FBI Law Enforcement Bulletin

Features

Departments

Selecting a Duty-Issue Handgun

By CHAD A. KAESTLE and JON H. BUEHLER

Handgun developments, administration changes, evolution of equipment needs, and input from weapons staff members represent reasons why law enforcement agencies sometimes issue new firearm models to their officers. When making this decision, departments must consider all of the choices available to them to find a particular weapon that best fits the needs of the organization and its personnel. Agencies seeking to procure a new duty handgun for their officers will find a number of suitable models on the market.[1] Various features and options present advantages and disadvantages for law enforcement. Additionally, some agencies may decide that one particular handgun alone cannot meet their needs. Instead, they may consider a system of similar models from a particular manufacturer.

Decisions concerning firearms hold importance for any law enforcement agency. When departments make choices based on a consideration of their needs and the physical requirements and expertise of their officers, they will select the best weapons for their personnel.

SELECTING FEATURES

When considering handgun models, departments must decide which features will prove most useful. Options exist pertaining to action, caliber, materials and finish, size and

associated magazine capacity, safeties, sights and light mounts, and ease of care and maintenance.

Action

Each handgun represents one of three categories—single action, double action, or double action only. Single-action firearms feature a hammer that requires manual cocking for the initial firing and a trigger press that demands only a few pounds of pressure. After the first shot, the unassisted cycling of the slide, through recoil, automatically recocks the weapon. Because the shooter only fires with the hammer cocked, the gun always functions in single-action mode. The light trigger press may contribute to an unintentional discharge, requiring the user to operate a manual safety when carrying the weapon with the hammer cocked. For this reason, agencies generally issue these firearms to specially trained officers, such as emergency response, special weapons and tactics (SWAT), or hostage rescue team members.

With double-action handguns, pressing the trigger during the initial shot both cocks and fires the weapon in one motion. Because the gun automatically recocks the hammer before each subsequent trigger press, shots fired thereafter are single action. Handguns that fire in double-action mode have remained popular with law enforcement agencies for many years because officers can transport them with the hammer down, yet ready for action. Many departments consider the often heavy and long trigger press safe for carry due to the added effort needed to fire the first shot.

Double-action-only handguns function in double-action mode for every shot, rather than just the initial one. As a result, the trigger press always remains the same. These firearms increasingly have become popular with law enforcement agencies. As departments switched from revolvers over the years, double-action-only handguns allowed for a largely seamless transition to semiautomatics because the double-action-only trigger system functions much like a traditional double-action revolver. As these weapons only require mastery of one trigger press, rather than two, officers can learn to use them more easily than other types. Additionally, the fact that few, if any, external safety or decocking levers exist makes them even easier to master.

The weight of the trigger press on double-action-only handguns varies by model. Some manufacturers offer different trigger options, allowing for either a heavier or lighter press to suit the requirements of a particular agency. Although some departments may favor a heavier trigger press for liability reasons, this may increase the time it takes for a shooter to fire the weapon, leading to decreased accuracy if

Special Agent Kaestle serves as an instructor in the Firearms Training Unit at the FBI Academy.
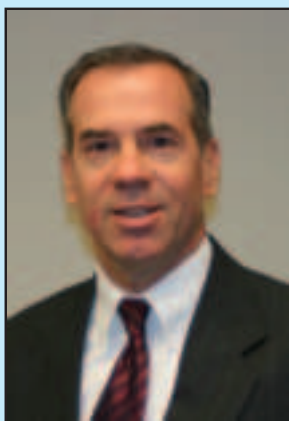
Detective Buehler is a firearms instructor with the Modesto, California, Police Department.

the officer rushes the shot under stress.

Regardless of the trigger system selected, departments must ensure that officers receive training to keep their fingers off of the trigger until ready to fire the weapon. Appropriate, frequent, and documented instruction minimizes the risk of and associated liability from unintentional discharges.

Caliber

The four main handgun calibers used by federal, state, and local law enforcement agencies today include 9 millimeter[2] and .40, .357, and .45 automatic. Although each differs in terms of cartridge size and ballistic capability, all can meet the needs of departments—if firearms training emphasizes shot placement rather than the size or power level of one caliber versus another.

Handguns in 9 millimeter initially became popular with departments because of the high magazine capacities that many of the weapons offer—generally anywhere from 12 to 17 rounds—which allow officers to carry more ammunition than they could while using 6-shot revolvers. Also, of all the aforementioned calibers, the 9-millimeter cartridge generally has the mildest perceived recoil.

For many years, American shooters have admired the .45

automatic as a powerful cartridge with applications in military service, law enforcement, self-defense, and competition. A major debate exists among officers, and the shooting community in general, about which cartridge holds superiority—the 9 millimeter, due to less perceived recoil and

"

...departments must decide which features will prove most useful.

"

higher-capacity firearms chambered for the round, or the .45 automatic, with a larger, more powerful round but with heavier recoil. In the past, the .45 automatic generally was chambered in larger-frame handguns with lower cartridge capacities, though some models now offer a smaller-size frame or use a relatively high-capacity magazine.

The .40-automatic cartridge provides ballistic performance closer to the .45 automatic, while being chambered in handguns with 9-millimeter-size frames and offering magazine capacities higher than many .45-automatic handguns.

This cartridge also has greater perceived recoil than the 9 millimeter but still remains manageable for many shooters. The .40 automatic has become a popular cartridge for law enforcement by offering some of the benefits of both the 9 millimeter and the .45 automatic.

Finally, the .357 automatic offers a cartridge with ballistic performance close to the .357 magnum for use in handguns with a larger magazine capacity. Basically, the .357 automatic represents a .40-automatic case redesigned in a bottleneck shape for fitting with a bullet similar in diameter to a 9 millimeter. Because this cartridge features a rim with the same diameter as that of the .40 automatic, users can chamber it in many .40-automatic handguns by simply changing the barrel.

Materials and Finish

A variety of materials comprise today's handguns. Some models feature a form of steel—either carbon or stainless—for both the frame and slide, while others have steel for the slide and either aluminum or polymer for the frame. Depending on the environment and carry method, duty firearms often become exposed to harsh conditions, such as water from rain, snow, perspiration, and other sources; dirt and sand; or numerous other hazards that can deteriorate handguns

and affect proper function. For daily carry by either uniformed or plain-clothed officers, the materials and finish for weapons should be durable and easy to clean.

Stainless steel can offer more rust resistance than carbon steel (depending on the finish applied). Although stainless steel handguns often have a brighter, more reflective appearance than those with dark finishes, some models have a matte finish to reduce glare. Others even have a blackened stainless finish, offering the rust-resistant properties of stainless steel with the tactical superiority of a black, nonreflective finish. Generally, users find stainless steel handguns simpler to clean and maintain.

Blue finishes generally prove the least durable and rust resistant, although the dark color offers tactical advantages for law enforcement use. Proprietary durable black finishes form a protective coat over the metal, including hard and rust-resistant varieties, while also remaining nonreflective and relatively simple to maintain.

Handguns framed in steel tend to weigh more, which can impact ease of carry on a daily basis. Aluminum frames offer one solution. As another popular remedy, manufacturers offer handguns with frames made from polymer with imbedded parts, such as slide rails or other frame components, made out of metal. Handguns with polymer frames offer durability and ease of maintenance and often absorb some recoil from firing.

Size and Magazine Capacity

Law enforcement agencies can choose between full-size, compact, and subcompact handguns. Each has its own uses. The largeness of the weapon correlates with the magazine capacity. Some models feature single-stack magazines, which

> **Every department realizes the importance held by decisions concerning firearms.**

generally allow for a slimmer grip. Others have double-stack magazines that have a higher cartridge capacity but generally feature a thicker grip width as a result.

Full-size handguns, in either high- or standard-capacity models, can be useful for carry by uniformed and plain-clothed personnel with medium to large body sizes. Compact models tend to make better concealed-carry weapons because of their generally smaller size and light weight. Further, they may prove appropriate for general issue if a department desires only one firearm because officers more readily can carry compact weapons for off- and on-duty use. While normally not the best choice for general issue, subcompact handguns serve well for special applications (e.g., use by undercover officers) or as backup and off-duty weapons. Many of these models are the easiest to conceal in a variety of deep-cover holsters (e.g., ankle and ballistic vest). Often, quality compact and subcompact handguns on the market come with either single- or higher-capacity double-stack magazines, which give departments more latitude if they find grip width, as well as overall weapon size, an issue.

Safety Options

As much as possible, departments must seek to minimize unintentional discharges by their officers. Coupled with effective and repeated preventative training, handgun safety devices effectively help accomplish this goal. Manual hammer block, trigger safety, and decocking levers; internal firing pin, drop, and magazine disconnect safeties; and integral locking devices represent available options.

Manual safety devices, operated by the shooter, generally block the hammer from

contacting the firing pin, disable the trigger mechanism, or perform both of these duties. Departments should ensure that officers easily can access the safety levers. Generally, single-action handguns come with manual devices that disable the trigger mechanism so that users can carry the weapon with the hammer cocked and ready to fire but locked so that it cannot be activated until the release of the safety—also known as "cocked and locked." Model 1911 .45-automatic handgun variations also have a grip safety that makes the weapon inoperable until the officer holds and manually presses the lever. Double-action handguns tend to have either manual safety levers; decocking levers, which, when activated, safely lower the hammer of a cocked handgun, eliminating the potentially dangerous practice of manually lowering it by pressing the trigger; or a lever that combines both functions. Double-action-only handguns often have few, if any, manual safety devices because they only are cocked during firing. This benefit may appeal to some departments because no external levers exist that can snag on the clothing of officers who carry the handgun concealed.

