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JULY 1973



# FBI

## LAW ENFORCEMENT BULLETIN



FEDERAL BUREAU OF INVESTIGATION  
UNITED STATES DEPARTMENT OF JUSTICE



JULY 1973

VOL. 42 NO. 7



THE COVER—Pictured are two officers of the U.S. Capitol Police with their canine teammates. The dogs were trained at the Metropolitan Police Department Canine Center, Washington, D.C. See article beginning on page 16.

# FBI

LAW ENFORCEMENT BULLETIN

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Published by the  
FEDERAL BUREAU OF INVESTIGATION  
UNITED STATES DEPARTMENT OF JUSTICE  
Washington, D.C. 20535



# Message...

## To All Law Enforcement Officials

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THERE IS NO GREATER RESPONSIBILITY of law enforcement leaders than the safety of the officers under their command. It behooves them to analyze carefully those areas of police performance wherein every reasonable safeguard might be employed in the protection of law enforcement personnel.

Since 1961, an average of nearly 11 law enforcement officers have lost their lives annually in uniquely similar circumstances. These situations have also accounted for the deaths of 11 more officers in the first 4 months of this year. They are one of the leading hazards to police patrol personnel.

The killings occurred in unlikely settings which, nevertheless, unfolded dramas that spell danger to law enforcement officers. The slain officers had responded to one of the most routine of all summons for police assistance: the "disturbance" call.

With the increase in murders of policemen over many years, it could be expected that the victim officers were gunned down by cornered felons, fleeing suspects, or fanatical terrorists. This was

not always the case. In disturbance call situations, most often the officers lost their lives at the hands of persons not wanted for a serious crime and whose actions were not criminally motivated. Even more troubling is the fact that the officers often were killed in or on the premises of a family home.

Many if not most disturbance calls for police assistance involve family disputes. In the heated emotions of these conflicts, the police officer's arrival frequently triggers intense hostility which is further aggravated by the agitated mental state of the disputants. The violence inherent in many family quarrels can and has turned quickly against the law enforcement officer. His role is difficult and made more complex by the absence of a clear violation of the law which thrusts him in the unfamiliar role of a conciliator or mediator among the disputants. At the same time he must enforce the law and maintain public order. His and the disputants' attitudes toward one another are at the outset critically important in this charged atmosphere.

Beyond the loss of dedicated officers' lives is the further tragedy that their deaths might have been

## MESSAGE

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avoided. With prior training by professional behaviorist personnel to assist police efforts in these incidents, the risk of injury or fatality to both the officer and the disputants quite probably would have been greatly reduced.

Specialized training and closely coordinated support programs are required to deal safely with crisis intervention problems. These disorders are not a new law enforcement responsibility. New approaches, however, need to be taken to mini-

mize their potential for harmful violence. Law enforcement skills in disturbance incidents must be perfected. Officers should be able to apply the law in these situations with a sensitive appreciation of the needs of the disputants balanced with a keen awareness of the dangers involved.

The summer months usually produce an above-average increase of crimes against the person. This is added reason for the profession to take stock now of its capability in crisis intervention—for it has proved to be a deadly business.

*William D. Ruckelshaus*

WILLIAM D. RUCKELSHAUS  
*Acting Director*

JULY 1, 1973



New tactics and techniques have been developed in the United States by a small number of criminals who style themselves urban guerrillas. "... we have to try something new, like armed revolutionary violence ... (Urban Guerrilla Units). Ripping off money from banks and being Revolutionary Executioners of the gestapo pigs [police] mainly to capture weapons from the enemy ...," announced the newspaper of the Eldridge Cleaver faction of the Black Panther Party.<sup>1</sup>

Here the Panthers were echoing Pan-Africanism advocate Stokely Carmichael ("... when the guerrilla kills a member of the occupying army, he not only takes the gun that's around his waist, he opens up the door and he takes a 12-gauge shotgun."<sup>2</sup>) and the Brazilian theoretician of urban guerrilla warfare, Carlos Marighella ("The principal object of the ambush tactic is to capture enemy arms and punish him with death."<sup>3</sup>). But recently developed information indicates a change in this tactic.

### Evidentiary Link

A new writer on urban guerrilla warfare realized that weapons taken from murdered police officers—and a number of police killings have been marked by the theft of the victims' weapons—become an evidentiary link tying the guerrilla to a police killing in the event of capture while armed with a stolen gun. A notebook of guerrilla techniques, found in the possession of persons involved in purchasing a considerable arsenal, advised the would-be guerrilla: "We do not need to take weapons from iced [killed] pigs, specially those that have been righteously baconized. There are better places to rip-off weapons—not where they can be linked to butchered hogs."

Attacks on police are still the main

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*"Many of the techniques used by extremists of all types in this country can be found in a number of books and pamphlets on urban guerrilla warfare. The volume of this material circulating today amounts to a lexicon of violence."*

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tactic of these "revolutionary executioners." In 1972, 11 police officers were killed and 43 were wounded in attacks where responsibility was claimed by revolutionary or urban guerrilla-type groups or individuals, or where there were strong indications members of these types of groups were involved. In 1971, 19 officers died and 48 were wounded in similar attacks.

The 9 mm. pistol ("I recommend the Browning 9 mm. automatic. It comes with a 13 shot magazine," notes the writer of a booklet on guerrilla tactics.<sup>4</sup>) and the 9 mm. submachine-gun are becoming favorite guerrilla weapons in this country, along with the AR-15 and AR-180, civilian coun-

terparts of the M-16 military assault rifle. Other weapons, including foreign military weapons stolen in this country, have also been used, however.

Revolutionary-inspired attacks on police in this country have included ambushes, snipings, and apparently spontaneous shooting confrontations. Perpetrators have made false requests for police assistance to lure officers into ambushes and have committed deliberate traffic violations to cause patrolmen to leave their police cars and expose themselves to a fusillade. Cold weather has been suggested as the best time of the year for these attacks as the wearing of heavy clothing permits better concealment of weapons.





## Expropriations

"The police have the guns and the banks have the money. So this brings us to the act of expropriation. . . . the rip-off of arms, goods or money for revolutionary purposes . . .," according to the Black Liberation Army.<sup>5</sup> Robberies to gain funds for the "revolution" have been claimed by this group. Communique No. 1 from the Attica Brigade of the Afro-American Liberation Army (the name Panther leader Eldridge Cleaver gave his urban guerrilla followers—it is synonymous with Black Liberation Army) claimed those who threw a hand grenade under a New York City police car on December 20, 1971, were on a mission to "rip off funds for the Afro-American liberation struggle."<sup>6</sup>

This boasting about expropriations was later criticized by other advocates of urban guerrilla activity who subscribe to the advice of "giving expropriations the appearance of bandit attacks"<sup>7</sup> in order to gain time to build a revolutionary movement. Also criticized were Black Liberation Army robberies of "after hours" clubs as not being worth the risk. "If U.G.'s [urban guerrillas] are going to risk life and freedom doing armed expros [expropriations]—go for the big money," advises the writer who warned against taking slain police officers' weapons. Recommended targets for expropriations, by this writer and others, include banks, check-cashing establishments, and large chain stores, especially the last two categories on the 1st and 16th of the month when assistance checks are to be cashed.

Recent urban guerrilla writings have also detailed techniques and equipment useful in expropriations. Reconnaissance of the target (determining the amount of police patrol traffic and whether a bank guard is armed) is stressed, along with planning the getaway. Hand grenades are described as having been effective in

the past in deterring pursuers. Panel trucks are a favorite guerrilla vehicle because a large amount of equipment can be carried in a concealed manner. The use of rented panel trucks (rented with false identification) as homemade armored cars in escapes has been suggested. The armor would consist of sandbags or sheets of steel or bulletproof plastic.

The lack of a police radio prevented a guerrilla unit watching a bank from knowing police were checking the license number of the guerrilla vehicle, according to an article on techniques by the Black Liberation Army.<sup>8</sup> (The use of stolen cars is suggested if the car is repainted or the license plates are switched.) Guerrillas have also been advised to attack any police coming on the scene of an operation before the officers can radio for assistance. Suggestions for bank robbery techniques have included warnings about "bait" money, use of disguises, wigs, hoods, and ski masks, plus the destruction or removal of bank robbery cameras.

Followers of the Cleaver Panther faction in Louisville, Ky., described the Black Liberation Army as "a small urban guerrilla unit waging armed struggle against . . . the United States government. . . ." The "army" is "entirely autonomous and decentralized. . . ."; its leadership is a collective. Thus, according to this version, there is no dependence on orders from a "high command" to collect "a compulsory revolutionary tax" from a bank [a thought adopted from Carlos Marighella]. . . . "or to carry out other guerrilla operations, such as "punishing a pig by death. . . ."<sup>9</sup>

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*"Guerrillas have . . . been advised to attack any police coming on the scene of an operation before the officers can radio for assistance."*

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Expropriations by various types of revolutionaries are not always violent. Fraudulent use of traveler's checks has been reported. Followers of the Weatherman (the extremist group later renamed the Weather Underground to avoid implications of "male chauvinism") philosophy have doubled their funds by buying these checks and falsely reporting them lost or stolen, thus receiving a second set of checks to cash. False or stolen identification is usually used in this and other fund-raising schemes, often consisting of credit cards and identification stolen on campuses from college students. Reports have also been received of revolutionaries obtaining birth certificates of persons who died in infancy. The name of a deceased infant can be obtained by reviewing death notices for the appropriate year of birth. This procedure is a well-known espionage technique.

## Terrorism and Urban Guerrilla Warfare

Expropriations by urban guerrillas to support the "revolution" are seldom needed by today's political terrorist. This is one of several important differences between the terrorist and the guerrilla in today's world. Urban guerrilla warfare can be defined as criminal conduct for revolutionary purposes. Terrorism, on the other hand, is violent criminal activity designed to intimidate for political purposes. The distinction is in goals sought and sometimes in methods used. The guerrilla is working toward revolution. The terrorist acts to focus attention on a particular grievance.

"The terrorist has a political tool; the urban guerrilla has a strategy for revolution. . . ."<sup>10</sup> Today, the usually indigenous urban guerrilla relies on expropriation to finance his activities, while the political terrorist often operates in countries foreign to him and is many times financed by countries



*"Urban guerrillas can, and do, use indiscriminate terror as a tactic at times. Bombings are the most common instrument, as the unsuspected bomb, used against civilians, is well calculated to instill fear."*

sympathetic to his aims. Thus, the fanatical terrorist can create the hostage-type situation (which exposes the terrorist to capture) in order to gain the maximum publicity, but the urban guerrilla must "never expose himself unnecessarily. All possible precautions ought to be taken to avoid a defeat or annihilation."<sup>11</sup>

Urban guerrillas can, and do, use indiscriminate terror as a tactic at times. Bombings are the most common instrument, as the unsuspected bomb, used against civilians, is well calculated to instill fear. This tactic, for example, might be similar to the worldwide letter bomb campaign against Israeli officials and sympathiz-

ers that followed the Arab terrorist attack at the XX Olympiad. Letter bombs can weigh less than an ounce and be only an eighth of an inch thick. Most have been hand addressed and have been sent from overseas addresses by airmail. Plastic explosive in thin strips and TNT in a powdered form have been utilized; detonators have included tiny springs and percussion caps.

