

**POLICE WORK:**  
**FROM HANDCUFFS AND BATONS**  
**TO**  
**HARD-DRIVES AND KEYBOARDS**

CAPTAIN RODNEY G. JONES  
FONTANA POLICE DEPARTMENT  
FONTANA, CALIFORNIA

## INTRODUCTION

---

So, you want to be a cop? Your Dad was a cop. Your Dad's Dad was a cop. Even your Uncle was a cop. You think you can handle it because your family taught you everything you need to know? Forget it, you know nothing.

The role of policing in society has changed over the last three decades, in many ways most prominently due to the emergence of technology and its impact on shaping the duties, types of crimes and public perceptions of the police. As personal computers, Ipods and video games have engulfed society, so too did the availability and use of technology both to support law enforcement and as instruments of crime. In the past, officers were expected to make sure the scofflaws were off the street, keeping the streets safe for motorists and 'honest tax-payers.' All of this has changed.

At the outset of the 21<sup>st</sup> Century, the police are expected to do much more than their counterparts of the previous century. Many police departments focus on the quality of life for the citizenry they serve as diligently as their predecessors attended to enforcing the law. Public calls for more responsive cops and deputies has led to pervasive efforts to integrate Community Policing to move forward from the old role of simply putting

people in jail to the role of improving the quality of life. At times, though, it seems the role of the police changes tremendously, only to return to its roots. According to author Jeffrey Patterson:

“To better understand today’s debate over community policing, law enforcement administrators should study their history. History debunks the more outrageous claims made by some of the proponents of community policing and cautions against forgetting the important lessons of the past. It shows us that calls to change the way the police operate have been a constant theme from the very beginning of municipal policing. And it reminds us that our problems today – while serious – are really nothing new.”<sup>1</sup>

Unlike officers in the past, however, the demands on today’s police officer include a need for officers to have expertise with the use of a variety of emerging technologies. As the Century progresses, that need will only grow more intense.

The following pages will discuss two central themes; the need for peace officers to have a firm grasp on the use and understanding of current and emerging technologies, and how to recruit and train persons suited for the role of the police in the digital future. It will also note the price of doing nothing and what the astute police manager can do today to prepare her or his agency for the future.

---

<sup>1</sup> COMMUNITY POLICING: LEARNING THE LESSONS OF HISTORY, Jeffrey Patterson, Sergeant, Clearwater Florida Police Department, 1995

### The Internet Revolution and its Impact on the Police

The Internet has had a significant impact on society, and law enforcement is but one way we have changed the conduct of our daily lives. It has changed the breadth of crimes the police investigate and the manner in which crimes are investigated. According to futurist Gene Stephens,

“As street crime has diminished, new and more insidious types of offenses, especially terrorism and Internet-assisted crimes, have replaced it. Here, offenders are often thousands of miles away while planning and even while committing these crimes. With a rudimentary mastery of modern technology, terrorist from anywhere in the world can bring chemical and biological mayhem to any place on earth. Hackers and crackers halfway around the globe can shut down a chosen community’s Internet-dependent monetary or energy systems. Already, identity theft, often assisted by Internet scams, has become the most prevalent crime in the United States and other developed societies.”<sup>2</sup>

Law enforcement employees need to have a fundamental understanding of computers and other technological equipment. Without an understanding of the technological tools provided, police officers will be largely ineffective. Police departments can provide instruction to bring employees to an acceptable level of competency where they can utilize the equipment issued to them. Often, it is more effective and economical to ensure the employees have this competency before they are hired. In any case, trends in on-line crime will require the cop or deputy of the future to have the skills to patrol the web as skillfully as they now patrol their beats.

---

<sup>2</sup> POLICING THE FUTURE: LAW ENFORCEMENT’S NEW CHALLENGES, Gene Stephens, The Futurist, March-April 2005, Pg. 51-7

Internet crimes are often thought of as victimless. Nothing could be further from the truth. Children and teenagers can and do become victims of Internet crimes. Predators contact teenagers and children over the Internet and victimize them by:

- Enticing them through online contact for the purpose of engaging them in sexual acts.
- Using the Internet for production, manufacture, and distribution of child pornography.
- Using the Internet to expose youth to child pornography and encouraging them to exchange pornography.
- Enticing and exploiting children for the purpose of sexual tourism (travel with the intent to engage in sexual behavior) for commercial gain and/or sexual gratification.”<sup>3</sup>

Staffing only officers ill-equipped to investigate these crimes (not to mention the financial and fiduciary crimes on the net) falls short of the police obligation to protect their communities. The police must recruit employees who have the ability to understand the Internet and navigate the Internet. Economically, it is better to recruit officers with these skills versus training them after they are hired.