Internal devices, such as firing pin and drop safeties, also represent useful features to look for in duty firearms; many

handguns have them, regardless of the action type. Firing pin and drop safeties do not allow the firing pin to move forward until the user deliberately presses the trigger, thus preventing an unintentional discharge if the carrier drops the weapon.

© Regina Kosicki

Some handguns feature magazine disconnect safeties, which disable the action of the weapon with the magazine removed; opposing beliefs exist as to their usefulness in law enforcement. Many people consider it best to have the ability to fire the weapon with the magazine removed and a round in the chamber, particularly if an officer must exchange a partially loaded magazine for a fully loaded one during a lull in a gunfight, while still maintaining an operational firearm. Others support their belief in the use of magazine safeties with incidents where deactivating a handgun by dropping the

magazine during a struggle for the weapon with a suspect may have saved the officer's life.[3]

A recent development with some handgun models is the addition of an integral locking device, which uses a type of key to actively lock the action of the handgun and render it inoperable. This proves especially useful if unauthorized users, such as young children, gain access to the weapon. This option is an alternative to aftermarket trigger or cable locks, also designed to lock a weapon's action to prevent unauthorized use. Departments should consider selecting some type of locking mechanism—an integral part of the weapon or an external device—for issue to their personnel to help officers maintain control over their handgun at all times.

Sights and Light Mounts

Handgun sights vary by model. Some weapons have a rear sight featuring a white outline and a front sight that is either plain black or marked with a white dot. Other handguns have three white dots (two on each rear post and one on the front). Many manufacturers and some aftermarket companies offer glow-in-the-dark night sights to aid in low-light shooting. Generally similar to three-dot systems, these consist of sealed, small glass capsules, containing the radioactive

isotope tritium as the source for the glow, fixed into each of the three posts.[4] Usually, the capsules have white rubber seals around them; this allows for daytime use as a standard three-dot sight. Because a large number of law enforcement shootings occur in low-light conditions, night sights have become popular. They are particularly useful to officers at dusk when enough light exists for them to see the threat yet not enough for them to properly aim.[5]

Many handgun models also feature accessory rails on the frame, which allow mounting of factory or aftermarket flashlight, laser, or combination attachments. These components can be switched on intermittently or for a period of time and allow officers to maintain both hands on the weapon, rather than, for example, having to hold a separate flashlight with the support hand.

Care and Maintenance

Departments should select a general issue handgun that all personnel, regardless of background, can care for properly. Because the weapon serves as a tool for officers to employ to save their own lives or others, it must receive appropriate maintenance to function correctly. With this in mind, agencies should seek a firearm that personnel of all skill and interest levels will find easy to field strip, clean, and maintain. Departments should consider handguns that contain the least number of component parts as possible for personnel to disassemble and clean and that require minimal lubrication for proper functioning. Also, the less parts a handgun has, the fewer components there will be for department armorers to keep on hand and replace in the event of wear.

> *…law enforcement agencies face decisions…such as which model to use and whether to issue a single handgun or a weapon system.*

Some handgun models require the user to press the trigger to disassemble the weapon, while others require that the slide be locked to the rear before a lever can be activated and the handgun disassembled. This represents an important consideration due to the danger of unintentional discharge if an officer has not properly checked the weapon's condition before pressing the trigger. Recurring training and reinforcement of proper gun handling techniques, especially checking for an empty weapon and pointing the muzzle in a safe direction before pressing the trigger, will mitigate this problem. Therefore, departments should not remove a certain handgun model from consideration because of this issue.

CHOOSING A SINGLE MODEL OR WEAPON SYSTEM

Just as one size of footwear will not fit the feet of every employee, the same firearm may not suit the variety of hand sizes within an agency. Several years ago, a particular police department decided to change a relatively open handgun policy and issue all officers a large-frame, double-column-magazine 9-millimeter handgun. The agency's union representatives sought input from the firearms training staff because it became obvious that this firearm, due to its larger size, would not be appropriate for members of that department with smaller hands.

Administrators without knowledge of firearms may not have recognized the problems shooters would experience while operating a handgun too large for them. Range staff in most agencies can recall incidents where officers operating a weapon that did not properly fit their hands had difficulty

manipulating a pistol's controls, problems shooting a handgun accurately, or a lack of confidence in their ability.

Wisely, the administration viewed the detailed information about these potential problems and allowed input from firearms personnel. Then, they selected a weapon system that offered a basic design from a particular manufacturer with a variety of grip and magazine sizes and calibers, allowing options for the officers in the department.

This example illustrates how agencies can attempt to reasonably accommodate the differences among its personnel. For other departments, these issues may not be as prevalent and a single handgun model may be appropriate. In making this decision, agencies must consider the advantages and disadvantages of both options.

Single Model

If a department has a smaller number of officers—and all are reasonably compatible with a certain firearm for duty issue—it may find the selection of one specific model advantageous. For example, the agency would only have to train officers on one handgun, thus making the process easier. Also, departments that maintain, repair, and keep an inventory of parts for a particular model instead of several, perhaps incompatible ones, benefit from lower costs.

But, problems may occur if the agency hires a new officer who cannot demonstrate a suitable level of proficiency with the chosen handgun for physical reasons (e.g., small hand size). The selection of one firearm might not allow for a reasonable accommodation for such personnel. Also, the weapon may prove inappropriate for carry by employees in specialized assignments, such as detectives or undercover officers.
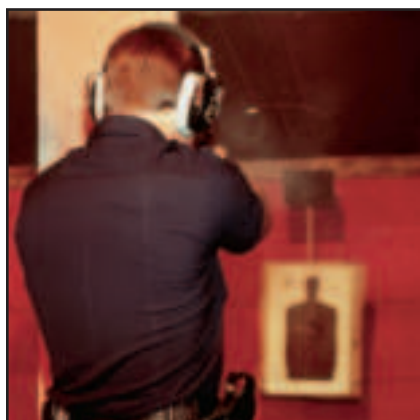
© George Godoy

Handgun System

Issuing handguns from a system of firearms made by a manufacturer allows a department flexibility in meeting weapons training requirements and the needs of physically different personnel. For example, a heavy full-size, high-capacity handgun with a wider grip may not serve a smaller officer well; such an individual may have difficulty properly operating the weapon due to

the inability either to maintain a proper grip or to reach and activate the control or safety levers. Likewise, a compact handgun may present difficulty for larger personnel. Other issues that departments must consider in regard to officer use include recoil from larger-caliber cartridges and the need for weapon concealment when necessary. Many manufacturers offer the same type of handgun in full-size, compact, and subcompact models with variations chambered in the popular law enforcement cartridges. Therefore, when officers have difficulty, for instance, managing the recoil of a .40 or .357 automatic, a department could issue them a 9 millimeter in a similar or same-size handgun that they may feel more comfortable with; hopefully, better marksmanship skills would result.

Weapons staff members frequently teach new officers who have no prior firearms experience. Instructors help students feel confident enough to use a firearm effectively and to conquer the timid feelings that may result from a lack of experience with recoil, muzzle blast, and gunshot noise. If officers do not overcome such concerns, they may not develop the interest, enthusiasm, and commitment toward continuous development of marksmanship abilities after their initial

training and throughout their law enforcement careers. These skills will help them maintain a confidence level that will benefit them in a deadly force encounter. To this end, departments must recognize that a weapon's caliber and size represent potential obstacles that may keep personnel from continuing to practice on their own.

The cost of a firearm system poses a disadvantage—a department has to purchase parts for more than one model and ensure its armorers can repair and maintain them as well. But, agencies could inquire about weapon systems from manufacturers that offer different models with interchangeable component parts. As another drawback, the agency would have to buy inventories of different caliber ammunition, furthering the financial burden. Also, training may become more difficult because of the differences between the weapons; therefore, departments may wish to consider choosing a system of handguns that have the same general operating levers and functions, despite the different sizes and calibers.

CONCLUSION

From time-to-time, law enforcement agencies face decisions concerning firearms, such as which model to use and whether to issue a single handgun or a weapon system. When going through this process, departments should strongly consider input from their firearms staff, a readily available and economical source of current information. Weapons instructors not only have on-the-job knowledge but frequently use handguns as a hobby in their off-duty time and read publications about the latest updates in firearms technology.

Every department realizes the importance held by decisions concerning firearms. When an agency bases its choice on the needs of the organization, as well as its personnel, officers will carry weapons that help them do their jobs effectively and, also, to protect themselves. ✦

Endnotes
[1] Semiautomatic handguns enjoy the most popularity in law enforcement today because they hold more ammunition and easily are reloaded. Therefore, the author exclusively focuses on them and uses the term "handgun" to refer only to semiautomatics.
[2] Also known as 9-millimeter luger or 9-millimeter parabellum.
[3] Chuck Karwan, *The Gun Digest Book of Combat Handgunnery*, 3d ed. (Northbrook, IL: DBI Books, Inc., 1992), 95.
[4] Ibid., 183.
[5] Gabriel Suarez, *The Tactical Advantage: A Definitive Study of Personal Small-Arms Tactics* (Boulder, CO: Paladin Press, 1998), 97.