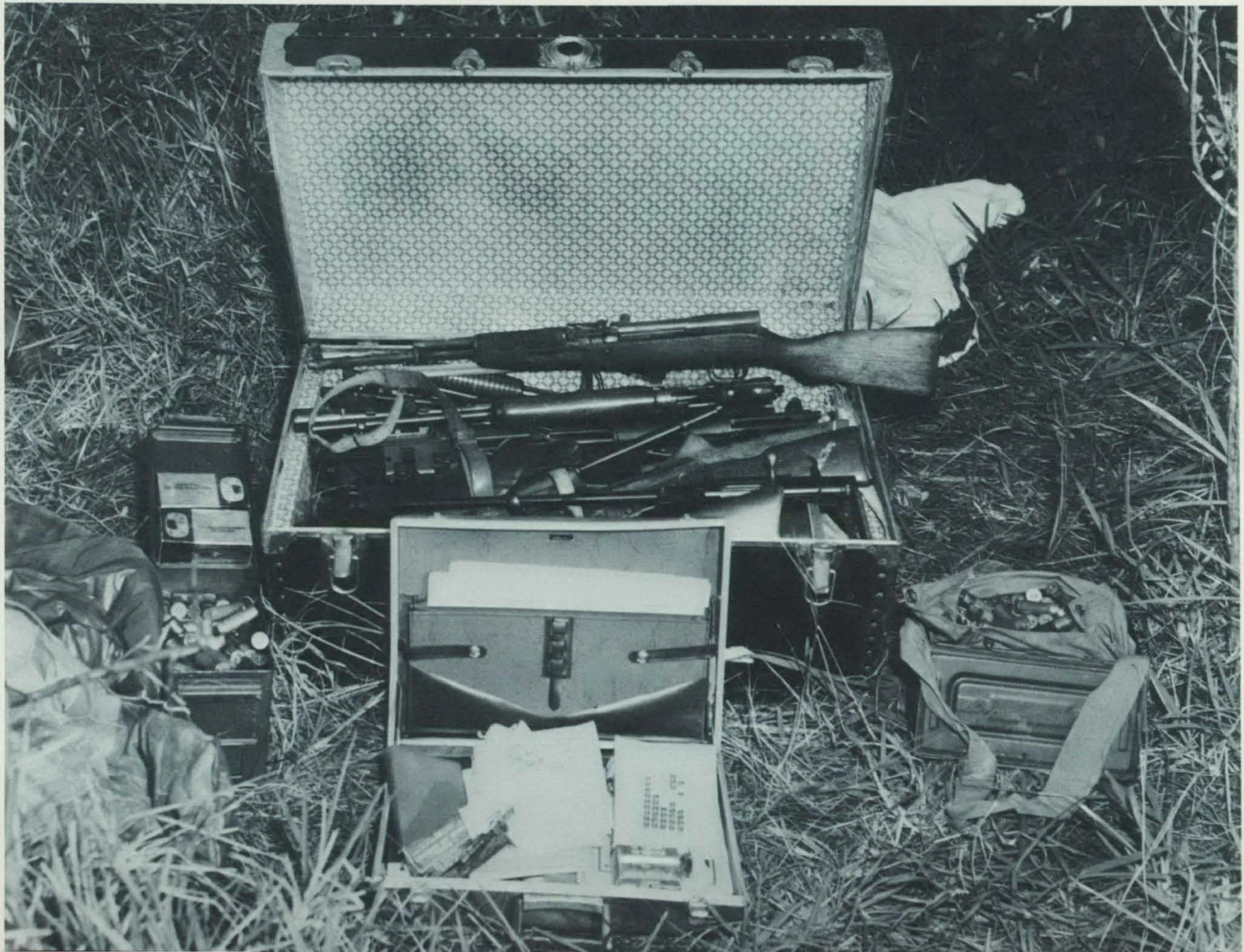
### ***Bombings and the Weatherman***

In this country, the bomb has been the primary weapon of the Weatherman group. "Tonight [June 9, 1970], at 7 p.m., we blew up the N.Y.C. po-

lice headquarters," boasted the Weatherman.<sup>12</sup> The March 1, 1971, bombing of the Capitol building in Washington, D.C., was claimed by the Weather Underground in Communique No. 8. In 1972, the Weather Underground took credit for the May 19 bombing of the Pentagon. Other bombings directed against the "establishment" have been claimed by urban guerrilla revolutionary groups with such exotic names as the Smiling Fox Tribe, the Proud Eagle Tribe, and The Perfect Park Home Grown Society.

Often these bombings were preceded by warning calls, though this did not prevent loss of life in at least one case. The nature of the target—

A trunk of weapons and an attache case of urban guerrilla literature recovered by the FBI.





military, government, or other "establishment" symbol—and the warning call claiming the bombing have become the trademarks of Weatherman and other revolutionary-type groups.

The Weatherman was among the first revolutionary organizations in the United States to adopt Fidel Castro's "foco" theory—that it is not necessary to organize the population as a whole to accomplish armed revolution—" . . . a small group of armed insurgents . . . can act as a focus for the various discontented elements . . . [to] channel all the latent energy available into action for the defeat of the government." <sup>13</sup>

Bombings by revolutionary groups inspired a Ku Klux Klan group to publish "Revolutionary Notes" late in 1972 "to provide the patriot with the same information which is already in the hands of our leftist enemies." <sup>14</sup> Instructions for making time bombs from dynamite, capable of being concealed in a thermos bottle or attache case, are set out, complete with diagrams. According to the Klan, this type of bomb can wreck an elevator, rupture a gas or water main, disable a power transformer, damage the service core of a skyscraper, or, if left in a subway car over an axle, derail the train. Two months after the Klan claimed in this article that "a well-planned campaign of bombing can wreak utter havoc," a member of the group was arrested and found to have dynamite, blasting caps, a clock, a battery, and other necessary equipment for a time bomb as described in the Klan publication.

While linked most often to ambushes and other shooting confrontations with police, the Afro-American

Liberation Army has also used explosives, especially on the west coast. Early this year, components for making time bombs were seized by police from members of this group. In May 1972, a bomb was discovered at the Portuguese Consulate in San Francisco. The Afro-American Liberation Army claimed credit for placing the bomb in a letter directed to the news media. The device in this case consisted of 14 sticks of dynamite, a blasting cap, and a fuse, all contained in a brown paper sack. A dirt-filled cloth sack was placed over the bomb to direct the force of the blast, but the bomb failed to detonate when the fuse went out.

After a police car was bombed in Los Angeles on October 7, 1972, an anonymous caller claimed credit for the bombing in the name of the Afro-American Liberation Army. Although this group has used explosives more on the west coast, a house used as a training base in the South was booby-trapped with a heavy explosive charge when the guerrillas moved out. The "army" has also considered the use of light bulbs filled with explosives and straight pins as antipersonnel booby traps.

### *Lexicon of Violence*

Many of the techniques used by extremists of all types in this country can be found in a number of books and pamphlets on urban guerrilla warfare. The volume of this material circulating today amounts to a lexicon of violence. The paramilitary, "anticommunist" Minuteman organization, for example, reprinted two booklets in this category last year: "We Shall Fight

in the Streets" <sup>15</sup> and "Special Forces Demolition Techniques." The first title has also been found in the possession of Black Liberation Army members; it was prepared to educate England on guerrilla warfare in the event of a Nazi invasion during World War II. The pamphlet on demolition techniques includes recipes for various explosives, instructions for delayed detonation, and methods of placing charges.

Some books and pamphlets of this genre seen in the hands of extremists in the United States include the well-known "Minimanual of the Urban Guerrilla" by Carlos Marighella and "Underground Manual Number 3" by "Nick Parados." The "minimanual" is one of the most complete expositions of urban guerrilla tactics, while the latter booklet is a "how to" manual on explosives and incendiaries. One of the earliest guerrilla manuals circulated in this country, and one used by both Panthers and Weatherman-type revolutionaries, "Underground Manual Number 3" includes materials on homemade and improvised explosives and detonators.

A commercial venture aimed at the would-be guerrilla is "The Anarchist Cookbook" by William Powell (New York, 1971). The "cookbook" part of the title is based on the chapter of recipes for foods incorporating marihuana or hashish. Sabotage, weaponry, guerrilla organization, and explosives are all covered in detail in this book. Another copyrighted volume with both tactics and techniques is General Alberto Bayo's "150 Questions for a Guerrilla" (Havana, 1959; translated edition, 1963). The editor's notes for the translated edition

*"Expropriations . . . are not always violent. . . . Followers of the Weatherman . . . philosophy have doubled their funds by buying . . . [traveler's] checks and falsely reporting them lost or stolen, thus receiving a second set of checks to cash."*



The covers of several urban guerrilla manuals being circulated in the United States.



caution the reader against experiments with some of the author's explosive formulas; indeed, the explosives and incendiaries described in all of these books can be extremely dangerous. Many of the instructions lack even elementary safety precautions.

Another instance of publication of material on urban guerrilla warfare by a group at the opposite end of the extremist spectrum from the Weatherman or the Panthers is the series of "Revolutionary Notes" printed by the National Youth Alliance. To overcome a claimed Marxist "monopoly" in this area, the Alliance published detailed instructions for guerrilla activity. In July 1972, for example, an article on sniping was printed which included instructions on telescopic sights and night firing.

This small organization, which opposes "Zionism" and "race-defiling

... through school integration," accurately sums up the aim of urban guerrilla warfare in this series: "to undermine the confidence of the masses in the existing regime . . . when the authorities lack either sufficient will or strength to restore order—the public will begin withdrawing its support of those authorities."<sup>16</sup>