It is difficult to determine what the future may hold for candidates preparing to enter a career in law enforcement. One thing for certain, though, is they will have to have expertise in technology. A variety of people were brought together to determine events and trends that may positively or negatively impact this research.

---

<sup>3</sup> INTERNET CRIMES AGAINST CHILDREN, U.S. Department of Justice, Office of Victims for Crimes, NCJ 184931, Updated December 28, 2004

### An Expert Panel Provides Their Views

A Nominal Group Technique<sup>4</sup> panel was used to assess trends and possible events that would impact the technological needs for departments. Panelists with a variety of experiences related to the study were recruited to provide their opinions and expertise. Members included an officer recently hired with Bachelor's degree, but of limited life experience; a veteran officer with limited technological talent; a police forensic computer investigator, and a veteran police chief represented the law enforcement side of the panel. Rounding out the group was a crime analyst, a human resource specialist and an information services manager.

Several events and trends were discussed by the NGT panel. The most prominent of these were:

- Many specialized investigative tasks would be regionalized. A variety of tasks and assignments are regionalized already, such as tasks forces for narcotics, drug trafficking, stolen vehicle crimes and cargo thefts. Most departments do not have the resources to support these services. Having several departments supply personnel and work together provides the necessary justification for these teams.
- Due to the high cost of officers, departments will actively seek to mitigate the need for cops, possibly by 'civilianizing' some tasks historically assigned to police officers. Discussion of this trend expanded the scope of the project to

---

<sup>4</sup> The Nominal Group Technique (NGT) is a method of brainstorming in a group. It allows for an organized interaction between panel members in a systematic fashion

include the need to enhance technological skills for sworn officers and non-sworn employees alike

- Terrorist organizations would expand their use of the Internet to fund their illicit activities. The access to funds electronically was dramatically impacted by the events of 9-11. According to a New York Times article, “The administration has made cutting off money to terrorists one of the main prongs in its attack against Al Qaeda and other terrorists groups. It has seized tens of millions of dollars in American accounts and assets linked to terrorist groups, and prodded other countries to do the same. They have also developed a program to gain access to and track potentially hundreds of millions of international bank transfers into the United States.<sup>5</sup>
- A cognizance of the electronic community would emerge. Even today, there could be an Internet crime involving a victim in California, a suspect in China and bank in the Bahamas. Having a police department in California investigate the crime is problematic, and increasing episodes of Internet fraud would place a higher demand for officers with a technological understanding.
- Most schools offer some form of computer education, so the potential candidate pool should include persons who already have at least a portion of the skill set necessary to succeed in policing. This level of expertise, however, needs to be

---

<sup>5</sup> TURF WARS HINDER U.S. ATTACK ON TERROR CASE, AGENCY SAYS, Eric Lichtblau, New York Times, November 29, 2005

evaluated in the recruitment phase to determine the expertise level of the candidate's strengths and weaknesses.

- The federal government will, most likely, become more involved in the investigation of computer related crimes. They are already involved in large scale investigations but may expand their scope of work to include crimes traditionally handled at the local level.
- Voice recognition software might emerge as a norm in the patrol car of the future. One of the more difficult tasks confronting the patrol officer is the ability to operate a computer and drive a police car at the same time. Voice recognition software reduces the distractions confronting the patrol officer, and could decrease the need for a technological expertise because officers would simply dictate commands as opposed to inputting commands manually.

The panel was split on the importance of voice recognition software. The panel from the police side of the fence thought this would be significant. A recruit would not need computer skills because by simply speaking, he could operate the computer. (While it is true they would still have to turn it on and off, the majority of interaction is in data entry and data retrieval.) Conversely, the rest of the panel (the more technologically advanced side) thought the impact would be minimal. Voice recognition software would solve only the inputting of data, it would not replace all computer skills necessary. Whereas some of the trends and events are illusory, voice recognition software availability will increase.

The panel was in agreement on this, but differed on the impact of the availability of the software.

*The Marriage of Technology and Policework-*

The panel concluded that technology and police-work are forever intertwined.