Wanted: Book Reviews

The *Bulletin* invites criminal justice professionals to submit reviews of recently published nonfiction books they have read on topics relative to their field of expertise for possible inclusion in its Book Review department. The magazine publishes only positive reviews of between 350 and 500 words or 1 ½ to 2 pages double-spaced. As with article submissions, the *Bulletin* staff will edit book reviews for style, length, clarity, and format.

Book reviewers should include two or three compelling points that the author makes, along with the complete title of the work; the names of the authors or editors; and the publishing company, city and state, and publication date. As a guide, the staff suggests that reviewers examine book reviews in past issues of the *Bulletin* to acquaint themselves with the magazine's requirements. Reviewers should submit their book reviews typed and double-spaced on 8 ½- by 11-inch white paper with all pages numbered. Reviewers should include an electronic version of the review saved on computer disk. Send book reviews to:

Editor
FBI Law Enforcement Bulletin
FBI Academy
Madison Building, Room 201
Quantico, VA 22135
telephone: 703-632-1952
e-mail: leb@fbiacademy.edu
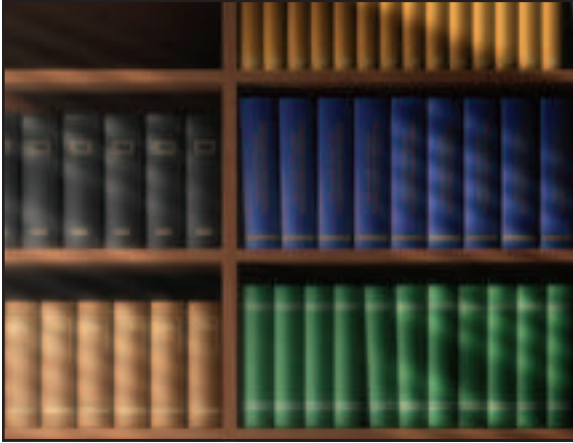
Problem-Oriented Policing: From Innovation to Mainstream *by Johannes Knutsson, editor, Criminal Justice Press, Willan Publishing, Devon, United Kingdom, 2003.*

Problem-oriented policing (POP), in some locales, has succeeded and supplemented existing crime prevention and community policing as main areas of law enforcement emphasis. POP is a police management philosophy that entails SARA: *scanning* to identify, specify, and describe specific problems to include *analysis* in which the causes of the identified problems are explored fully and *response* that refers to the search for "tailor made" solutions to remove the specific or general causes of the problems through implementation of concepts supported by *assessment* concerning the process where the solutions implemented are evaluated in terms of effectiveness and strategies. Many consider POP as a more analytical approach to conducting law enforcement business with a strategy to get away from a reactive, incident-driven mode to that of a preventive way of doing law enforcement business in general.

Problem-Oriented Policing: From Innovation to Mainstream contains original research and papers compiled, written, and contributed by leading scholars on police activities from around the world and focuses on implementing the problem-oriented policing concept into the mainstream of law enforcement. These various noted authors present information ranging from the pro and con of the concept and its successes and failures to how an agency gets the concept funded and implemented.

As examples, the book highlights the efforts of the San Diego, California, Police Department concerning its implementation of the concept, as well as the outstanding results by the Charlotte, North Carolina, Police Department in its concept application against the crime of thefts from cars in center-city parking facilities. The book also provides an "A to Z" approach on the concept in the United Kingdom as to its application to repeat victimization and dealing with and closing drug markets. The research papers in the book present an abstract section and contact information for the authors, along with cited references. Some chapters have a proposal to their findings or a conclusion to the research with final end-of-paper notes to the reader. Overall, the book has four major strengths: 1) a matrix example of a question-based, problem-solving protocol for beat-level, problem-solving officers; 2) a POP flow schematic on the sequence of analysis and its techniques based on actual situational scenarios in communities; 3) a study of the British crime reduction program that fostered problem-oriented policing and how it received funding to implement the concept through competitive bidding; and 4) a listing of organizational impacting factors in terms of

police staff turnovers, middle management emphasis, and prioritization of police resources as obstacles to concept implementation, as well as front-line factors, such as officer critical thinking in decision making, imagination in responses, partner agency support, and phobias and syndromes.

The book directly applies to preventive police patrols, criminal investigations, emergency responses, ancillary public services, prosecutors, and defense bar and judiciary representatives. Mayors, city managers, other elected and appointed officials, and academics, as well as police research organizations, government funding agencies, the media, private industry, and local community groups would benefit from reading *Problem-Oriented Policing: From Innovation to Mainstream*.

Reviewed by
Larry R. Moore
Lifetime Certified Emergency Manager
International Association of
Emergency Managers
Knoxville, Tennessee

Unusual Weapon

Gun Knife

A small revolver is concealed in the handle of this knife. The revolver fires six .22-long rifle caliber cartridges. The blade is removable and the handle may be carried alone as a firearm.

Homicide Investigative Strategies

By John B. Edwards

© Charles Sikes

Experienced law enforcement officers know that the most important objectives in all homicide investigations are the ability to identify, collect, analyze, and process information quickly and effectively and, then, act just as efficiently on that data to achieve maximum results. The effectiveness of the investigation often depends on the investigative team's ability to quickly process and complete prioritized leads to swiftly provide answers to the case agent. Uncovering information that establishes clues and generates leads that tailor the focus and scope of the investigative effort are critical issues. Further, investigative teams must be able to locate and interview people quickly to lock individuals into statements to provide the maximum indicia of credibility and reliability; locate and preserve valuable evidence; and obtain and document the most accurate observations and accounts, putting together specific timelines. Investigators should use "the

fact-finding capsule," a fundamental method illustrated by several investigative tactics completed under three important rules.

1) Haste: quickly accomplish all tasks to seize the initiative and promptly develop facts.

2) Specificity: precisely explore all issues to obtain facts detailed enough to make objective judgments and correlations.

3) Element of surprise: prevent interviewees from getting their stories together and deter the interjection of attorneys into an efficient interview process.

The tactical steps of a homicide investigation should include a specific interview, a timeline documenting the witness' or suspect's physical location, what happened at those places over a time period necessary and germane to the case, and a well-documented statement. If the suspect articulates an alibi, investigators immediately should conduct follow-up verification interviews, observing, inspecting, and documenting the suspect's shoes, clothing, and physical appearance, as well as any premises and personal effects involved.

These basic investigatory steps remain critical to today's criminal investigations; however, the advent of technologies and modern communications creates a need to apply these old strategies in a new fashion. In today's world, almost every household has access to or possession of computers, and most individuals possess cell phones and pagers. Every technological asset, whether at home or work, has records, communications, tolls, or billings that may reveal valuable evidence regarding a person's lifestyle, friends, associates, enemies, or businesses. This information quickly can identify motives and other articulative facts essential to determining an individual's victimology or suspectology. Learning these details during traditional interviews proves essential to the investigative effort. The Fourth Amendment applies to many technologies and, therefore, investigators oftentimes need consent, court

rders, or search warrants to develop the information. Experienced officers know that they must address all issues in an ongoing investigation and that the first 48 hours prove critical, leading to the prompt investigative trilogy.

INVESTIGATIVE TRILOGY

The prompt investigative trilogy has three particular areas: 1) specific focus (immediate); 2) general coverage (immediate); and 3) informative (pending). Teams of investigators must address each area simultaneously during the investigation and direct information from all three areas to the central clearinghouse (e.g., the lead investigator, case agent, or detective in the case). At that time, teams should process information, form theories, and take steps regarding the focus, scope, and need for additional resources.
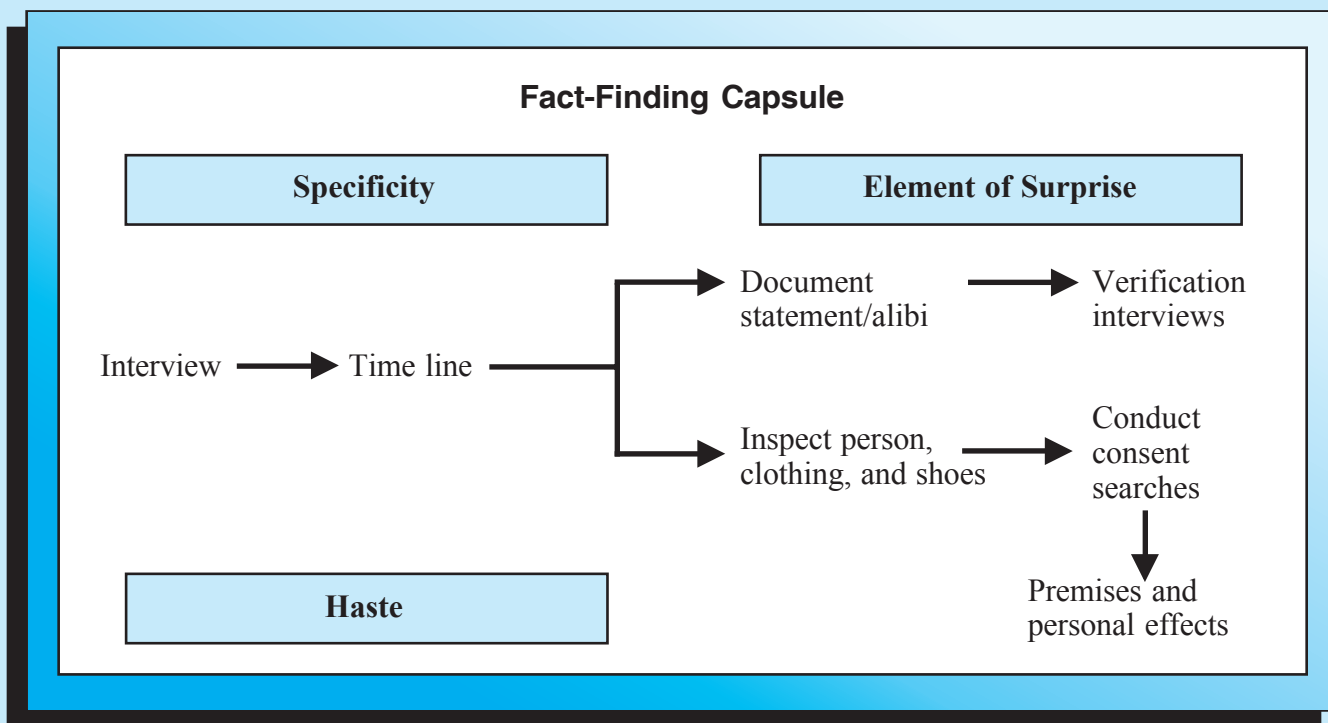
Specific Focus

Witnesses, evidence, events, and facts make up the specific focus. These categories apply to those issues immediately identified at the inception of the investigation. For instance, at a crime scene, certain witnesses may have been present at the time of the crime. Distinctive pieces of evidence may be in plain view, and events or facts may exist that investigators must address. These immediately apparent issues demand specific focus whether in crime-scene processing or interviews.