#### FOOTNOTES

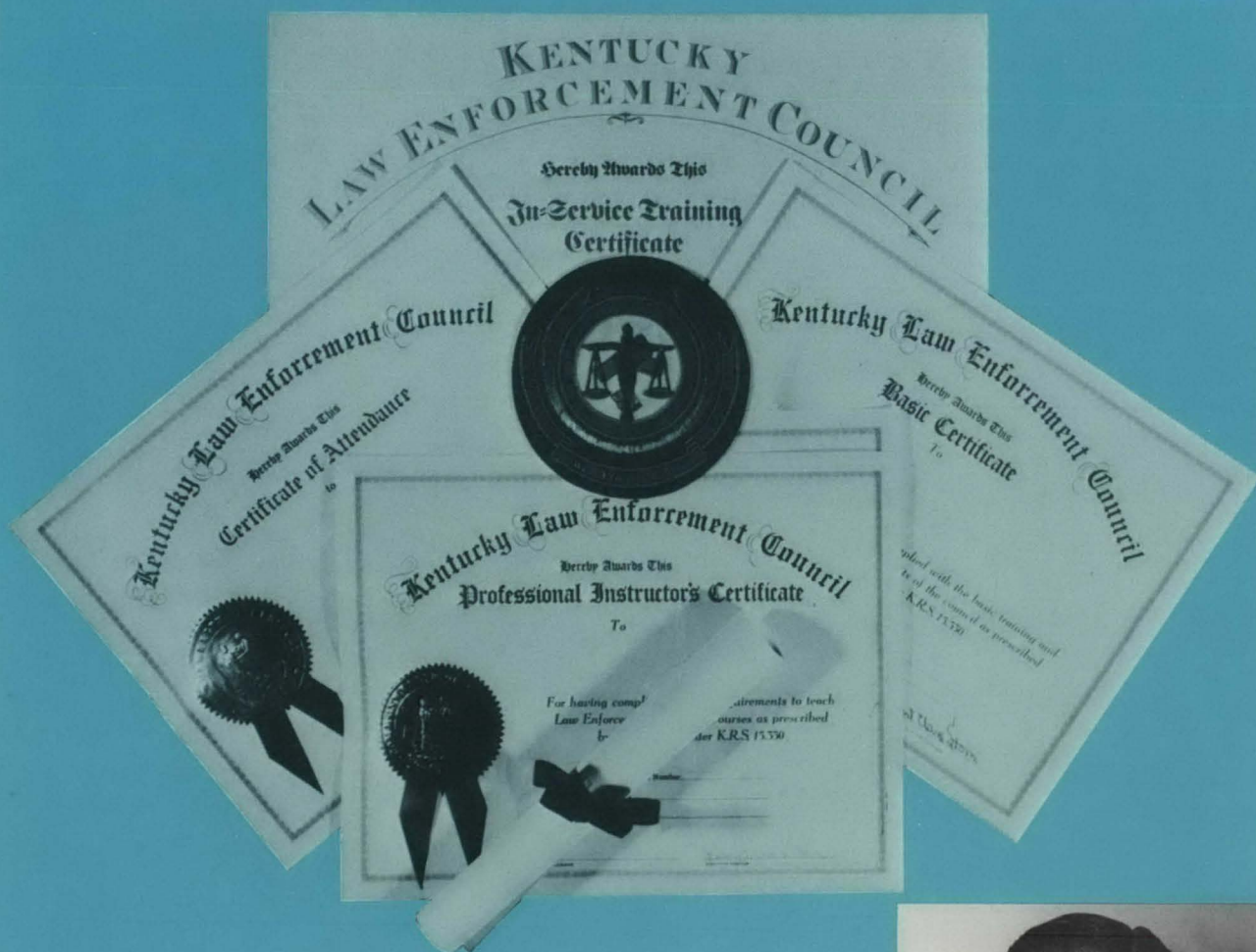
- <sup>1</sup> *Right On!* (Vol. 1, No. 12, Feb. 15, 1972), p. 10.
- <sup>2</sup> Stokely Carmichael, *Stokely Speaks* (New York, 1971), p. 213.
- <sup>3</sup> Carlos Marighella, *Minimanual of the Urban Guerrilla* (New World Liberation Front, 1970), p. 26.
- <sup>4</sup> *On Organizing Urban Guerrilla Units* (Afro-American Liberation Army, 1970), p. 32.

- <sup>5</sup> "Message from the Black Liberation Army," *Right On!* (Vol. 2, No. 2, Apr. 5, 1972), p. C.
- <sup>6</sup> *Right On!* (Vol. 1, No. 10, Dec. 19–31, 1971), p. 17.
- <sup>7</sup> Carlos Marighella, *Guerrilla Tactics and Operations* (n. d.), p. 10.
- <sup>8</sup> "Message from the Black Liberation Army," *Right On!* (Vol. 2, No. 2, Apr. 5, 1972), p. C.
- <sup>9</sup> *Voice of the People* (Vol. 1, No. 1, February 1973), p. 9.
- <sup>10</sup> Robert Moss, *Urban Guerrilla Warfare* (The International Institute for Strategic Studies, London, 1971), p. 3.
- <sup>11</sup> Che Guevara, *Guerrilla Warfare* (New York, 1969), p. 36.
- <sup>12</sup> *Outlaws of Amerika, Communiques from the Weather Underground* (New York, 1971), p. 7.
- <sup>13</sup> Frank Kitson, *Low Intensity Operations* (London, 1971), p. 33.
- <sup>14</sup> *The Fiery Cross* (Vol. 7, Edition 10, Tuscaloosa, Ala.), p. 1.
- <sup>15</sup> Captain S. J. Cuthbert, *Scots Guards* (First U.S. edition, 1965, Boulder, Colo.).
- <sup>16</sup> *Attack!* (Washington, D.C. 1972).



*Incentive Program Brings—*

# A REVOLUTION in Police Training



By  
**ROBERT CLARK STONE**  
Executive Director,  
Kentucky Law Enforcement  
Council,  
Richmond, Ky.





*“... it was discovered that many Kentucky policemen were paid as little as \$150 a month, only a few had received any formal law enforcement training previously, and in some areas of the State, educational requirements for police officers were nonexistent.”*

**K**entucky represents just one example of the revolution in police training now going on in the United States. A police pay incentive bill passed by the Kentucky Legislature in 1972, the first statewide program of its kind in the country, has caused a vast increase in this training.

Before 1966, a great majority of Kentucky police and sheriffs departments afforded no training to their officers, and they, regrettably, did not take full advantage of many fine training courses sponsored by the FBI, the Kentucky State Police, and the Kentucky Peace Officers' Association.

On September 1, 1966, Eastern Kentucky University, at the suggestion of the FBI and the Kentucky State Police, obtained a \$15,000 Federal grant from the Law Enforcement Assistance Administration (LEAA), U.S. Department of Justice, to begin a program to establish a Kentucky Peace Officers' Standards and Training Council. Since that time, similar organizations have developed in many other States.

Two years later, the Kentucky Legislature enacted legislation making the council an independent State agency to study police standards and to provide and supervise police training. The name was changed to the Kentucky Law Enforcement Council (KLEC), and Federal funds were obtained through the State planning agency, the Kentucky Crime Commission, to supplement a State appropriation for the council.

The council represents outstanding expertise in law enforcement. The members include: The Special Agent in Charge of the Louisville FBI office;

the attorney general of Kentucky; the director of the Kentucky State Police; the dean of the School of Law Enforcement at Eastern Kentucky University; the dean of the School of Police Administration of the University of Louisville; the State president of the Fraternal Order of Police; the president of the Kentucky Peace Officers' Association; five chiefs of police; one sheriff; one mayor; one member of the Kentucky Bar Association; and one individual who is not associated with any of the above groups.

### **Training Courses**

The first job of the council was to find out what Kentucky law enforcement officers wanted and needed in the way of training. The executive director and a Special Agent of the FBI went to police departments throughout the State with sample training programs in various fields and asked what types of training were most beneficial.

The first basic course of the KLEC was conducted in July 1969 and was 3 weeks in length. During the course, it was discovered that many Kentucky policemen were paid as little as \$150 a month, only a few had received any formal law enforcement training previously, and in some areas of the State, educational requirements for police officers were nonexistent. It was also found that much of the equipment used was either unsafe or inoperable.

Since that time, 26 basic courses have been conducted by KLEC. A total of 632 policemen and sheriffs have

been trained in the course, the duration of which has been progressively increased, at the insistence of trainees, from 3, to 4, to 6, and then to 10 weeks. A total of 1,757 officers have received training in specialized courses ranging from police photography to command decisions.

All basic training is conducted at Eastern Kentucky University. The university provides free of charge office and classroom space, services and facilities for the training, and hosts the council at its bimonthly meetings. However, KLEC is an independent State agency and is in no way affiliated with the university.

KLEC has been invited to participate actively in the use of a planned Law Enforcement Traffic Safety Center at Eastern Kentucky University. Construction is scheduled to begin this spring on this \$8 million facility. It will contain offices, classrooms, laboratories, photographic darkrooms, a gymnasium, indoor pistol range, and a large swimming pool, all specifically designed for law enforcement training. Additionally, there is a lake for water recovery training and a range for driver training, and a sophisticated outdoor firearms range is being constructed nearby.

Training is also conducted by KLEC throughout the State. A series of in-service courses is held at Western Kentucky University in Bowling Green, where a retired FBI Agent heads the program.

Assisting in this statewide training program is a mobile classroom which tours the State providing training principally in rural areas. This unit is





Shown is the interior of the mobile classroom while a class is in progress.

a 54-foot house trailer which is 12-feet wide and specially constructed to endure the rigors of many thousands of miles of travel. It contains desk space for 30 trainees and a fully automated training presentation utilizing tape recordings, slides, and motion picture films. This automated presentation is controlled by an electronic student response system which is keyed to each desk. The student-officer can answer questions posed in the automated program by means of a responder at his desk. In this way, class response to a particular question or problem can be measured numerically or proportionately by one of the two instructors who travel with the mobile unit. Officers from nearby areas to the host department are also invited to attend these mobile unit training sessions.

### **Legislation**

Approximately 30 States have mandatory police training which requires all new officers to complete basic training. Legislation to make

minimum training standards mandatory in the State of Kentucky was proposed in 1968 and 1970, but each time it was defeated. However, an alternative bill, supporting voluntary police training has been successful.

In the spring of 1971, the KLEC, the Kentucky Crime Commission, the Fraternal Order of Police, the Kentucky Peace Officers' Association, the Kentucky State Bar Association, the Kentucky Sheriffs' Association, and the Northern Kentucky Chiefs' of

Police agreed to propose and support certain State legislation benefiting law enforcement goals. One such bill was to change Kentucky's Constitution to permit Kentucky sheriffs to succeed themselves. Another was to create a Law Enforcement Foundation Program Fund to pay each eligible police officer of each participating department up to 15 percent, in addition to his salary, as incentive pay.

To qualify for this incentive pay, a participating department must:

- Employ one or more police officers.
- Pay every police officer a minimum annual salary of \$4,350, based on a 40-hour week.
- Require each policeman hired after July 1, 1972, to have a high school diploma or its equivalent as determined by KLEC.
- Require each police officer hired on or after July 1, 1972, to successfully complete basic training within 1 year of his date of employment.
- Require every police officer in the department, including the chief, to successfully complete each year 40 hours of inservice training appropriate to his rank and responsibility and

Basic and advanced police photography offer a challenge to trainees.





the size and location of his department.

KLEC has the responsibility of conducting or approving all the training, and the Kentucky Crime Commission has the responsibility of administering the rest of the program.

The bill also provides that the fund will match on a 50-50 basis any program designed by eligible local units of government to compensate officers for college credits attained. However, the fund will not pay more than \$500 per year to any one police officer under this plan. The Kentucky Legislature has set aside \$4.75 million in State and Federal funds to pay policemen under this legislation.

### *Participation and Success*

Kentucky's policemen are meeting the standards and the training requirements in ever-increasing numbers. Already 1,630 Kentucky policemen (out of a total of 2,900 believed to be eligible) have completed the necessary 40 hours of inservice training. Thirty-nine have completed the basic course and 31 are now in basic training.