Specifically, technology cannot be removed from the smooth operation of an efficient police department. To be effective, police department across the nation must embrace evolving technology and integrate it into their day-to-day operations.

In the last ten years alone, the tasks facing law enforcement has changed significantly. In addition to the changing technological demands, public criticism caused changes in law enforcement. Many departments are required to keep additional data. Recently, the Los Angeles Police Department had additional mandates implemented as a result of a federal civil-rights investigation:

Bowing to the inevitable, Los Angeles city officials have agreed to accept a federal court agreement that would require a series of long-sought changes in police management and training. . . The agreement . . . would require the department to collect data on the race of people stopped by officers in an effort to determine the extent of racial profiling, install a computerized tracking system to track complaints and disciplinary actions against officers. . . .”<sup>6</sup>

Doing nothing – relenting to the status quo, will provide for a highly ineffective police department. Criminal investigations will be incomplete. Officers will not be able to use

---

<sup>6</sup> LOS ANGELES AGREES TO CHANGES FOR POLICE, Todd S. Purdum, New York Times, September 21, 2000.

the tools they are assigned. Departments will waste money on training trying to teach simple computer skills.

### Options for Policing

There are two options open to law enforcement. Police can continue down the same path and hire employees in the same manner. In this case, the future will be challenging. The alternative is to recruit officers with a good technological background. Recruiting officers with a technological background is better than trying to train officers to have a technical expertise the job. Departments, however, must provide recurrent training to established employees who are technologically challenged.

There are several goals to be addressed by any recruitment program designed to improve the technological experience of officers:

- Increase staff's awareness as to the ever-increasing need to officers with technological skills.
- Develop a process for evaluating the technical skills of prospective candidates.
- Develop a program which encourages officers to enroll in computer science courses.
- Develop on-the-job training for employees who lack the technological skills necessary for their assignment.
- Implement a policy requiring police cadets to take computer science courses in college.

Developing a program and process to enhance the technological skills for all prospective candidates and employees will provide for an efficient and economical operation. The need for police employees to have a grasp and comfort in operating advance technical equipment is essential. If employees have this skill at the time they are hired, or soon thereafter, the operation of any department would run well. Without this type of expertise, much time will be spent providing the expertise necessary.

A successful program to attract a more qualified candidate is threatened by traditional thinking and a refusal to be innovative. It is inevitable that police employees must possess a better understanding of technology. Current methods of hiring, training, and recruitment fails to evaluate or attract employees with this skill set. Current methods of hiring, training, and recruitment must change, because the demands of police officers today are vastly different from those entering the profession twenty years ago.

### The Change Process

Mention 'change' in any organization, and many will tremble with fear. Most people are uncomfortable with change. It forces members of that organization to think differently and venture into uncharted territory. People fear change because it takes them out of their comfort zone. However, as noted by John Kotter, change is inevitable:

No organization today, large or small or global, is immune to change. To cope with new technological, competitive, and demographic forces, leaders in every sector have sought to fundamentally alter the way their

organizations do business. These change efforts have paraded under many banners: total quality management, reengineering, restructuring mergers and acquisitions.<sup>7</sup>

The change essential for law enforcement to make is to increase the expertise officers have in the operation of technological equipment. The personal computer is the most significant of these tools that need to be mastered by officers. Some of the skills can be taught. To save time and money, however, it is better if the police candidate has the essential skills at the time they are hired – at the very least, to have the fundamental ability to use a keyboard and operate comfortably in the computer environment. Something as simple as a typing test for entry level officers would be sufficient. Establishing a minimum typing speed would ensure officers have some technological experience. This change will not be warmly embraced by most departments for several reasons:

- It is a departure from the normal manner of recruitment and hiring.
- There is an increased cost to departments.
- The increased testing and evaluation of recruits will reduce the number of qualified candidates.
- Most departments will be challenged to find the time available for the added evaluation and testing.

#### *Developmental Change-*

---

<sup>7</sup> WINNING AT CHANGE, John P. Kotter, Leader to Leader, No.: 10 Fall 1998.

Developmental change, for the most part, is the improvement of a practice or a manner in which things are done in the organization. It could be a condition, method, or skill.

Rather than focusing on a comprehensive and fundamental change, developmental change fixes what is broke.

*Transitional Change-*

Transitional change occurs when the organization embarks on a new method of going from an existing state to a new state. The transition from the old to the new is accomplished over a predetermined period of time.