General Coverage

While teams of investigators address those specific focus issues, a second team should handle the general coverage issue, which comprises four areas. First, they should conduct neighborhood canvasses, which deal with people in close vicinity to others, and make observations or assessments regarding situational environmental issues in connection with proximity. Second, interviews of friends, families, and associates may determine victimology or suspectology information while such information is fresh and untainted by the direction of the investigation. Third, coworkers or employers may provide other information regarding victims and suspects. Finally,

Fact-Finding Capsule

Specificity		Element of Surprise

Interview → Time line →

→ Document statement/alibi → Verification interviews

→ Inspect person, clothing, and shoes → Conduct consent searches ↓ Premises and personal effects

Haste

Prompt Investigative Trilogy		
Immediate Specific Focus	**Immediate General Coverage**	**Pending Informative**
Specific witnesses	Neighborhood canvass	Cell phone records
Specific evidence	Friends, family, and associates (victimology)	Computer hard drives
Specific events	Coworkers	Other records
Specific facts	Victim/suspect time lines	Private papers

construction of definite victim/suspect timelines should outline the environment, proximity, locations, and times.

Informative

The third and most critical area, the informative, was created by modern technologies. Just as an inventory of a person's residence after a homicide provides many facts about that individual, so does the information from the numerous technologies available today. This area consists of records of cell phones and pagers, computer hard drives (e.g., palm pilots, laptops, notebooks, desktops, and servers), diaries, notes, and documents. Informative includes data that persons of interest in the investigation use that, in turn, tell about their lives, interactions with others, and geographic connections.

THREE-PHASE STRATEGY

All investigations have a three-phase strategy. First, investigators should ensure the availability of proper resources to conduct the investigation in the most efficient and competent manner to stabilize and organize the effort to gather all facts. Second, teams quickly should educate all investigators with as much information as possible. Third, investigators expeditiously should investigate the case, establishing focus early. More often than not, the focus of the investigation (the result of the information gathered and the interpretation of that data) will determine its success.

CONCLUSION

In today's world, investigators simultaneously must accomplish multiple tasks and quickly analyze information to seize the initiative and react timely and accurately to any given scenario. The fact-finding capsule, complimented by the prompt investigative trilogy, represents the necessary formula to factor into the equation regarding investigatory demands associated with homicide cases today. Following these protocols will ensure the most efficient use of time in connection with the gathering of facts and seizing of evidence. ✦

Special Agent Edwards heads the Statesboro office of the Georgia Bureau of Investigation.

Defending Against Cybercrime and Terrorism
A New Role for Universities

By TONY AEILTS

W ith the growth of technological access, systems, and resources, cyber-related crimes are on the rise in many communities. How will local law enforcement agencies address the growth of high-tech crime in the future? What impact will terrorism have on the nation's

technological infrastructure, and how do we protect against it?

The high-tech industry is vital to the nation's economy and its future. Industries, businesses, government agencies, and private households all benefit from a healthy and well-protected technological environment. And, everyone

wants reassurance that communications, financial operations, and technological infrastructure are closely guarded. The rising fear of cyber-related crime not only inhibits the use of developing technology but adversely affects national economic conditions. The FBI estimates that the average loss for a

technology-oriented crime is nearly $500,000, and, further, the added cost to the consumer is $100 to $150 per computer sale.[1] Other estimates indicate that losses related to high-tech crimes in the United States are $10 billion to $15 billion per year.[2] Further, 10 million Americans were victimized by identity theft in one year, with estimated losses exceeding $50 billion,[3] and the Federal Trade Commission reported that of the 516,740 complaints received in 2003, over 41 percent regarded identity theft.[4]

Beyond the implications of cybercriminal activity, a new technological threat exists pertaining to terrorism. Since September 11, 2001, the nation has focused more on the issue of cyberterrorism because although terrorists typically have used traditional methods of physical attack (explosives, kidnappings, and hijackings), their attention may move, with increasing frequency, toward cyberterrorism. Various forms of technological infrastructure may be vulnerable to such attack; pipelines, power plants, transportation, and other hard assets rely on cybertechnology. Further, communication systems used for financial, military, police, and corporate purposes suffer from the same vulnerability. This not only includes threats against physical facilities and tangible equipment but remote cyberattacks that could disable national infrastructure as well.

DEFINING THE SCOPE OF THE PROBLEM

Headlines regarding the threat of high-tech crime have become commonplace. Cyberstalking of children, child pornography, identity theft, financial fraud, computer hacking, computer viruses, and theft of proprietary business information and intellectual property have become the prominent crime for those with even modest amounts of technological sophistication.[5] Statistics related to the prevalence of high-tech crime remain unclear. Many law enforcement agencies do not clearly identify occurrences of high-tech crime.

For example, a high-tech related theft of money or resources statistically is identified as a theft based upon historical definitions; the high-tech component of the crime may not be identified at all. To address this issue, the FBI and the National White Collar Crime Center implemented the Internet Fraud Complaint Center (IFCC) in 2000.[6] The IFCC tracks complaints it receives and coordinates with local law enforcement agencies regarding appropriate investigative jurisdiction; however, this process still does not provide consistent measurements of cybercrime.

From January 1, 2002, to December 31, 2002, the IFCC Web site received 75,063 complaints.[7] Additionally, the IFCC points out "that Internet usage passed the 200 million

> *This virtual crime world demands cooperation and sharing of resources among agencies....*

Chief Aeilts heads the California State University Police Department in San Luis Obispo.

mark...from just 65 million in 1998."[8] This dramatic threefold increase in Internet usage in just a few years could indicate the possibility of a corresponding increase in cybercrime. Some experts argue that many "...victims may have serious doubts about the capacity of the police to handle computer crime incidents in an efficient, timely, and confidential manner."[9] Businesses or other institutions may not report such crimes due to concerns of loss of prestige, customers, and financial status. Consequently, agencies may not adequately capture cyber-related crime statistics, and the gross impact of this type of crime, generally, may appear understated.

COORDINATING JURISDICTIONS AND SHARING RESOURCES

The difficulty of identifying the impact of cybercrime is not the only significant concern—jurisdictional issues also are problematic. When a high-tech crime occurs, it is not always clear which law enforcement jurisdiction is responsible for its investigation and prosecution. Cyberincidents can cross regional, state, and even international jurisdictional boundaries. Crime has expanded into a virtual geographic world and traditional jurisdictions and boundaries do not apply. This virtual crime world demands

cooperation and sharing of resources among agencies: "...although sharing information among the courts, the police, and other justice agencies at every level of government has been a goal of dedicated individuals and organizations for the past several years, the September 11 terrorist attacks have given the issue a renewed national scope.... The attacks, they say, highlighted the lack of information exchange and underscored the importance of improved coordination among agencies....[10]

> **Together, all stakeholders should explore the various dynamics of the high-tech crime problem.**

Most law enforcement agencies simply do not have the resources to adequately deal with the myriad of potential cybercrimes.[11] The ability to track criminals in multiple jurisdictions, as well as specialized knowledge of vast varieties of hardware, software, applications, foreign languages, and other related issues, requires regional, state, and national

multiagency cooperation. "The most promising approach so far is a task force in which high-tech specialists from city, county, state, and federal law enforcement agencies work together and accept assistance from industry."[12] However, one critical component is missing from that formula—the effort can and should bring high-tech resources from higher-education institutions to the forefront to assist law enforcement and national defense. "The White House's top computer security official...called on colleges and universities to help develop a national strategy for securing computer networks. 'I think this effort—this framework—is extremely important because it demonstrates that the issue of network security is a major concern of colleges and universities around the country,' said...[the] president of the American Council on Education in a statement. 'Policy makers and corporate leaders should know that the higher-education community is working together constructively to address this challenge.'"[13]

LINKING WITH HIGHER-EDUCATION INSTITUTIONS

Higher-education resources are abundant within the realm of technology, but law enforcement agencies fundamentally underuse them. Frequently,

these resources are in close proximity to many agencies but simply remain overlooked.