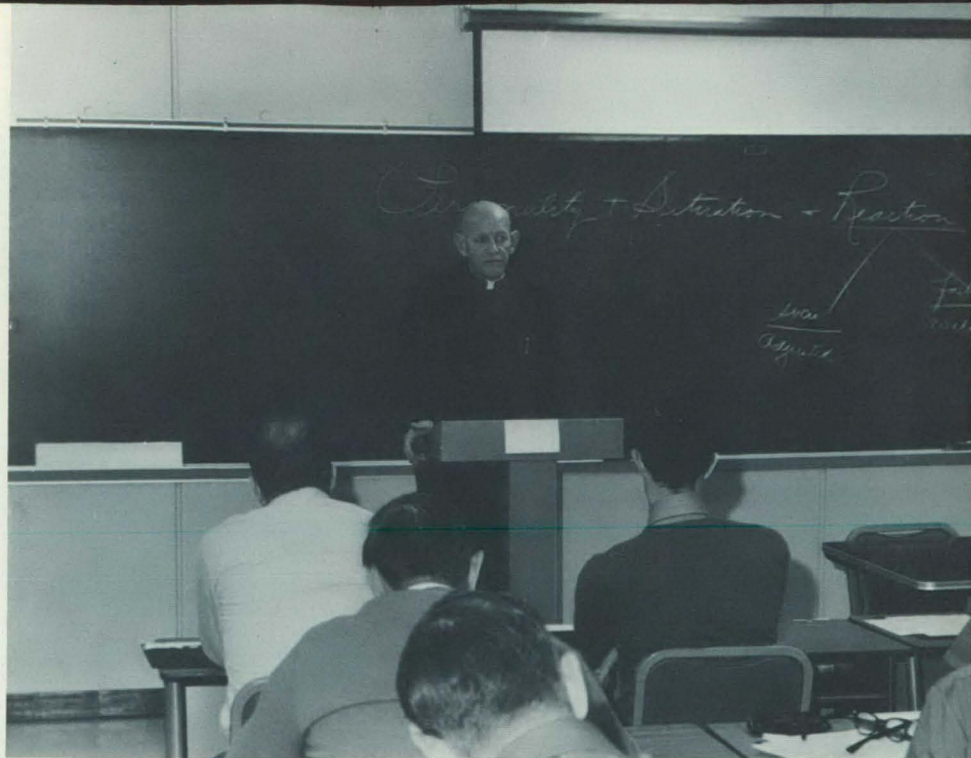
The basic police training course is designed not only to teach laws, police techniques, and skills, but also to develop new attitudes toward many law enforcement problems. The area of human relations, for example, constitutes a full week, and professors of sociology and psychology, as well as experienced policemen, teach this vital subject.

The 10-week basic course is divided into modules of 5 weeks. An officer may begin with the first week or the

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*"Kentucky's policemen are meeting . . . [minimum police] . . . training requirements in ever-increasing numbers."*

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An associate professor at Bellarmine College in Louisville instructs a "Human Relations" class in a Police Supervision Course.

sixth week of any course. He may then complete the remainder of the course any time within the first year of his employment. As each week is devoted to a separate area of instruction and contains a separate test, an officer seeking to meet his 40-hour inservice requirement may do so by attending the basic course if such training is appropriate to his rank and responsibility.

The executive director of KLEC is a member of the recently formed National Association of State Directors of Law Enforcement Training (NASDLET). This group, comprised of State training directors throughout the country, coordinates activities of the member State agencies and meets twice a year to compare progress and to solve the problems of member organizations. The training directors participating in NASDLET find that mutual problems exist throughout the United States. A problem faced by one has usually been successfully resolved by others.

It is still too early to determine what effects the pay incentive bill has had

on law enforcement performance. But it is already evident that the emphasis on better police training has helped to generate activities in many other areas of the criminal justice system. Some of these activities, for example, have been:

- Establishment of a Kentucky Association of Chiefs of Police.
- Passage of a new criminal code.
- Scheduling an annual conference of Kentucky coroners (judges, attorneys, and law enforcement officers are invited to join in these conferences).
- Creation by the attorney general's office of a Prosecutor Assistance Unit and publication of a monthly Criminal Justice Bulletin, as well as a Criminal Law Volume containing sections of the Constitution and statutes pertaining to police work in a volume small enough to be carried in





Col. Charles Carlton Oldham, Kentucky Law Enforcement Council (KLEC) Chairman, is shown presenting a certificate to an officer who has completed his training requirements.

the glove compartment of a car.

- Breathalyzer (an automated device for determining concentration of alcohol by breath analysis) training conducted by the Traffic Safety Institute at Eastern Kentucky University and certified by KLEC.
- Passage of legislation requiring all police instructors, except those in institutions of higher education, to be licensed by KLEC.

The KLEC staff has 20 employees, including 12 professional police in-


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*“ . . . the grave responsibilities of the law enforcement profession require a dynamic training effort.”*

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structors. These instructors have a total of 14 college degrees and 147 years of police experience. The emphasis in the entire program is not only concerned with the amount of training but with the quality of training conducted.

*“ . . . emphasis on better police training has helped to generate activities in many other areas of the criminal justice system.”*

Adequate police training programs are increasingly demanded by State, county, and city officials. They are welcomed enthusiastically by a crime-threatened public. Moreover, the grave responsibilities of the law enforcement profession require a dynamic training effort. This not only improves the profession's capability but raises officer morale by instilling in them pride and confidence. With improved law enforcement training, crime will find fewer opportunities to happen and less success when it does. The community will be a better place to live for all our citizens. 



# Profile of Attorney General Elliot L. Richardson



The Honorable Elliot Lee Richardson was confirmed by the U.S. Senate on May 23, 1973, as the 69th Attorney General of the United States. Nominated by President Richard M. Nixon to replace the Honorable Richard G. Kleindienst, who resigned his post on April 30, 1973, Mr. Richardson brings to the Department of Justice a rich and distinguished career. He first served with the Department of Justice as U.S. Attorney for Massachusetts from 1959 to 1961, and in 1961 as Special Assistant to the Attorney General.

At the time of his nomination, Mr. Richardson was Secretary of Defense, in which position he served since January 30 of this year. Prior to that, he was Under Secretary of State from January 24, 1969, until June 24, 1970, when he became Secretary of Health, Education, and Welfare (HEW). He headed HEW until assuming the leadership of the U.S. Department of Defense.

Mr. Richardson was born in Boston, Mass., on July 20, 1920. He graduated cum laude from Harvard College in 1941 and subsequently enlisted in the U.S. Army in 1942 as a private. When honorably discharged from the Army in 1945, as a first lieutenant, Mr. Richardson had been awarded numerous citations for his service

during combat in the European theater.

Returning to Harvard to continue his education, Mr. Richardson was president of the Law Review and received his law degree, cum laude, in 1947. Upon graduation from the Harvard Law School, Mr. Richardson served for a year as law clerk to Judge Learned Hand of the U.S. Court of Appeals for the Second Circuit. He was also law clerk for Supreme Court Justice Felix Frankfurter during 1948 and 1949.


From 1949 to 1953 (as well as three other periods from 1955 through December 1964), he was an associate and partner in a Boston law firm. In 1953 and 1954, Mr. Richardson served in Washington as assistant to Massachusetts Senator Leverett Saltonstall, who was then Chairman of the Senate Armed Services Committee. He served by appointment of President Eisenhower as Assistant Secretary of HEW for Legislation from 1957 to 1959 and as Acting Secretary of HEW from April to July 1958.

Elected Lieutenant Governor of Massachusetts in 1964, Mr. Richardson coordinated the State's human resources programs. In 1966, he was elected Attorney General of Massachusetts and established the Nation's

first State-level organized crime section.

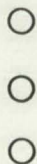
Mr. Richardson is a member of the American Law Institute, the American Bar Foundation, the Council on Foreign Relations, the American Academy of Arts and Sciences, the National 4th (IVY) Infantry Division Association, the Disabled American Veterans, and the American Legion. He has served as a member of the Board of Overseers of Harvard University and as chairman of a number of its overseers committees. He was also a Director of the Harvard Alumni Association, 1957-60.

Mr. Richardson is a former trustee of Radcliffe College and the Massachusetts General Hospital, President of the World Affairs Council of Boston, Director of the Salzburg Seminar in American Studies, the Massachusetts Bay United Fund, and United Community Services of Metropolitan Boston. He is a member of the Advisory Committee, Massachusetts Council for Public Schools, and the Executive Board, Boston Council, Boy Scouts of America. A recipient of many honorary degrees, Mr. Richardson is the author of numerous articles on law and public policy.

His wife, the former Anne F. Hazard, and he have three children: Henry, Nancy, and Michael. 



# The State of Development of the FBI's Automatic Fingerprint Identification System



*The following is a paper, Part I of which appeared in the June 1973, FBI Law Enforcement Bulletin, by Special Agent Conrad S. Banner, Chief, Automation and Research Section, Identification Division, Federal Bureau of Investigation, Washington, D.C. It was prepared for the Project SEARCH International Symposium on Criminal Justice Information and Statistics Systems held at New Orleans, La., in October 1972, and is reprinted from the proceedings of the symposium with the permission of the SEARCH Project Coordinator. In the interest of currency, certain information has been updated.*

## PART II

### *The Envisioned Future Automated Fingerprint Identification System*

**T**he FINDER system has been designed to process 10-finger fingerprint cards. This is because FINDER is intended to be the prototype of eventual production model equipment which will be used to process the large quantity of fingerprint cards received daily at the FBI Identification Division. Figure 9 is a simplified functional block diagram of the future automatic fingerprint card processing system as currently envisioned.

As depicted in figure 9, all fingerprint cards received will first undergo a computerized name search. This processing step corresponds to the

name search procedure practiced in the manual records system presently employed at the Identification Division and is utilized for the same purpose. Experience in the manual system has shown that because of the high percentage of recidivism by criminals, it is cost/effective to perform a search of the names and other descriptive data appearing on incoming fingerprint cards against a name index file compiled from previously received arrest cards. A name search which leads to a positive match avoids the more complex and costly search by fingerprint characteristics. However, in order to insure the accuracy of such matches, each name search match must be verified by having a fingerprint technician visually compare the finger-

prints on the search card with those on the matched prior arrest card.

Fingerprint cards that are not matched to prior arrest records by the computerized name search procedure, and those cards matched to records by name searching but failing subsequent visual fingerprint verification, will be sent on to the automatic fingerprint identification system for processing. Other inputs to the system are the general descriptive data (i.e., age, sex, etc.) previously digitized for use in name searching, but which can now be used to limit searches to special subdivisions of the computerized arrest fingerprint file.

The automatic fingerprint identification system will consist of several production model version FINDER fingerprint reader systems, a special purpose high-speed minutiae matching processor, a mass data storage and retrieval system, one or more medium-to large-scale general purpose computers, and related control and interface units. Fingerprint cards that are to be searched will be fed into fully automatic card-handling units of the fingerprint reader systems. Each fingerprint reader will scan all or a preselected number of fingerprints on the cards, extracting both the minutiae and ridge direction data from each fingerprint scanned.

These data are passed on to a general purpose computer which utilizes the ridge direction data to register (i.e., normalize) the measured values of both the minutiae and ridge direction data to a standard positional reference system. The general purpose computer next derives classification codes from the registered ridge direction data and the general descriptive data. The resulting classification codes are then communicated to the mass data storage system for retrieval from the fingerprint minutiae file of all sets of minutiae data that fit the same classification codes.



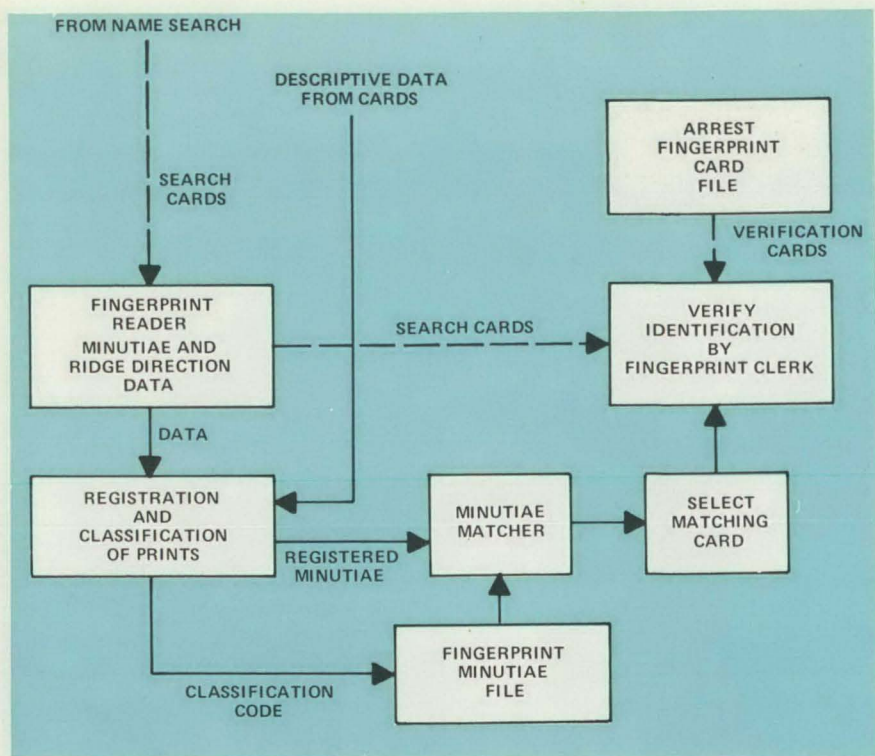


Figure 9.—A simplified functional block diagram of the future automatic fingerprint card processing system.

