back position was 37/100ths of a second.

9 180 DEGREE TURN/ WEAPON DISCHARGE /SQUARE BACK

- 50/100ths of a Second

The ninth movement is the 180 degree turn, and is similar to the 90 degree movement studied previously, in that it more accurately reflected a street encounter where the suspect engages in a more dynamic turn and actually dis-

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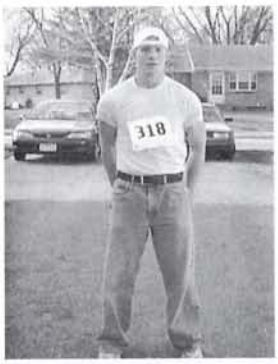

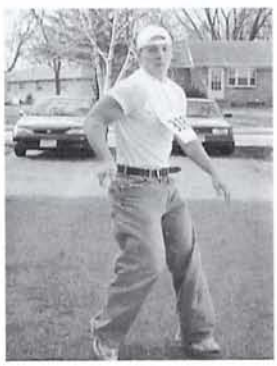

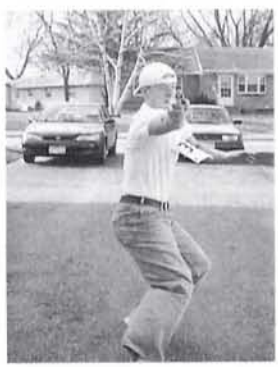

charges a weapon at the officer as they are turning. In this study, the subject was instructed to start by facing directly at the camera/officer with the weapon in a concealed, bootleg position beside and behind the strong side thigh, then to do the turn and actually point the weapon at the officer/camera and pull the trigger. As in the 90 degree study, the motion was very dynamic, varied among subjects, and sometimes covered quite a distance before the subject achieved a full "square back" position.

In my previous study with just the pure motion of the 180 degree rotation, and with the subject (weapon in hand), but only inadvertently pointing it at the officer, the time was 54/100ths of a second, with the fastest being 37/100ths of a second. In this study, the subject directly pointed the weapon at the officer and pulled the trigger while turning. The average time for this more dynamic motion was 89/100ths of a second, with the fastest being 50/100ths of a second. From the start of the motion to drop off, the average time was 48/100ths of a second. The fastest time was 40/100ths of a second. From "drop off" to square back position the average time was 42/100ths of a second. The fastest time was 10/100ths of a second.

10 180 DEGREE TURN WITH MOMENTUM/ POINT GUN/SQUARE BACK

- 33/100ths of a Second

The tenth motion studied involved the subjects doing a specific movement out of a door and a then a 270 degree turn. This turn is interesting because it was done in close proximity to a wall. That significantly affected the rotation and the direction in which the weapon was pointed. All subjects held the weapon in the direction of the officer for much of the turn as they rotated close to the wall. I also analyzed the main motion and subportions of the motions to be able to extract portions of the turn such as the quarter turn from "drop off." The main result from this study was the time for a dynamic 180 degree turn. In the midst of the 270 degree turn, the subjects were instructed to point the weapon directly at the officer/camera and continue their motion to a 180 degree turn in the opposite direction from the officer, and run away from the officer. The average time for this dynamic 180 degree turn is 58/100ths of a second. The quickest was 33/100ths of a second. It is also interesting that subjects doing this maneuver covered a long distance before actually completing the turn. Not one subject simply pivoted and turned. Most subjects covered 6 to 10 feet to accomplish this motion in the time reported. I presume this 180 degree turn is faster than the 180 degree turn looked at in motion #9, because the subjects in this segment had already developed momentum before they started into this 180 degree turn.

11 360 DEGREE TURN

- 60/100ths of a Second

The eleventh motion studied was a 360 degree turn, which has happened in a small number of shooting situations where the suspects were shot as they were attempting a 180 degree turn. The suspects then continued the rotation after they were shot and fell to the ground face up. The subjects in this study did not fall to the ground, but they did complete a 360 degree turn. They were instructed to do this as quickly as possible. This motion in particular covered a long distance especially by some subjects, and subsequently the average time was just under 3 seconds. Some subjects traversed almost 15 yards before completing the motion. The closer approximation to a more realistic street encounter, where these shootings have actually occurred,

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was a time of just under a second. The fastest time of 60/100ths of a second was done by a subject who traversed about 4 feet as he did the 360 degree turn.

By studying the "dynamic" rotation, while the subjects were doing a 90, 180 or 360 degree turn, not only can we see that the subjects would be shot in the back if they were actually in a street encounter, and the officer was to really "react," also, the subjects would be shot at quite a distance from where the officer said they were when the officer made the decision to fire. This study makes it very clear that regardless of the best intentions of the officer, given what the suspect is doing, and how quickly he can do it, the suspect will be shot in the back in some situations.

All of the responses of the average officer referred to in this study assumes that he is set, and has made the decision to shoot as soon as the subject presents a threat to him. It also assumes the officer is completely focused on the subject and then is able to react to the first movement of the subject. In the real world this may not be the case – the officer is then forced into playing "catch up." This is really dangerous, particularly now that we know how rapidly these scenarios can develop.

Readers of this article may believe that regardless of how alert or set an officer is to react, the only way to survive some of situations in the street is to triple the reaction time of their trigger pull. This is impossible. Realistically, the way an officer can survive the "Dodge City Showdown" or being a victim of the "Split Second Syndrome," is to (as much as they can) prevent these circumstances from happening at all. If there is one primary lesson for the officer to take from this study, it is the value of good basic officer survival skills, such as pre-event decision making, visual and mental alertness, tactical positioning, and always having the suspects keep their hands in plain view. Other supportive tactics like those taught in their academy, presented in magazines like *The Police Marksman* and in texts like **The Tactical Edge** would all be helpful for an officer to survive the unknown threat in the street. So much of any sophisticated skill is always based on a solid foundation of basics. ☆

About the Author

Dr. Bill Lewinski has a doctorate in Police Psychology from Union Institute in Cincinnati, Ohio. He is a professor in the Law Enforcement Program at Minnesota State University, Mankato, is on the National Board of Examiners with Goju-Kai Karate-Do USA, and is an ex-lecturer& contributing expert to the Street Survival® Seminars & The Tactical Edge. He lectures and testifies extensively in the area of Performance Psychology in force related matters. He may be contacted at: william.lewinski @Mankato.MSUS.EDU

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