Specific Strategies

University High-Tech Faculty and Staff

Law enforcement administrators should identify university faculty and staff as a significant training resource, as well as one in support of high-tech criminal investigations. Faculty members routinely conduct high-tech research, including the development and implementation of cutting-edge innovations. Their positions enable them to recognize the implications of emerging technology issues and understand potential social impacts. Their research and development often address how individuals can abuse and compromise technology, as well as find ways to protect it. "University research is crucial to developing ways to protect computer networks, in part, because businesses can't afford to spend money on long-term, high-risk research."[14] Further, universities typically have well-developed information technology support services with cadres of highly trained staff who routinely install, repair, modify, and protect information systems. Part of their expertise comes from daily exposure to these systems on a functional level.

Few local law enforcement agencies have this well-developed resource.

Additionally, institutions of higher education have high-tech classroom facilities with numerous monitors, computers, interfaces, remote projection, automated lectures, and other related capabilities, providing substantial opportunity to train multiple students, provide quality high-tech instruction, and enhance student interaction. These training resources commonly are available during academic breaks throughout the year.
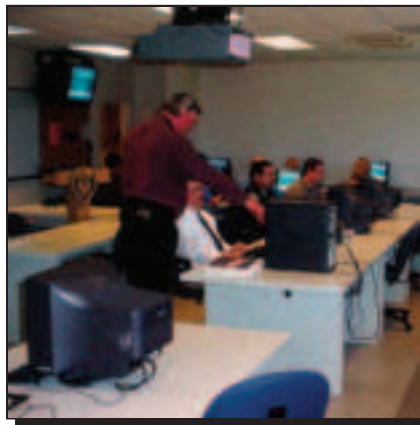
An Investigative and Multiagency Protocol

Many colleges and universities employ state-certified law enforcement agencies to protect assets of the institution. These educationally based departments can provide a critical conduit for allied law enforcement agencies and their access

to university high-tech resources and personnel and serve as a mechanism to ensure investigative integrity. University police departments can monitor such issues as search and seizures, due process, and investigative protocol and provide liaison with member agencies and the district attorney. This expertise proves helpful when identifying and using nonsworn university resources in support of cybercrime investigations, and it can smooth the way toward a successful investigation.

Using a multiagency, high-tech investigation protocol can reduce potential misunderstandings about resources (departments should use personnel and other resources based upon prior agreement), protect the integrity of the investigations, and provide a system of easy reference that allows member agencies to follow a consistent and predictable process. Agencies should consider a number of factors in their protocol, including the personnel-sharing process, technological equipment and programs purchases, and grant-funding distribution.

Financial Opportunities

Many high-tech task forces compete for a variety of state and federal grants. However, most grants require an accomplishment record indicating the importance of financial support

to continue efforts to address the problem. Because many high-tech businesses have a strong interest in guarding against high-tech crime, collaborating with these organizations may produce additional financial resources. Many companies offer a variety of funding opportunities via foundations—corporate efforts to support their community. Agencies should pursue corporate high-tech support, as well as government grants.

A high-tech crime investigation partnership, in and of itself, provides a generally self-supporting mechanism. Equipment and people cost money, but the sum contribution of partnered agencies constitutes the initial formula that best would support the beginning steps of this effort. In fact, if each agency provides some limited support, such as personnel, resources, training expertise, and computer equipment, the high-tech group likely can be self-supporting. Additional funding based upon grants, foundations, and allied organizations then becomes a resource to enhance an already existing and functional program.

Stakeholders

Together, all stakeholders should explore the various dynamics of the high-tech crime problem. Each will have a perspective unique to their needs, concerns, resources, and customers. Until such collaborative meetings occur, stakeholders will lack full awareness of their own resources and expertise. Most important, participants must gain their organization's support. Long-term approval for partnerships, protocols, and financial and personnel support is critical to the development of a realistic and substantial program. Stakeholders may vary from one region to another, but the local

> **"**
> **Law enforcement administrators should identify university faculty and staff as a significant training resource....**
> **"**

district attorney, college or university, area law enforcement agencies, and the FBI provide a basic formula. Businesses, which can provide information technology specialists and financial support, also should be considered an integral part of the plan.

Line-Level Personnel

Once stakeholder organizational leaders agree to support a move toward the development of a high-tech, multiagency crime investigation group, they should identify line-level personnel who can accommodate the program's efforts. For colleges and universities, this includes their police investigators, as well as high-tech faculty and staff members. Each organizational leader should charge these individuals with the responsibilities of communicating with line-level members in partner agencies. Fundamentally, the grassroots members will form many of the long-term and functional relationships.

While it may be helpful for line-level law enforcement personnel to have extensive high-tech investigative expertise, it is *not* necessary. The preliminary development of a high-tech partnership should include those agencies with little or no high-tech expertise; an important element of this process is the development of expertise and resources over time.

A Model for the Future

The University Police Department (UPD) at California Polytechnic State University in San Luis Obispo reviewed its cybercrime issue and implemented several approaches to address the problem. First, several UPD officers received extensive training from the university's wealth of staff members and faculty with broad expertise in technology,

emerging high-tech trends, and education/training abilities. The training centered on the application of computer forensics and investigative protocol as they related to high-tech crime. Next, UPD invited representatives of local law enforcement agencies to discuss the formation of a high-tech task force. The response was outstanding; representatives from departments in a four-county area attended the meeting, along with university faculty and staff.

UPD then developed an e-group site[15] using university faculty. A list of 30 investigators from 14 agencies in 3 counties signed on to use this site as a mechanism to exchange high-tech investigation information and as a forum to solicit help with their investigations. Other meetings occurred and, subsequently, interest in a high-tech resource group grew to 46 investigators representing 5 counties in the region. Faculty members provided training and discussion ensued about joining the High-Tech Crime Investigators Association International. At that point, participation included local city police and county sheriffs' departments, state agencies, the district attorney's office, and the FBI. Additionally, the group sought participation from corporations, recognizing that they also are victims of

high-tech crime and could provide high-tech expertise and resources.

Currently, this group includes about 100 members, representing dozens of agencies. Members continue to meet, communicate via the e-group site, provide high-tech training, and share investigative expertise with each other on a variety of high-tech crime investigations. This effort specifically has resulted in the successful outcome of numerous regional, multiagency, high-tech investigations with direct involvement from the forensic expertise of UPD officers and the support of high-tech faculty and staff. UPD, as an educationally oriented police agency, influenced a region and helped coordinate the high-tech resources of university police, faculty and staff, and corporations. It also provided an organized venue to

coordinate the high-tech resources of regional allied agencies.

CONCLUSION

The United States is not yet adequately prepared to deal with cybercrime and terrorism. The significant cost of cybercrime, coupled with the difficulty of identifying it, is of national concern, and the law enforcement profession should align agencies and resources to address these issues. The inclusion of college and university resources in the fight against cybercrime and the threat of terrorism may be a pivotal step. High-tech faculty, staff, and facilities, as well as university police departments, are a powerful combination of resources—one which exists in thousands of communities. In-depth technological expertise, high-tech classrooms,

information systems support, and a built-in policing conduit all can be used to mitigate the potential impacts of high-tech crime and terrorism. ✦

Endnotes

[1] California High-Tech Task Force Committee, *Combating High-Tech Crime in California: The Task Force Approach*, (June 1997), 3.

[2] Blumberg, "ID Anti-Theft Efforts Stir Capitol Debate," *The Daily Recorder*, August 7, 1998, 7.

[3] Testimony of FBI Deputy Assistant Director Steven M. Martinez before the House Government Reform Committee's Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, September 2004.

[4] U.S. Federal Trade Commission, "FTC Releases Top 10 Consumer Complaint Categories in 2003," retrieved on November 8, 2004, from *http://www.ftc.gov/opa/2004/01/top10.htm*.

[5] For additional information, see Robert D'Ovidio and James Doyle, "A Study on Cyberstalking: Understanding Investigative Hurdles," *FBI Law Enforcement Bulletin*, March 2003, 10-17; John Pollock and James May, "Authentication Technology: Identity Theft and Account Takeover," *FBI Law Enforcement Bulletin*, June 2002, 1-4; Thomas R. Stutler, "Stealing Secrets Solved: Examining the Economic Espionage Act of 1996," *FBI Law Enforcement Bulletin*, November 2000, 11-16; and Matthew L. Lease and Tod W. Burke, "Identity Theft: A Fast-Growing Crime," *FBI Law Enforcement Bulletin*, August 2000, 8-12.

[6] Jerry Seper, "Justice Sets Up Web Site to Combat Internet Crimes," *The Washington Times*, May 9, 2000, sec. A., p. 6.

[7] *IFCC 2002 Internet Fraud Report*, retrieved on June 9, 2004, from *http://www.ifccfbi.gov/strategy/2002_IFCCReport.pdf*.

[8] Ibid.

[9] Marc Goodman, "Making Computer Crime Count," *FBI Law Enforcement Bulletin*, August 2001, 13.

[10] Dibya Sarkar, "Homeland Security Focuses Coordination," retrieved on April 2, 2004, from *http://www.fcw.com/fcw/articles/2002/0401/news-home-04-01-02.asp*.