The candidate sets of fingerprint minutiae retrieved from the file and the registered minutiae of the search fingerprint card are next sent to the special purpose high-speed minutiae matching processor, or "matcher." The matcher uses a statistical scoring scheme to measure the degree of correlation between the minutiae values of each fingerprint of the candidate file cards and those of the fingerprints of the search card. If a high degree of correlation is found between the minutiae values of a file fingerprint and a search fingerprint, a high matching score for the two fingerprints will result. These one-against-one matching scores calculated by the matcher are then transmitted to the general purpose computer. The computer selects candidate file cards that received consistently high matching scores on all 10, or other predetermined number of fingerprints, and combines the scores in such a way that the candidate file card that matched the search

card with the best overall score will be identified as the match.

The automated fingerprint identification process will terminate with a verification step to insure the accuracy and integrity of the system. Present plans call for this step to be performed by a fingerprint technician who will conduct a visual comparison of the fingerprints appearing on the actual search card with those on the actual file fingerprint card that was identified as a match by the automated system. This is a duplication of the verification procedure presently practiced in the manual system; however, it is possible that at some future time an automated verification procedure will be developed and adopted.

### Conclusion

It is apparent from the foregoing that much progress has been made toward finding the answer to the question of whether a machine can dupli-

cate the fingerprint processing capability of the human technician. But, however tempting it might be to answer the question now in the affirmative, based upon the successes achieved in experiments to date, we feel compelled to refrain from doing so as it must be recognized that the experiments represent limited samplings and were conducted under laboratory conditions rather than production work conditions. Much additional research work remains to be accomplished before we will acquire the confidence to supply a conclusive answer.

However, with the acquisition of actual automatic fingerprint reading equipment, we have hastened the day when we will be in a position to supply a definite answer to the question. This is because the equipment provides us with the means by which we will be able to test thoroughly, evaluate, and perfect our theories on automatic fingerprint identification. For example, before we acquired the FINDER equipment we were unable to generate a large number of computerized fingerprints for use in experiments without incurring exorbitant processing burdens and costs. It previously took  $1\frac{3}{4}$  hours for a general purpose computer to perform the functions that are now performed by the preprocessor unit of the FINDER system in one-half second. With the FINDER system we can now generate data bases of computerized fingerprints of whatever size required and this can be done economically.

As previously indicated, construction of the FINDER equipment was completed in August, 1972, and the equipment is presently at the FBI Identification Division in Washington, D.C., where it is undergoing extensive testing and evaluation. These tests include experiments to evaluate how well the FINDER equipment performs its assigned functions as well as experiments designed to evaluate and

(Continued on page 28)



The utilization of trained dogs to combat crime has many advantages. Where many police officers would be used and several hours would be required to search a building for a hidden suspect, a trained dog can perform the job in a matter of minutes. Many times a dog has been successful in finding a suspect after the area has been searched by police officers. Dogs can also be used at the scene of a crime to track a suspect to his place of hiding or to a vehicle which might facilitate his escape. In a recent murder case, the police dog was the only link between the scene of the crime and the getaway car. The dog tracked the suspect from the house where the crime had been committed, through the yard, across two alleys and a highway where, after a short distance more, it lost the scent. Witnesses, however, were found nearby who subsequently testified that they saw the man get into a car and drive away.

The Metropolitan Police Department (MPD), Washington, D.C., normally maintains a total complement of 80 to 85 canine teams. Seven of these teams are used in narcotics and explosives detection. Five teams are on detail to assist the U.S. Capitol Police, and two are used in a continuing public relations program which consists of giving demonstrations and talks to school children and civic organizations.

## Program History

The first class of the MPD Canine Center, Washington, D.C., commenced training on January 2, 1960, and by

\*The author served with the Metropolitan Police of London (Scotland Yard), England, for 27 years, with the canine section of that agency for 10 years, and as its canine instructor until his retirement in January 1959. Mr. Cahill subsequently came to the United States and served with the Baltimore City Police Department in Maryland as civilian canine instructor until November 1959, and was appointed to his present post with the Metropolitan Police Department, Washington, D.C., in December 1959.





# Detectors

SNIFFING  
OUT  
CRIME



By  
**T. PATRICK CAHILL\***  
Chief Training Instructor,  
Metropolitan Police Department  
Canine Center,  
Washington, D.C.

mid-1965, over 90 man-dog teams were patrolling the streets.

In 1969, in an effort to help control the problem of illegal narcotics in Washington, D.C., members of the canine branch began to study and observe the techniques of the narcotics divisions of Federal law enforcement agencies and police departments that were using dogs for the detection of cannabis, i.e., marihuana and hashish. A visit was made to the training kennels of the Metropolitan Police of London, England, where successful training of Labrador retrievers for the detection of marihuana was observed. After studying their methods, it was decided to try a young male Labrador appropriately named Narco.

After 6 months of training, Narco was ready for operational duty. In co-

operation with the Narcotics Squad, Narco made several successful finds of marihuana. This four-footed member of the MPD was recently accepted as a reliable witness in a court case involving the use of narcotics. In June 1970, Narco uncovered a cache of marihuana in the automobile of a defendant. The drug had been hidden behind the wiring in the rear of the glove compartment.

During courtroom tests to determine his accuracy, Narco sniffed out narcotics accurately in two of three tests conducted within a 2- to 5-minute period. After this courtroom demonstration, the presiding judge ruled that the use of the dog to pick up a scent outside the vehicle had not violated the constitutional rights of the accused. Narco was the star witness. This episode received national and international attention because it was a test case to ascertain whether evidence produced by a narcotic-detecting dog could be considered valid in a court of law, and whether a canine can be considered a reliable witness.

During 1970, three German shepherds were added to the MPD's corps of narcotics-detector dogs. In March 1971, all four dogs began their training to detect heroin. To our surprise the transition was extremely easy. We started off with 100 percent heroin, then reduced to 50 percent, and then to 25 percent, and eventually to the street-level strength of 4 percent and 2 percent. The heroin was cut with various materials, i.e., dextrose, milk and sugar, quinine, etc. Frequent tests were conducted to assure that the dogs were locating narcotics and not the cutting agent or the wrapping used to encase and conceal the narcotic.

*"Successes . . . have proven that canines are efficient professionals whose work minimizes the exposure of the citizenry and the police officer to danger."*





Training dogs to detect explosives was first contemplated by the canine staff early in 1970, and by the end of August 1970, the project was begun—thus making MPD a pioneer in training explosives-detection dogs.

Initially, a male German shepherd was started in explosives-detection training. After 2 months his progress proved unsatisfactory. The training of a second German shepherd was begun, but again after 2 months his progress remained stationary, and it was also decided to drop the second dog. Our training efforts were hampered by the fact that there was, at this pioneering stage, no standard by which to judge progress. In retrospect, we were too impatient or expecting to attain too much efficiency in too short a time. Finally, a dog was brought in off general street details for training in explosives detection. The dog selected

had been used in shows, demonstrations, competitions, and various community-relations programs sponsored by the department. It had an excellent nose and the handler had good control. The training in explosives sniffing was productive, and within 2 weeks the animal was reliably detecting suspected samples. The canine explosives-detection program became operable in February 1971, and four more dogs were added to these teams.

### *Uses and Requirements*

Trained dogs may be utilized in general street details such as surveillance, patrol, search, tracking, pursuit, and sentry duty assignments. Or, they can be developed for specialized use in narcotics and explosives-detection teams. Dogs have been used for many years by the Armed Services and by many police departments on a national and international basis. Trained dogs are being used by more than 300 police departments in the United States. Almost every large city in Europe employs dogs to assist police in crime and narcotics detection. These dogs are used in the countries along suspected drug routes, at the borders leading from one country to another, and by customs officials in most countries throughout Europe, as well as in Canada, Mexico, and Vietnam.

All dogs used by the MPD are German shepherds with the exception of one Labrador retriever. Each animal was donated by the public or purchased by civic groups and then donated to the department. All are males, between the ages of 1 and 2, weighing over 65 pounds, in good physical condition and appearance, and with a good sound temperament.

Sixty percent of the dogs offered for



Chief Jerry V. Wilson.

service with the department were rejected on preliminary examination. The remaining 40 percent were given a physical examination and X-rayed for hip dysplasia (a common canine ailment). Of the 40 percent chosen, half were rejected by the veterinarian mainly for hip dysplasia. Of those remaining, approximately 6 percent were weeded out before or during training.

Dogs considered for police training are tested for gun shyness, a willingness to work, good olfactory sense, and their response to various phases of the training. All dogs are taught to track for missing persons, lost children, criminals fleeing crime scenes, and weapons or articles that might have been discarded by criminals. The dogs are taught to search buildings and open areas for hidden suspects, and to provide protection for their handler.

Most dogs are over 12 months old before their training is attempted. Younger dogs have been found to have too short an attention span to train effectively. In addition, working police dogs should be generally inquisitive, alert without excitability, and

"Narco" with instructor at Metropolitan Police Department Canine Center.



*"All dogs used by the MPD . . . [were] donated by the public or purchased by civic groups and then donated to the department."*



adaptable to changing human and environmental conditions. Dogs are rejected for use when their interest declines and they have to be driven to perform. All dogs are treated humanely at all times and are given monthly health checks by the veterinarian.

The German shepherd is utilized by law enforcement agencies more than any other breed because:

It has a reputation throughout the world for its superior performance as a "police dog";

Its supply (by donation) is far greater than any other breed suitable for police work;

It adjusts easily to extremes of temperature and other conditions; and

Its aggressive appearance has a psychological effect as a crime deterrent. (Probably its greatest asset.)

### Canine Training

To alleviate the possibility that the dogs trained to detect heroin might become addicted through continual sniffing of heroin, all dogs are given a monthly health examination. This includes urinalysis and blood tests to detect the presence of heroin. These checks are continued as long as the dog is being used for heroin detection. Great care has to be taken during training to prevent the dogs coming into direct contact with the narcotic. Any narcotic can be extremely dangerous if accidentally swallowed and could prove fatal to the animal.

It has been suggested by some misinformed sources that the dogs are deliberately made to become addicts so that they crave the drug, and it, therefore, becomes an incentive for them to find. There is no good evidence this is the case. As to the dogs

*"To alleviate the possibility that the dogs trained to detect heroin might become addicted . . . [they] . . . are given a monthly health examination."*

used for detecting drugs in the MPD, none of them have been given any drug as an incentive nor have any of them shown any ill effects, to date, from their narcotics-detection work.