*Transformational Change-*

Transformational change is a complete departure of past methods. The big difference between transitional change and transformational change is the results of the latter are not known until the end is near.

The difference amongst all three methods of change is most evident in the change itself. In all three types, the beginning and end result are known. The three different types of changes are evident in the method of getting from the start to finish. For this project, transitional change is the most appropriate. It is not a complete overhaul of recruitment that is needed. It is a way to look for, test, and evaluate prospective candidates for their technological proficiency. It can be established over a set period of time. Unlike transformational change, the end result is known at the outset of the change.

POLICE WORK:  
FROM HANDCUFFS AND BATONS  
TO  
HARD-DRIVES AND KEYBOARDS

An evaluation procedure is essential to measure the program's success. An objective test needs to be prepared that tests technological skills. It should contain a keyboarding test. Multiple choice questions for working in the Microsoft Windows environment should be developed. A practical test for the operation of a computer should be developed. Once the objective test is developed, all sworn employees should take the test. A baseline could then be established for current recruitment and training. After two years, all employees hired under the new recruitment standards should be tested on the same objective test given two years earlier. A significant improvement should be noted.

If a candidate or a veteran officer has difficulty with a particular competence, specialized training should be provided for that portion. Remedial training is important, especially for veteran officers. Veteran officers have a lot to offer to the agency. When they are challenged by technology, they are to some extent – ineffective. Providing remedial allows the experienced officers to be more effective at their job.

Testing is essential to evaluate new candidates and existing employees. When testing new candidates, training should be provided when the candidate is near the level of competency necessary to be efficient and effective in the field of law enforcement.

However, it is more economical to decline to hire candidates who are severely challenged in the area of technology.

## Conclusion

Law enforcement is facing its most significant change of the modern era. There is a fundamental change in how police officers do business. Police officers solve crimes by interviewing witnesses, following leads, and pressing informants. Police officers today use DNA, alternate light sources, and “Google” searches to identify and apprehend suspects.

Police officers are equipped with a gun, baton, and occasionally a radio. Additionally, today’s officers use mobile data computers to communicate with the station. Lo-Jack<sup>8</sup> is used to find stolen vehicles. Global Positioning Systems (GPS) is used to track people through their cellular phones. Officers are required to investigate crimes that occur entirely in the intangible world of the Internet. Wire fraud, identity theft, and internet pornography are becoming the crime of choice. According to the Federal Bureau of Investigation (FBI), there was a 66.6 percent rise in Internet related crime from 2003 to 2004.<sup>9</sup> The impact of technology on the work of the police is both persistent and growing. Ignoring this truth will hamper our effectiveness investigating a variety of crimes, and may cause our communities to lose faith in their protectors unless and until they acquire the proficiency necessary to combat cyber-crime on equal footing.<sup>10</sup>

---

<sup>8</sup> LoJack is a company that installs a small transceiver in vehicles so that if it is stolen, a radio is activated that notifies police as to the location and travel of the vehicle for recovery.

<sup>9</sup> IC3 2004 INTERNET FRAUD – CRIME REPORT, National White Collar Crime Center and the Federal Bureau of Investigation, 2005

<sup>10</sup> Ibid

POLICE WORK:  
FROM HANDCUFFS AND BATONS  
TO  
HARD-DRIVES AND KEYBOARDS

As the technology revolution replaces the industrial revolution, it is imperative for law enforcement to accept and adapt to this-change. The change must occur in the way candidates are recruited, hired, evaluated, and trained. This change will cost more money during a time of dwindling government budgets. This change may reduce the number of viable candidates at a time when there is an increasing need for officers.

The issue is quite clear – technology is forever tangled in the efficient operation of America’s police departments. Police administrators have two choices; they can get on board and supervise departments that make the best use of the available tools. Or, they can suffer the consequences. Doing nothing means departments will be inefficient in their fundamental tasks – investigating crimes and putting criminals in jail.

While this research provides for no ‘quick-fix,’ it provides a method of evaluating and recruiting officers who possess the necessary technological experience. Methods for training existing employees are also provided. Departments who fail to accept this change will simply not be able to manage or solve the increasing technological crimes of today. Therefore, our future goals are clear. We must be swift and proactive now in changing the standards for recruiting and training to achieve higher technological skills to protect our communities and ourselves.