[11] The FBI's Cyber Task Force Unit (CTFU) assists in the creation, maintenance, and operation of cyber task forces throughout the United States. The unit ensures that these task forces are capable of responding to significant criminal and national security threats involving the use of computers, the Internet, and high technology. The unit ensures that 1) task forces have state-of-the-art equipment and sufficient technical talent so that the United States is prepared to respond to cyber-related threats; 2) an effective infrastructure enables law enforcement to have a coordinated approach to the investigation of cybercrime; and 3) the relationship between the FBI's cyber task forces and those associated with other agencies are complementary.
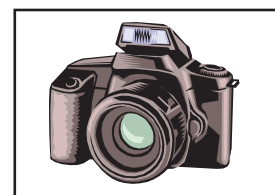
[12] Supra note 1, 17.

[13] Dan Carnevale, "White House Official Asks Colleges to Help Create National Computer-Security Strategy," *The Chronicle of Higher Education*, April 19, 2002, 12; retrieved on April 5, 2004, from *http://chronicle.com/free/2002/04/2002041901t.htm*.

[14] Richard A. Clarke, special advisor to the President for cyberspace security, in Dan Carnevale, "White House Official Asks Colleges to Help Create National Computer-Security Strategy," *The Chronicle of Higher Education*, April 19, 2002, 12; retrieved on April 5, 2004, from *http://chronicle.com/free/2002/04/2002041901t.htm*.

[15] An e-group site hosts special interest groups on the Internet. These sites often offer free, usually advertising-supported, service for anyone who wants to create an electronic forum in which individual and group discussions can take place about a particular area of interest. The site may be restricted by password protection.

FBI Law Enforcement Bulletin
Call for Authors

Why Should You Publish an Article?

- Allows you to share your experiences
- Provides you with a wider audience
- Increases your credibility
- Enhances your professional image
- Improves your chances for promotion

What Should You Write About?

Write about topics that interest you. Write about problems that you, your department, or the community have solved. Possible topics include the following:

- Administrative/personnel issues
- Crime problems and solutions
- Domestic violence
- Drugs
- Equipment
- Ethics
- Environmental crimes
- Firearms
- Future of policing
- Information resources
- Investigative techniques
- Juveniles
- Leadership/management concerns
- Negotiation/interviewing skills
- Police-community relations
- Technology
- Training

How Do You Write an Article?

Authors should write in third person and use active voice. They should supply references when quoting a source exactly, citing or paraphrasing another person's work or ideas, or referring to information that generally is not well known. Authors should study several issues of the magazine to ensure that their writing style meets the *Bulletin's* requirements. **Most important**, authors should contact the *Bulletin* staff for the expanded author guidelines, which contain additional specifications, detailed examples, and effective writing techniques, or access *www.fbi.gov/publications/leb/leb.htm.*

The *Bulletin* judges articles on relevance to the audience, factual accuracy, analysis of the information, structure and logical flow, style and ease of reading, and length. The staff edits all manuscripts for length, clarity, format, and style.

The *Bulletin* generally does not publish articles on similar topics within a 12-month period or accept articles previously published or currently under consideration by other magazines. Because it is a government publication, the *Bulletin* cannot accept articles that advertise a product or service.

How Do You Submit an Article?

- Send a query letter and short outline or
- Submit a completed manuscript to—

  Editor, *FBI Law Enforcement Bulletin*
  FBI Academy, Quantico, VA 22135
  Telephone: 703-632-1952
  E-mail: leb@fbiacademy.edu

The *Bulletin* staff will review queries and articles and advise the authors of acceptance or rejection. The magazine cannot guarantee a publication date for accepted articles.

Authors also should submit three copies of their articles typed and double-spaced on 8½- by 11-inch white paper with all pages numbered. Authors should include an electronic version of the article saved on computer disk. A photograph of the author(s) should accompany the article.

The Characteristics of an Effective Law Enforcement Officer

By Chuck Knight

Policing today is very complex. As officers, you are expected to be all things to all people and to make split second decisions that will take the courts, attorneys, and media weeks or months to determine if you made the right decision, which must be right in their eyes or we get battered in the press and humiliated in the courtroom. Police officers must be effective at what they do. With that in mind, I would like to share some characteristics with you that I believe are critical to be successful in law enforcement.

Perhaps the most valuable commodity a police officer can possess today is integrity. Integrity must be maintained at all cost. Police officers are in a position of public trust—a trust that if broken, will create an atmosphere of hostility between the police and the public. Our success depends upon the trust and confidence of the citizens in our respective communities. We must remain professional in all that we do and forever be committed to the highest level of standards within the law enforcement profession.

As police officers, our first sworn duty and allegiance are to the community and the police or sheriff's department's mission. We must maintain a high degree of loyalty to successfully serve our communities. As police officers, you will be called upon to meet many challenges, adversities, and every level of danger. This requires courage. You will be called upon to display this courage with recognition of the high standards for which you will be held accountable. You must support your fellow officers at all times for the common safety of everyone concerned.

While there is a time to be meek, there also is a time to stand and protect yourselves, your fellow officers, and your loved ones. You will be called upon to resolve conflicts of many types; this must be done through impartial enforcement of the law, not through imposition of judgment or punishment. Victims, witnesses, and all others deserve to be treated with dignity and compassion.

I was touched by a quote I heard several years ago from a fellow police officer: "At times when taking a person to jail, the main difference between me and the guy in the back seat is not much more than the screen between us." A person may be your prisoner, but he or she still is a person; I encourage you to treat that person as such. This requires compassion.

You must be aware of the limit of your authority and never overstep those boundaries. In your endeavor to enforce the law, remember to uphold the spirit of the law as opposed to merely enforcing the letter of the law. Treat everyone with fairness and equality.

Work together with fellow officers and the community. Promote pride within the law enforcement profession and in the city or county where

Mr. Knight, former chief of the Coos Bay, Oregon, Police Department, currently serves as the city manager. He delivered this speech at the Oregon Police Academy's graduation ceremony in Monmouth, Oregon.

you live and work. This requires a spirit of cooperation, also known as teamwork.

Develop a keen sense of humor—yes, humor. I believe a genuine sense of humor will allow you to get past the hard times. I am not telling you to laugh at a traffic violator when you issue a citation nor think it humorous at the scene of a fatal accident. You must not let the hard times get you down. As for me, I recognize how brief this life can be; we must not allow our lives to be shortened by taking it too seriously.

Last, don't forget what is most important to you—your faith, your spouse, your family, and fellowship with friends and relatives. Do not sacrifice what is most vital in your life for the thrill of policing—set priorities. If you fall apart at home, you will not be of help to your fellow officers at work. ✦

Crime Data

Probation and Parole in the United States, 2003

According to the U.S. Department of Justice's Bureau of Justice Statistics (BJS), in 2003, the combined federal, state, and local adult correctional population reached a new record of 6,889,800 men and women—about 3.2 percent of the adult population. Of that figure, the number on probation or parole reached a record high of more than 4.8 million.

About 71 percent of probationers were under active supervision, required to regularly report to a probation authority in person or by mail or telephone. Forty-nine percent had been convicted of a felony, 49 percent of a misdemeanor, and 2 percent of other infractions. Twenty-five percent had been convicted of a drug offense, 17 percent for driving while intoxicated or under the influence of alcohol, 12 percent for larceny or theft, 9 percent for assault, 7 percent for domestic violence, 6 percent for minor traffic infractions, 5 percent for burglary, 4 percent for fraud, and 3 percent for sexual assault. Of the almost 2.2 million probationers discharged from supervision during 2003, about 3 in 5 had successfully met the conditions of their supervision. Approximately 16 percent were incarcerated because of a rule violation or a new offense, and 4 percent had absconded.

About 83 percent of all parolees were under active supervision, required to regularly contact a parole authority in person or by mail or telephone. During 2003, about 470,500 were discharged from supervision. Forty-seven percent had successfully met the conditions of their supervision, 38 percent were returned to incarceration with a new sentence or because of a rule violation, and about 9 percent had absconded.

Probation and Parole in the United States, 2003 (NCJ-205336) was written by BJS statisticians Lauren E. Glaze and Seri Palla. It is available from the agency's Web site at *www.ojp.usdoj.gov/bjs/abstract/ppus03.htm* or by contacting the National Criminal Justice Reference Service at 800-851-3420.

Bulletin Reports

Firearms

Survey of State Procedures Related to Firearm Sales, Midyear 2002 provides an overview of each state's firearm check procedures and interaction with the National Instant Criminal Background Check System operated by the FBI. The report summarizes issues about state procedures, including persons prohibited from purchasing firearms, restoration of rights of purchase, permits, forbidden firearms, waiting periods, fees, and appeals. Appendix tables contain data on 2001 applications to buy firearms and rejections, as well as tabular presentations of state-by-state responses. This report is one in a series from the Bureau of Justice Statistics (BJS) Firearm Inquiry Statistics Project, managed under the BJS National Criminal History Improvement Program. It is available electronically at *http://www.ojp.usdoj. gov/bjs/abstract/ssprfs02.htm* or by contacting the National Criminal Justice Reference Service at 800-851-3420.

Web-Based Resources

Since its inception in 1957, the Institute for Law Enforcement Administration's (ILEA) mission has been to provide educational programs to meet the needs of law enforcement administrators. It is a not-for-profit, tax-exempt, educational center designed to enhance the professional development of police leaders at all levels. Membership in ILEA is available to city, county, state, and federal law enforcement organizations. Its Web site, *http://www.cailaw.org/ilea*, contains information on the institute and its Center for Law Enforcement Ethics; listings of its advisory board members, member police and sheriff's departments, and staff; publications; and a calendar of events.