Canine-specialist detectors are trained to block out everything except the compulsive desire to sniff out explosives, narcotics, or other objects they are trained to find. Dogs that have been fully trained for general street assignments, and later for specialized detecting, will not forget their early training. They will respond to commands taught them previously. Special care must be taken initially, however, when dogs from street details are given specialized detection training. They have become accustomed to working among people in threatening and distracting circumstances. As a result, their attention and efforts must be carefully redirected exclusively to their specialized tasks.

Following training as narcotics or explosives detectors, five of the MPD detector dogs have entered competitions which necessitated searching for humans, weapons, or other objects and performing attack work amidst gunfire. It was encouraging to observe that competition in no way affected the dogs' abilities in their specialist fields, or vice versa.

In order to perform a multiplicity of tasks, the dogs and their handlers have to be specially selected. The dogs must first be trained and experienced in general street assignments and then given specialist training as detector dogs. Each step in the detection process should be taken separately and concluded satisfactorily before the next phase is started. Specialist dogs must have continual, daily practice to maintain their detection abilities at peak performance.



Officer (handler) and "Major" are effective narcotics and explosives-detection team.

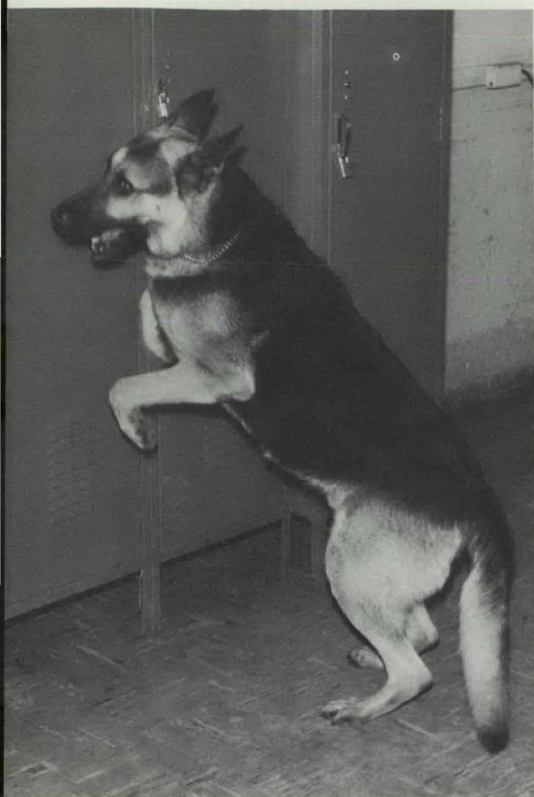
*"Specialist dogs must have continual, daily practice to maintain their detection abilities at peak performance."*

The Metropolitan Police Department has the advantage of having a large canine operation with a good selection of dogs and is able to keep its specialist dogs solely for the purpose for which they were trained.

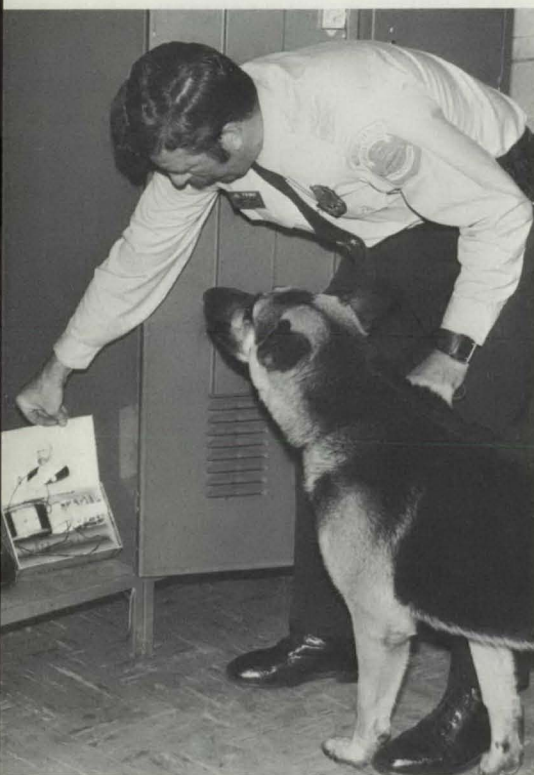
I would suggest that smaller canine units utilize one handler with two dogs, i.e., one for general street assignments and the other as a specialist. When working, the handler could carry both dogs in his car. I think this would be an easier solution for small departments wishing to have dogs available for both narcotics and explosives detection, in addition to their normal street detail.

A specially trained narcotics-detector dog can be trained to locate ex-





"Major" barks to identify suspect locker (above) which contained dangerous clandestine explosive device (below).



plosives as well. Unlike its experience with narcotics, however, the animal must be trained not to attempt retrieval or pawing of the suspect explosives. Instead, it must be taught to sit and bark when it finds explosive material. Under no circumstances should the dog be encouraged to touch or disturb suspect material which, of course, could be fatal to the animal, his handler, and any others nearby.

While aggressiveness is an asset for any police dog, this quality must be carefully controlled without diminishing it in the training of explosives-detection canines. We have found in experiments that a dog with aggressive traits works better for long intervals of time and with more enthusiasm than the one without aggressive traits.

The training for explosives-detection dogs is extremely rigorous. They are required to locate incendiary devices in spite of efforts to conceal them by location or packaging, as well as attempts at disguising their nature by mixture with foreign material. Trainers use locations such as a sealed canister submerged under water, or one carton containing explosive material may be buried beneath several hundred cartons.

These trained dogs are capable of locating a full range of commonly available military and civilian explosives. This identification is made by a precise action from the dog—he barks and points to where the explosive is hidden. This allows his handler to locate the explosive immediately. The speed with which the dog works is impressively fast as compared with the efforts of human searchers. For example, frequently a 50-yard corridor filled with lockers can be searched by a trained canine in less than 2 minutes due to the fact that the dog is capable of making swift decisions based on his olfactory sense. The detection reliability of these dogs is well in excess of 95 percent. This high performance factor, com-

*“. . . frequently a 50-yard corridor filled with lockers can be searched by a trained canine in less than 2 minutes. . . .”*

bined with its rapid rate of search, makes the trained dog an excellent first choice in checking out bomb scares.

### **Handlers and Teams**

The great risks and responsibilities that are placed upon the handlers of explosives-detecting dogs cannot be overemphasized as a major consideration in the training of detector teams. The teams are called upon to search large buildings and areas where explosives are suspected to be hidden. They search room by room and, by the process of elimination, declare each area safe as they leave. Eventually the entire building or area is declared safe.

One has to remember that the dog cannot work continuously. It has to be given periods of rest in which to clear its nose and to rest the overworked olfactory membranes. Fortunately dogs recover very quickly from the strain of search. When available, more than one dog should be used. A handler must frequently utilize all his powers of persuasion to stimulate the dog to keep working in a very tiring and boring assignment.

The relationship between the handler and the dog is very important to their effectiveness as a team. Superior canine performance is more often the result of the dog's desire to please the handler than its interest in a material reward.

Handlers are instructed in the laws, procedures, and search techniques applicable to the use of dogs by a law enforcement agency as well as the technical aspects of canine training. Lectures on grooming, care of the dog,



anatomy of canines, principal canine diseases, first aid, and theories on scent are also part of handler training. When training teams for other departments, the staff of the training section, canine center of the MPD, reserves the right to reject man or dog if they do not attain the necessary standard to become a proficient team. MPD handlers who successfully complete the course receive technicians pay after completion of 60 days on the street which is approximately \$680 per annum.

A minimum of 14 weeks is required to train a team. It takes about 9 months to a year before an officer and a dog become a proficient team. Once training is completed, it is essential that the team continue to receive inservice training at least 1 day every 2 weeks. Two consecutive inservice training days a month, however, have been found to be even more beneficial.

### Results

Since the inception of the bomb detection program, MPD canine teams have responded to more than 500 calls for bomb-search assistance.

In one case involving a canine bomb detector team, the dog sniffed out a bomb within minutes of its detonation. On September 28, 1972, a telephone call was received at one of the major bus terminals threatening that a bomb had been placed in the terminal and had been set to detonate within a few minutes. Personnel at the terminal contacted the MPD Canine Center and requested a canine team to search the terminal. The terminal was promptly evacuated, and within a few minutes of the arrival of the

*"Superior canine performance is more often the result of the dog's desire to please the handler than its interest in a material reward."*

Trained detector dog swiftly searches exterior of suspect car and promptly finds narcotics behind license plate.





## CANINE TEAMS' PERFORMANCE

	1969	1970	1971	1972
<b>Narcotics detection:</b>				
Number of calls_____	13	26	43	34
Successful _____	6	6	21	14
<b>Explosives detection:</b>				
Number of calls_____			213	361
Declared safe_____			213	360

team, the dog had located the device within 12 minutes of its scheduled detonation. Thus lives and property were saved with a minimum expenditure of time and manpower. In this case there were enough explosives, had the device detonated, to cause damage to the structure and to inflict serious human injuries.

### Outlook

Canine usage by law enforcement agencies is growing in the Washington metropolitan area. Several Federal agencies, e.g., the U.S. Park Police and the U.S. Customs Bureau, utilize canine teams. The U.S. Capitol Police and several nearby police departments including Arlington, Va.; Montgomery County, Prince Georges County, Md.; and Fairfax County, Va., have had officers and dogs trained by the MPD Canine Training Center. The Fairfax, Va., police teams were trained under grants provided by the Law Enforcement Assistance Administration (LEAA) and the Federal Aviation Administration (FAA). Specifically, 13 teams were trained for the U.S. Capitol Police and 4 teams for the Fairfax County Police. All teams were trained in all phases of police work.

After being assigned to street details for 2 or 3 months, six of the U.S. Capitol teams and four of the Fairfax County teams were brought back for additional training as explosives-detector teams. The four teams

used by the Fairfax County Police Department are used at both Dulles International and Washington National Airports when required. These teams serve as a psychological deterrent to potential airplane hijackers, in addition to being used to locate suspect incendiary and explosive devices.

The use of dogs is now considered a legitimate tool in assisting government, law enforcement, and private agencies interested in obtaining maximum security through the utilization of the natural abilities of trained canines. The potential for the use of dogs in the field of detection and se-

curity provides vast areas for further examination which, for the most part, have been unexplored except for the military, a few private concerns, and some law enforcement agencies.

Intensified studies during the last decade within those agencies having canine experience seem to indicate a trend toward accelerated usage of dogs in police work. Successes in narcotics, other crime, and explosives detection have proven that canines are efficient professionals whose work minimizes the exposure of the citizenry and the police officer to danger. In addition to the problems of crime prevention, drug abuse, delinquency, and the many other facets of modern law enforcement, the 20th century poses the growing problem of fanatical snipers and terrorists. These types of lawlessness require urgent solutions, and based upon the successful performance of MPD canine teams, they can be greatly thwarted by trained police dogs.

FBI

"Major" easily jumps through obstacle during inservice training.





# The Imperative of Police Legal Training\*

The  
Legal



Digest

By

INSP. CHARLES A. DONELAN  
Federal Bureau of Investigation,  
Washington, D.C.