Management

The Office of Community Oriented Policing Services (COPS) presents *Early Intervention Systems for Law Enforcement Agencies: Planning and Management Guide*, which examines early intervention (EI) systems, a data-based management tool designed to identify officer performance problems and provide interventions, usually counseling or training, to address those issues. In an EI system, performance data are entered into a computerized database, including such indicators as departmental use-of-force reports, citizen complaints, officer involvement in civil litigation, and resisting arrest charges. An EI system helps identify a range of problems that do not warrant formal disciplinary action but suggest that an officer is having problems dealing with citizens. This report is available electronically at *http://www.cops.usdoj.gov* or by contacting the U.S. Department of Justice Response Center at 800-421-6770.

Gangs

The Bureau of Justice Assistance (BJA) presents *Gang- and Drug-Related Homicide: Baltimore's Successful Enforcement Strategy*, which examines inner-city gang characteristics and growth as well as traditional and new, effective gang enforcement by the police. This report presents several innovative strategies to combat inner-city gangs: prosecution of gang members, effective gang enforcement, and investigative approaches (controlled arrests, interviews of randomly arrested gang members, and grand juries as investigative tools). Sample case files from the Baltimore, Maryland, Police Department are discussed. This publication further stresses the importance of creating police gang units and implementing strategy reviews as effective law enforcement tools to deter gang activity. This report is available electronically at *http://www.ncjrs.org/html/bja/gang*.

Serial Murder in the Netherlands
A Look at Motivation, Behavior, and Characteristics

By ALAN C. BRANTLEY, M.A., and ROBERT H. KOSKY, Jr.

Something unusual was happening at a children's hospital in The Hague, Netherlands. The hospital administrator did not want to prejudge the situation, but another patient of Lucy's had died. Although her patients were extremely sick and sometimes terminally ill, the hospital staff did not expect them to die so suddenly. This, however, had happened more than once—actually, more than twice.

Lucy's supervisor and several of her colleagues had alerted the administrator about the number of patients that had died immediately after she left their rooms. Therefore, the administrator decided to suspend Lucy, pending a review.

The review determined that within a 3-year period, eight of Lucy's patients had died while under her care. The hospital referred this information to The Hague Police Department on

September 4, 2001. Investigators quickly discovered that Lucy had worked at another hospital where 19 elderly patients had died while under her care. Additionally, at least one patient had died at home after Lucy visited the person's residence. Indicted for the murder of 13 patients, Lucy was arrested on December 13, 2001.

The Netherlands Public Prosecution Service had only once before charged anyone

with multiple counts of murder. Many members of The Hague District Attorney's Office, a component of the Prosecution Service, as well as the general public and the media simply could not understand how one person could be motivated to kill so many people. In fact, many believed that serial murder was an American problem; the Netherlands simply did not have serial killers.

The District Attorney's Office, in conjunction with The Hague Police Department, oversaw the investigation and prosecution of this case. In May 2002, the District Attorney's Office presented this case to the Behavioral Analysis Unit (BAU) at the National Center for the Analysis of Violent Crime (NCAVC), an entity within the FBI's Critical Incident Response Group (CIRG). Subsequently, BAU personnel conducted an on-site review of the case in the Netherlands, which led to a request for and the eventual expert testimony by a BAU member regarding the motivation, behavior, and psychological characteristics of serial murderers.[1] Although this case illustrates the relatively rare phenomenon of a female serial murderer, the traits and characteristics of female serial murderers are more similar than unique when compared with the broader population of male serial murderers.

Mr. Brantley, a retired FBI agent with the National Center for the Analysis of Violent Crime Behavioral Analysis Unit, currently is the owner and executive partner of a behavioral consulting firm.

Special Agent Kosky is assigned to the National Center for the Analysis of Violent Crime Behavioral Analysis Unit at the FBI Academy.

Definition Difficulties

Like many other behavioral classifications that attempt to label complicated and complex sets of variables, efforts to standardize a definition of serial murder have failed to achieve a consensus. People often use serial murder, serial homicide, serial killing, multiple murder, mass murder, and sexual homicide interchangeably. The lack of a standard definition of serial murder, at times, may confuse those who investigate this subpopulation of lethal criminals, and it also negatively impacts attempts by the courts, the criminal justice system, and the public to understand the problem. In general, previous efforts to define serial murder have included criteria relative to the number of victims, time elapsed between crimes, motivation,

geographical mobility, and victim selection. The major shortcoming of any behavioral typology or classification is that reducing something complicated to a concise label does not necessarily adequately explain the phenomenon.

The FBI derived its current definition for serial killing from legislation that describes serial killing "as a series of three or more killings, having common characteristics such as to suggest the reasonable possibility that the crimes were committed by the same offender or offenders."[2] Stated in this manner primarily for jurisdictional/ investigative reasons, the definition also includes the requirement that at least one of the killings occur within the United States. The criteria include three or more victims,

common offense characteristics, and common offenders. The FBI uses the term *killing* vis-à-vis *murder* because the bulk of its efforts are investigative and occur prior to an offender's apprehension and adjudication.

The FBI's definition of serial killing makes no reference to underlying motivation, behavior, and psychological characteristics. The agency kept the definition intentionally broad to encompass the full array of serial killers.

Motivational Factors

The FBI's NCAVC has further classified homicides of all types and has addressed motivational factors. Historically, in criminology and behavioral science literature, motivation appeared as one of the earliest criteria used to classify homicides, with classification efforts focusing on the traditional motives of financial gain, revenge, elimination of an obstacle, jealousy, and sex. Much later, criminologists and other behavioral scientists recognized that serial murderers are motivated by a complex and complicated set of motives, often involving nontraditional ones. To describe a motivational model for a serial murderer as one-dimensional or in terms of only one motive would prove inaccurate. Rather, a serial murderer's motivations are multifaceted and most often

reinforced by internal desires for gratification versus external rewards, such as profit or financial gain. This can be described further in terms of a dichotomy for violence based on the offender's desired outcome. This dichotomy involves the concept of instrumental violence versus affective violence. Instrumental violence occurs

> **Depression and its collateral side effects are prominent in the histories of serial murderers.**

when the violence is a means to an end—an armed robber steals money from the cash register and kills the store employee to eliminate a potential witness. By contrast, affective violence is an end in itself, or, in other words, the death of the victim is itself the desired end.[3]

Serial murder also can be differentiated from other types of murder because it is more often predatory, premeditated, and deliberate. Serial murderers fantasize and plan the crime and pursue and ultimately kill their victims without the interpersonal conflict and emotional provocation common in other

murderer-victim interactions and relationships.

The FBI continues to conduct interviews with serial murderers. In one study in the 1980s, the agency interviewed sexual murderers, the majority being serial murderers. The agency developed organized and disorganized typologies as a result of these interviews, primarily as a means to assess the level of an offender's criminal sophistication.[4] Generally, the organized offender commits well-planned and well-orchestrated offenses, whereas the disorganized offender commits more poorly planned and poorly executed offenses. For some time, criminal justice professionals have recognized these two rather broad categories of offenders who commit not only sexual murders but murders of all types.

The more organization demonstrated by an offender, the more likely the offender will be intelligent, socially competent, capable of skilled employment, evidence conscious, controlled, and able to avoid identification while accounting for a greater number of victims. Organized offenders also are more likely to select vulnerable victims to increase the probability of being successful and to avoid detection. They lack feelings of guilt or remorse and view their victims as mere objects that they can manipulate

for their own perverse satisfaction and sense of power, control, mastery, and domination. Also, the murderers themselves reported that the excitement and stimulation that resulted from doing something forbidden, taboo, and illegal provided an additional motivational facet. According to some serial murderers, the more perverse or taboo the behavior, the more excitement and stimulation they experienced.

Organized serial murderers may kill in such great numbers due to fantasies that feed their predatory desires and lead them to compete with themselves in a perverted contest of "practice makes perfect."[5] In other words, they continue to kill, in part, due to a desire to improve upon their last murder. They also may compete with authority figures by continuing to operate undetected. They know something no one else knows, and the information is exclusive. A common belief is that information is power, and offenders can feel powerful because they know something authorities do not know. In addition, they understand their misbehavior, know the difference between right and wrong, and can choose when and where to act upon their urges.

Developmental Histories

Serial murderers, as well as other violent offenders, often have developmental histories that include childhood sexual or physical abuse; maternal or paternal deprivation, rejection, or abandonment; or exposure to violent role models in the home. However, many individuals have experienced childhood abuse, and the vast majority do not become criminals, much less serial murderers. Most abused children adjust

© Digital Stock

and, as they mature, progress past their traumatic experiences. However, those individuals who become serial murderers do not adjust and put the trauma and its influence in the past. They ruminate about their mistreatment; dwell on their past experiences; and become frustrated, angry, and depressed.

They often express their chronic anger, which represents one of the internal motivational facets in the multifaceted motivational model, in their murders. A serial murderer once stated in a research interview that he was abused as a child and believed that he was mistreated all of his life. This made him angry, depressed, and miserable. He consciously decided to take revenge on society as a whole by committing his murders and making as many other people as he could just as depressed and miserable.

Depression and its collateral side effects are prominent in the histories of serial murderers. Behavioral scientists have recognized for some time that a fine line or close association may exist between murder and suicide. This association is illustrated, on the one hand, when depression is turned inward and manifests itself with symptoms of sadness, self-downing, apathy, hopelessness, helplessness, and ambivalence concerning living. Thoughts of self-harm and the act of suicide can result. Depression also can be turned outward and manifest itself with symptoms of irritability, hostility, and agitation. Thoughts of harming others and the risk of committing murder greatly increase as the result of these side effects of depression. In short, why would people who experience ambivalence concerning living or dying and have a state of mind that devalues life, including their own, place any value on someone else's life?