*"We will appoint as justiciaries, constables, sheriffs, or bailiffs only such men as know the law of the land and keep it well."*

*—Magna Carta (1215 A.D.)<sup>1</sup>*

The so-called "crime problem" is not a matter of deep concern to the thinking American citizen simply because crime exists. After all, crime has been around since Cain slew Abel and, so long as men are men and not angels, it is bound to remain. What disturbs his peace of mind is the great growth and prevalence of crime in our day. As it strikes closer among relatives, friends and neighbors, and strangers are victimized more often by its brutal attack, the fear and compassion naturally aroused increase his concern. He becomes angry and impatient. He cannot understand why so much is said these days about rights of every kind except those which constitute the most precious a man, woman, or child can possess.

What about the right to life, he exclaims, or the right to the integrity of the human person, or the right to the inviolate shelter of the home—all willfully ripped asunder by the murderer, the rapist, and the burglar?

The national statistics justify the citizen's anxiety. From 1955 to 1971, the total of serious crimes committed in America climbed from 1,333,000 to 5,995,000. A ray of hope was recently seen in the report that the crime rate declined 3 percent during 1972. This event is encouraging for it represents the first downturn in 17 years. But the fact remains that the incidence of crime is still too great for comfort and, consequently, its further reduction is essential.

*\*Inspector Donelan is chief of the Legal Instruction Unit, FBI Office of Legal Counsel. The article is based on his address at the Fifth Annual Law Observance Day Banquet, Knights of Columbus, Milwaukee County, Milwaukee, Wis., May 1, 1973.*

## Police Role of Protector

The instrument used by society since time immemorial to protect itself against the danger of crime is the criminal law. The purpose of this rugged branch of the law is to prevent crime by holding out the threat of punishment to would-be criminals in the form of death, imprisonment, and fine. Such punishment is the harshest sanction in our jurisprudence and, thus, it is not surprising that no one arm of government is given a monopoly on the enforcement of the criminal law. As the Supreme Court of the United States once observed:<sup>2</sup>

*"The lawful instruments of the criminal law cannot be entrusted to a single functionary. The complicated process of criminal justice is therefore divided into different parts responsibility for which is separately vested in the various participants upon whom the criminal law relies for its vindication."*

The "various participants" referred to by the Court include our police officers, public prosecutors, judges, and correctional officers. Each has a specific, critical role to play in providing the protection which is the community's due. Only the competent performance of all, backed by



*"What disturbs . . . [the citizen's] peace of mind is the great growth and prevalence of crime in our day."*

strong community support, can insure the achievement of the great purpose for which the criminal law was intended. Our interest tonight lies in the police officer—the responsibility placed upon him and the training he needs to shoulder it well, with particular emphasis on legal instruction.

The police officer constitutes the law's most visible personification in the streets and alleys of the Nation, and it is up to him to vindicate it in the first instance. By reason of his close contact with crime and the criminal, he is the man-up-front where the going is the roughest from the standpoint of personal danger, tension, and the pressure of instant decision. One grim statistic may suffice to indicate just how rough the going is. Last year 112 law enforcement officers were murdered in line of duty, and so far this year 36 were called upon to make the supreme sacrifice for the community they serve.

Needless to say, the police officer is not in contact with criminality round-the-clock. In the course of a day's work he deals with a host of social problems outside the ambit of the criminal law where people are in trouble, often in the very extremities of life. He falls heir to the wide and amorphous human estate where such crucial problems arise for lack of other interested claimants.

The police officer's main mission is to safeguard the community by preventing the outbreak of crime. The principal means he employs to keep the public peace is patrol. Police patrol does much to reduce the oppor-

tunity for the commission of crime, but there are many offenses which the most vigilant patrol cannot forestall. When such occur, frequently the gravest felonies on the books, the police effort necessarily shifts to investigation and the collection of evidence aimed at the prompt detection and apprehension of the criminal.

Once the officer has made the arrest of the probably guilty person and brought his prisoner before the committing magistrate, his task is done to all intents and purposes, and the responsibility of vindicating the criminal law moves to other authorities of our criminal justice system. Thereafter, according to classic theory, the goal of justice is to be attained by the speedy trial of the accused, the imposition of just punishment upon him if his guilt is established beyond a reasonable doubt, and his rehabilitation.

### ***Police Professionalization***

It is idle to think that the police officer of today can carry out his many duties in the exemplary fashion the community has a right to expect without being trained "to the nines." It is true that men were once given a badge, a billy, and a gun and sent out on the streets to enforce the law with the benefit of little or no instruction. But those were "the dear, dead days beyond recall." The many social, economic, and cultural changes which time has brought have made on-the-job police training anathema to our contemporary society.

The public safety now demands a police officer who has added to the discipline, ethical code, and storied dedication of his proud calling the final mark of the professional

man; namely, specialized knowledge. As Mr. Justice Robert H. Jackson of the Supreme Court of the United States declared 20 years ago in an address before the American Bar Association:<sup>3</sup>

"We recognize that police work is and ought to be a profession. It is skilled, technical work and the policeman ought to be valued by his community on the basis of a skilled and educated service."

Although the drive for professional status through the light of learning was launched long ago by far-sighted law enforcement leaders, its current advance has a great momentum. Reference to only one recent, and highly significant, development may indicate the present impetus. Twelve years ago, 15 of our institutions of higher learning awarded baccalaureate degrees and 40 granted associate degrees in the law enforcement and criminal justice field. Today, 515 colleges and universities grant degrees in this area ranging from the associate to the doctorate; and, furthermore, at least 900 of these institutions offer some courses designed for law enforcement.<sup>4</sup> This healthy ferment is edifying. It harbors nothing but good for the Nation.

You may ask what specialized knowledge ought a police officer possess to enable him to discharge his responsibilities in the professional manner? The short answer is that he must acquire the formal knowledge which such academic disciplines as the behavioral sciences, the forensic sciences, and the law can provide, together with a mastery of the many skills and techniques, ranging from firearms to the processing of a crime scene, which make up the traditional police arts. In all this, and as an absolute prerequisite, he must be imbued with a philosophy of effective, fair, enlightened, and scrupulously lawful enforcement compatible with the values of a free people in an ordered

*"By reason of his close contact with crime and the criminal, he [the law enforcement officer] is the man-up-front where the going is the roughest from the standpoint of personal danger, tension, and the pressure of instant decision."*



*"... as an absolute prerequisite . . . [the officer] must be imbued with a philosophy of effective, fair, enlightened, and scrupulously lawful enforcement compatible with the values of a free people in an ordered society."*

society. Perhaps a note on the FBI National Academy and a partial description of the instruction afforded by its Department of Law may supply some detail to these generalities.

### **Police Training**

The FBI National Academy was founded by the late Mr. J. Edgar Hoover in 1935 for the purpose of training selected officers from police agencies throughout the United States and the free world. By the close of 1972 this pioneering institution had sent forth 6,330 graduates, many of whom became trailblazers in the police educational movement. Its teaching staff is comprised of FBI Agents assigned on the basis of their professional and field experience, scholarly background, and personal commitment to this important phase of Bureau operations. Through a valued affiliation with the University of Virginia, college credit is awarded the officers for the academic studies they successfully pursue. They also receive the benefit of courses taught by members of the several faculties of this great university, including professors and the associate dean from its prestigious school of law.

The 60-hour curriculum offered by the Department of Law covers a wide spectrum of legal topics. Among others of intellectual interest, interdisciplinary scope, and practical importance to the police officer, these topics include: the Constitution of the United States, Principles of the Substantive Criminal Law, the Law of Evidence, and Constitutional Criminal Procedure.

Since this is Law Day when we celebrate our priceless American heritage of freedom under law, it may be fitting to discuss the topic of Con-

stitutional Criminal Procedure. The rules comprising this body of law are generated by the fourth, fifth, and sixth amendments in the "Bill of Rights" which safeguard such fundamental individual liberties as the right to personal security and privacy, the privilege against self-incrimination, and the right to counsel. These amendments guarantee that law enforcement officers will not restrain a man's personal freedom or invade his home without sufficient legal cause; that they will not compel him to accuse himself of criminality; and that they will not deprive him of the assistance of a lawyer at critical stages of a criminal prosecution. These liberties apply to everybody—the guilty as well as the innocent. They limit the action of all officers—State and Federal alike. They are on the line every time a police officer in the course of duty stops and frisks a dangerous suspect, makes an arrest, conducts a search, interrogates a prisoner, or assembles a lineup. Clearly, the protection of these basic rights against arbitrary official action is a matter of major concern to the citizen, the courts, and the professional police officer.

The field of Constitutional Criminal Procedure is constantly being expanded and is marked by a growing number of "No Trespass" and "Caution" signs. If officers disregard these signs, both the violation of a rule and its consequences are most serious. A willful violation amounts to nothing less than the lawless enforcement of the law. A good-faith mistake—the product of excessive zeal or lack of understanding—mars the professional image. In either event, any evidence of criminality obtained by such violations will be rendered useless as proof of guilt. This is so because the courts

not only condemn police conduct violative of constitutional rights, but also they will not permit the fruits of police misconduct to be used at trial to convict. The judges exclude the incriminating proof, no matter how relevant it may be, under a rule of evidence designed to compel respect for constitutional rights by removing the police incentive to disregard them.

There is no question that invocation of this exclusionary rule in a particular case may mean, as the great jurist Benjamin N. Cardozo once remarked in a famous aphorism, that "The criminal is to go free because the constable has blundered."<sup>5</sup> But the law, which can never affirmatively allow its officers to disobey its commands, is willing, however reluctantly, to pay this high price as a deterrent to unconstitutional law enforcement. Thus, if an obstinate or ignorant officer discovers evidence of crime or the criminal by improper means, he does nothing positively except satisfy his own curiosity. Indeed, he may even help a man, guilty in fact, escape justice under the law.

### **Police Responsibilities v. Constitutional Rights**

A fair balance must be struck between society's need for protection against crime through effective enforcement and its interest in insuring that basic rights of its individual members are not abridged by unlawful police action. If breaches of the ramparts of the Constitution can be prevented by education of those who must enforce the criminal law in the first instance, it is folly not to use this instrument to the limits that time and expense will allow. Although there is no need to make a "Philadelphia lawyer" out of the patrolman of Middletown, U.S.A., it is absolutely necessary that he be thoroughly schooled in the parts of the law that affect his daily work. What does it



*"A fair balance must be struck between society's need for protection against crime through effective enforcement and its interest in insuring that basic rights of its individual members are not abridged by unlawful police action."*

profit an officer "to find his man and the goods" if through lack of knowledge he violates the supreme law of the land and all his work goes for naught? What does it profit the community if his unconstitutional act leads to the return of an obviously guilty offender to its streets "unwhipped of justice"?

The law enforcement need for legal training and the type of instruction essential to its fulfillment may be demonstrated by reference to the rules of constitutional criminal procedure governing the police action of search and seizure based upon the fourth amendment. The verbal commands of the amendment are as plain as a pike-staff, but the application of the rules evolved from these commands is another matter. The amendment reads: <sup>6</sup>

"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

The legal terrain within the scope of the fourth amendment is very broad, and too diverse and uncharted for description here. Suffice to say that in safeguarding the rights of personal security and privacy, it extends to unreasonable seizures of a man's person by illegal arrest as well as to unreasonable searches of his home, office, automobile, or other possession. On the one hand, it forbids a search and seizure for evidence of guilt based on mere suspicion; but, on the other

hand, it provides a constitutional means of obtaining such evidence when probable cause for belief in guilt exists. While it speaks in terms of searches and seizures authorized by warrant issued by a judicial officer who determines that the requisite probable cause is present before such action is taken, and such procedure is plainly preferred, it nevertheless allows warrantless searches and seizures to be made, for varying reasons and under several doctrines, in certain carefully defined classes of cases.