Serial murderers are mentally abnormal and exhibit the

traits and characteristics of a variety of mental disorders without reaching the threshold of mental illness necessary for exculpability. At the core, evidence of severe personality disorder or paraphilia will exist and may include, but is not limited to, traits associated with antisocial personality disorder, psychopathy, sexual sadism, borderline personality disorder, and pedophilia.[6] The more organized serial murderers most often exhibit the traits and characteristics of the psychopath. Few, if any, organized serial murderers are psychotic at the time they commit their offenses.

Rare Phenomenon

Estimates of serial murder prevalence and the number of serial murderers are just that—estimates. No official statistics are maintained within the United States, and no known empirical data are available from international sources. What is known is that serial murder is a rare phenomenon and statistically, when compared with murders of all types, occurs infrequently. Like other types of murderers, serial murderers are predominantly male. Female serial murder, as a subset of serial murder, rarely occurs. When female serial murderers offend, they are more likely than their male counterparts to kill victims in close

proximity to themselves. In other words, their victims are more likely to be family members, paramours, those who were in their custodial care, and tenants. Female serial murderers also are more likely to poison their victims in a more impersonal, detached manner than males, who more often strangle, stab, or beat their victims.[7]

© Digital Stock
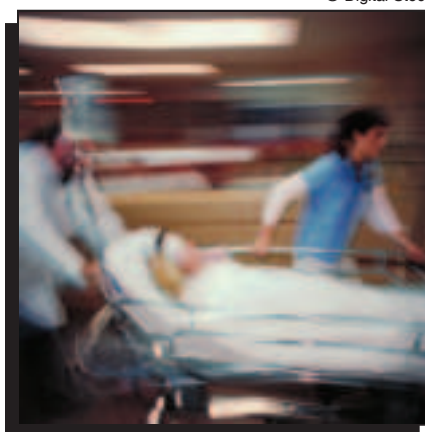
Another subset of serial murder include those committed by health-care workers in hospitals and nursing homes throughout the United States and other countries. A large number of health-care worker serial murderers are female due, in part, to the fact that female health-care workers outnumber male health-care workers by a wide margin. The differential of power between doctors and nurses also may play a role in a motivational model where a desire for recognition, attention, revenge, power, and control are

contributing factors. The desire for excitement, stimulation, and attention from colleagues also have been reported as elements contributing to the murder of patients.[8] Additionally, some serial murderers in health-care facilities and elsewhere have reported that the act of murder relieved tension, stress, and frustration.[9]

Health-care worker serial murderers also are most often organized in their planning, victim selection, and efforts to avoid not only detection but also the suspicion of others. They are aware of risk factors that can increase the probability of being identified and apprehended. Vulnerable victims who are helpless and unable to resist, such as the seriously ill, elderly, or very young, are at greatest risk for victimization. Health-care worker serial murderers decrease risk to themselves by working independently and outside the observation of others. Working evening and night shifts when fewer workers are present frequently occurs in cases of health-care serial murder.[10]

Lucy's Legacy

Lucy kept a detailed diary of her troubled life. Though she did not specifically mention her victims, she wrote often of giving in to her "compulsion." In one instance, the date of these entries coincided with the

death of one of her patients. Lucy recorded her struggles to understand her lack of feeling and compassion. She wrote of her "sociopathic" personality and her desire to understand this aspect of herself.

Lucy worked in critical care settings, and her patients were either elderly or children. In almost all of the cases, the victims were either comatose or had a diminished awareness of their surroundings. All were vulnerable and had impaired communicative abilities.

In the case of every victim, colleagues reported that Lucy developed a close rapport with either the patient or the patient's family. She seemed to spend an extraordinary amount of time with them. But, in every case, she had been seen alone with the victims shortly before their deaths or, at least, had made an observation in the medical record not witnessed by another health-care worker. In more than a few cases, Lucy reported a marked deterioration in a patient's status just before death. Strangely, a pattern developed where other nurses had made observations about patient progress that contradicted Lucy's. Also, the hospital accused Lucy of stealing drugs that, coincidently, happened to be the drugs her patients were taking. Autopsies revealed high levels of potassium in some patients. In others, missing

morphine, attributed to Lucy, seemed to coincide with several victims' deaths. Though theft of drugs did not play a significant role in the evidentiary part of the verdict of the Court of Appeal, in the case of one victim, intoxication with the drug digoxine was established by expert witnesses beyond any doubt. The case of this little girl, and

> " **Serial murder also can be differentiated from other types of murder because it is more often predatory, premeditated, and deliberate.** "

one other case in which intoxication with chloral hydrate was very likely, came to be important evidence for the court.

Though Lucy was indicted in the deaths of 13 patients and the attempted murder of 5 more, the investigation disclosed that 28 of her patients had died within a 4-year period, with 8 of those being children. Lucy was convicted on four counts of first-degree murder and three counts of attempted murder, as well as perjury, falsifying a high school diploma, and theft of several books from the prison library. Lucy received

life imprisonment, the maximum sentence allowed in the Netherlands.[11]

Conclusion

Serial murderers receive attention in American movies and television programs that is disproportionate to their frequency when compared with murders of all types. Sadly, law enforcement professionals in this country also know, all too well, the tremendous suffering these crimes can cause in real life. Officials in the Netherlands, however, never had faced the devastating effects that a serial murderer can create until a children's hospital in The Hague reported an unusually large number of patients dying while under a certain nurse's care.

While this case illustrates that of a female serial murderer, it also provides a glimpse into the equally infrequent sphere of the health-care worker serial murderer. Investigating a case involving an offender whose occupation places a premium on saving lives presents a bitter irony even for the most experienced law enforcement professionals. But, examining the motivation, behavior, and characteristics of such individuals can help investigators and prosecutors not only bring the guilty individuals to justice but also cope with the trauma of such horrific acts. ✦

Endnotes

[1] The authors based this article on a report written for the Public Prosecution Service, The Hague, Netherlands, in preparation for one of the authors' expert testimony at the subject's trial.

[2] Title 28, U.S. Code, Section 540B.

[3] A.H. Buss, *The Psychology of Aggression* (New York, NY: Wiley, 1961).

[4] R.K. Ressler, A.W. Burgess, and J.E. Douglas, *Sexual Homicide: Patterns and Motives* (New York, NY: Lexington Books, 1988).

[5] A.C. Brantley and F.M. Ochberg, "Lethal Predators and Future Dangerousness," *FBI Law Enforcement Bulletin*, April 2003, 16-21.

[6] Ibid.

[7] M.D. Kelleher and C.L. Kelleher, *Murder Most Rare: The Female Serial Killer* (New York, NY: Random House, 1998).

[8] C. Le Duff, "Prosecutors Say Ex-Doctor Killed Because It Thrilled Him," *New York Times*, September 6, 2000.

[9] C. Linedecker and W. Burt, *Nurses Who Kill* (New York, NY: Pinnacle Books, 1990).

[10] R.E Gaetjens, "A Review of Occupational, Behavioral, and Organizational Differences in Health-Care Worker Serial Homicide," (unpublished manuscript, December 20, 2000).

[11] The Dutch legal system allows appellate courts to essentially retry a case. Not only can a convicted party appeal a ruling but the government can appeal an acquittal. The convicted nurse appealed her conviction. On appeal, the defendant was convicted of seven counts of murder and four counts of attempted murder. Her life sentence was upheld.

The Bulletin Notes

Law enforcement officers are challenged daily in the performance of their duties; they face each challenge freely and unselfishly while answering the call to duty. In certain instances, their actions warrant special attention from their respective departments. The *Bulletin* also wants to recognize those situations that transcend the normal rigors of the law enforcement profession.

Sergeant Pedersen

Sergeant John Pedersen of the Vero Beach, Florida, Police Department responded to a medical emergency involving an infant who was having trouble breathing. Upon his arrival, Sergeant Pedersen found no signs of respiration at all and immediately began rescue procedures. After administering breaths and back thrusts to the baby, the airway became cleared and the infant began breathing on his own. Sergeant Pedersen then removed the blockage from the young boy's mouth—part of an ink pen that the baby had swallowed. The child and his family are grateful for the actions of this quick-thinking and well-trained officer.

Officer Elliott

Sergeant Hawkins

A wildfire ignited by a lightning strike raged out of control and threatened a resort community. Numerous residences sat directly in the path of the blaze. Officer Mitch Elliott and Sergeant Harry Hawkins of the Black Butte Ranch, Oregon, Police Department hurried door-to-door through intense heat, flames, and smoke and evacuated the residents as firefighters battled the blaze. After stopping to receive treatment for smoke inhalation and heat exhaustion, Officer Elliott and Sergeant Hawkins returned to duty to help evacuate the community's remaining residents and guests. The bravery of these two officers aided in the safe, orderly evacuation and allowed the firefighters to concentrate their efforts on battling the dangerous wildfire.

Patch Call

The patch of the Conway, Arkansas, Police Department reflects its city's pride in being a center of higher education. Guided by the principles of community policing, the agency serves 3 four-year colleges, as well as the fastest-growing city in Arkansas.

The Helena, Montana, Police Department serves the "Queen City of the Rockies." Its patch features the timber-covered, snow-capped Rocky Mountains. The Fire Tower, known as the "Guardian of the Gulch," stands watch over the city.