The history of a recently decided case involving emergent police action taken in a fast-breaking on-the-street encounter when no time to obtain a warrant was available may illustrate how closely the mandates of the fourth amendment follow the officer.<sup>7</sup>

Early one morning in a high-crime area of a large city, a police sergeant was operating alone on a patrol duty. At 2:30 p.m., a person whom he knew approached him and said that a man seated in a nearby automobile was carrying narcotics and had a gun at his waistband. The officer went over to the car to check out the report. No gun was visible from the outside. He tapped on the window and asked the occupant to open the door and step out. Instead of doing so, the man rolled down the window. When he thus failed to respond to the request, the officer reached quickly into the car and grabbed a fully loaded revolver at his waist, precisely where the informant said it would be. He then arrested him for unlawful possession of the gun. A subsequent search of the man and his automobile produced substantial quantities of heroin, a hypodermic needle, a machete, and a second gun.

Although this incident might seem to many citizens to be an example of good courageous police work, and that alone, the legal questions involved in the case were not settled until it went to the highest court in the land for final determination. The main point at issue was the legality of the policeman's action in the light of the fourth amendment. In this regard, it must be stressed that under the law an officer has to reasonably conclude that criminality is afoot before he acts, and that whatever evidence of guilt his action may later bring to light is irrelevant to the question of its initial propriety.

### *No Clear Distinctions*

The odyssey of the case was this: The occupant of the car was tried in State court and convicted of unlawful possession of the handgun and the heroin. The State supreme court affirmed his conviction, declaring that the officer's actions were not unreasonable under the State and Federal constitutions. Thereafter, a Federal District Court denied the defendant's application for habeas corpus relief. On his appeal to a Federal Court of Appeals, two of the three judges likewise denied his claim, the third dissenting. But later, the court of appeals, on reconsideration by a seven-judge panel, held that the conviction had to be set aside on the ground that the officer acted unreasonably under the fourth amendment. One judge dissented.

Finally, 7 years after the event, the Supreme Court of the United States received the case. After a review of its facts and circumstances, the high court overruled the court of appeals and held that the police sergeant had acted within the law.

In a 6-to-3 decision, the Court found that the informant's tip to the officer carried sufficient marks of reliability to justify the officer's response and forcible stop of the suspect. When the



suspect failed, in the setting of this encounter, to comply with the request to open the car door and step out, the gun reported to be in his waistband became a threat to the officer's safety. Thus, the latter's limited action in reaching where the gun was thought to be and seizing it was reasonable. The seizure of the revolver, in turn, gave the officer probable cause to arrest the suspect for unlawful possession of the gun; and the subsequent search of his person and automobile, leading to the seizure of the narcotics and other evidence, was a lawful incident of that arrest.

As this case made its way through the courts, the police sergeant's actions were examined by 23 judges sitting on 5 different tribunals on 6 separate occasions. Yet even though these wise and experienced men carefully reviewed the officer's performance in the cool light of reflection, they could not reach unanimity of opinion. Where 14 of them concluded the officer was right, 9 concluded he was wrong.

I mention this case for one purpose only—to show by concrete example the need for police legal training. It shows how grave legal questions may arise in police actions often thought to be routine. It evidences the depth of judicial concern for constitutional rights and the trouble that even the courts face in determining whether these rights are fully honored. It indicates the heavy burden of decision that lies upon the police officer who must take his bearings in the heat and hurry of an unfolding street encounter and act, if at all, with split-second speed. It indicates, too, the important stake the community has in the correctness of his decisions. In this case, for example, the officer's decision, properly

arrived at, put an armed narcotics pusher out of business where the officer's decision not to act might have allowed the gunman to ply his trade in living death without a hitch.

Training of an indepth character is the only type which can prepare the police officer to recognize the legal problems involved in his work and to follow the procedural steps prescribed for their solution. No other kind will suffice to guide him through the labyrinth of abstractions and ambiguities indigenous to the criminal law.

In a general discussion like this, no detailed review can be made of either the subject matter or instructional methodology of the legal training needed to develop the officer's ability to respond properly to police-action situations. But, briefly, if the object of study is the law of search and seizure, it will do the officer little good to be told to read or memorize the controlling fourth amendment and answer questions on its text. The knowledge he requires cannot be obtained in such a catechistical way. The terms of the constitutional provision are too comprehensive. Neither would it help much to tell him that if he lacks "probable cause," his searches and seizures will be deemed to be "unreasonable." The phrase "probable cause" in the fourth amendment is hardly more definite in meaning than its word "unreasonable." The officer may think he is moving in an elusive verbal circle.

### *Scope of Police Legal Training*

For a proper understanding of what will constitute permissible police action under the fourth amendment, the

officer has to be acquainted with the long history of official search-and-seizure abuse in England and colonial America which led to the addition of the great amendment to our Constitution. He must be made familiar with the purposes, principles and policies behind its compendious language. He must know what areas and interests are within the breadth of its protective shield and what general search-and-seizure methods and doctrines may be lawfully used and followed to penetrate it.

The officer has to appreciate that it is unrealistic to expect the courts to concoct a precise definition of what constitutes a reasonable search and seizure as opposed to an "unreasonable" one, or to draft a short checklist of what grounds of belief will satisfy the amendment's concomitant requirement of "probable cause." Concepts so malleable as these do not readily lend themselves to formula making.

During the progress of his legal training, the officer should be furnished with the law reports on leading search-and-seizure decisions by the courts for close reading and out-of-class study. Such reading and study can be helpful for several purposes. For example, the individual facts and circumstances confronting him in a particular situation will obviously provide the reasons for his decision to act or not to act. In cases under review by the courts, these facts and circumstances naturally play an equally critical and important part in the judicial determination of whether or not an officer's act was reasonable under the law. Although no two cases are exactly alike, the manner in which the courts approach a contested search and seizure, analyze the factual situation, explicate the issues, and reach their conclusion is of inestimable help in identifying those factors, frequently recurring in criminal investigation, which are of special significance in

*" . . . the police sergeant's actions were examined by 23 judges sitting on 5 different tribunals on 6 separate occasions. . . . [and] they could not reach unanimity of opinion. Where 14 of them concluded the officer was right, 9 concluded he was wrong."*



judging the constitutional reasonableness of police action.

By the same token, the study of leading cases will help the officer become familiar with the method the courts employ to determine what grounds of belief will constitute the "probable cause" necessary to justify a search and seizure. He will learn that the judges are not interested in how a legal technician would reflect on the probabilities involved in a police-action situation, but rather how reasonable and prudent men, dealing with the factual and practical considerations of everyday life, would gage the probabilities of criminality in the situation at hand. He will understand how the courts, using this commonsense yardstick, measure the quality and quantity of the factual foundation upon which an officer made his move, determining whether it was reliable enough to constitute probable cause under the amendment or was so lacking in trustworthiness that it amounted to nothing stronger than mere suspicion. He will learn what informational sources have special probative strength, the means and methods by which the facts observed or reported to him may be corroborated, and the importance of noting for possible future recall those significant facts and circumstances which motivated his decision to act. Study of the case law must be supplemented by review of legal materials by competent writers on the law and, finally, be followed by classroom discussion and exchange.


*"The police officer of today must be fully cognizant of the drastic powers he possesses under the law—both their extent and their limit."*

Sir William Blackstone, the 18th century legal commentator, once said it was best to keep constables in ignor-

ance of the drastic powers they possessed under the law.<sup>8</sup> But whatever merit this observation had in Blackstone's day, it does not possess a grain of truth so far as the American law enforcement officer of 1973 is concerned.

The police officer of today must be fully cognizant of the drastic powers he possesses under the law—both their extent and their limit. If their extent is unknown, he cannot enforce the law firmly and effectively. If their limit is unknown, he may violate those articles of the Bill of Rights which constitute the badges of our freedom. This fund of knowledge is essential to the development of the sense of self-confidence which enables him to avoid the twin faults of excessive zeal and excessive caution. Without such confidence, he may fail to move when the law commands that he act; or he may plunge ahead when the law requires him to wait. There are dangers to the community in either choice.

### Conclusion

Professional law enforcement has made significant progress in the vital quest to vindicate the criminal law. It has not done so alone. It has advanced by reason of the moral and material help it has constantly received from the thinking, responsible citizens of the country. But law enforcement is a young profession with many miles to go. Whether the great goal towards which it travels will be reached depends upon one indispensable factor—the continuation of this generous civic support. 

### FOOTNOTES

<sup>1</sup> Magna Carta, chapter 45 (1215).

<sup>2</sup> *McNabb v. United States*, 318 U.S. 332, 343 (1943).

<sup>3</sup> See 17 Federal Probation Journal 5 (1953).

<sup>4</sup> 1972-73 Directory of Law Enforcement and Criminal Justice Education, International Association of Chiefs of Police.

<sup>5</sup> *People v. Defore*, 150 N.E. 585, 587 (N.Y. 1926).

<sup>6</sup> U.S. Const. Amend. 4.

<sup>7</sup> *Adams v. Williams*, 32 L. Ed. 2d 612 (1972).

<sup>8</sup> 1 Blackstone, Commentaries, chapter 9.

## AUTOMATIC FINGERPRINT IDENTIFICATION SYSTEM

(Continued from page 15)

perfect the computer programs that are used to register, classify, and match the computerized fingerprint data generated by the reader equipment. We are unable to predict at this time how long it will take to complete this evaluation phase; however, it is clear from the complexity of the subject matter that a prolonged time period is involved. Further, our plans and timetable for the implementation of production model fingerprint processing equipment in the FBI Identification Division will depend, of course, upon the successful testing and perfection of the FINDER system.

Although the equipment is presently designed to process 10-finger fingerprint cards with the objective of reducing the amount of time and manpower presently expended in processing fingerprint inquiries at the Identification Division in Washington, D.C., we see even greater potentials for the equipment. One such potential is the possibility of searching latent fingerprints (i.e., fingerprints found at the scene of a crime) against the computerized fingerprint file. Traditionally fingerprint cards have been manually filed using 10-finger classification schemes, such as the Henry system. This has meant that in order to search efficiently the manual card file, information from all 10 fingers is required. Consequently, it is not feasible to search a single latent fingerprint against a 10-finger manual card file of any significant size.

The only alternative available to date has been to establish special single fingerprint files of necessarily limited size which are more amenable to searching latent fingerprints. But, preliminary studies indicate that, al-





A standard fingerprint card is loaded into the card-moving mechanism of the FINDER system.

though latent fingerprints are not usually themselves readable by automatic fingerprint reader equipment because of their frequently poor quality and fragmentary nature, they can be coded through the use of manual or semi-automated equipment<sup>4</sup> and then searched against a 10-finger file of computerized fingerprint data produced by the FINDER system. The potential here not only involves a re-

duction of manpower effort with concomitant cost savings, but also involves a dramatic new capability to identify criminals who have heretofore gone undetected.

Another potential lies in the possible use of automatic fingerprint reader equipment as a means for transmitting fingerprint card data over long distances. There is presently a great deal of activity in the law enforcement

*"Another potential [of computerized fingerprint data] lies in the possible use of automatic fingerprint reader equipment as a means for transmitting fingerprint card data over long distances."*

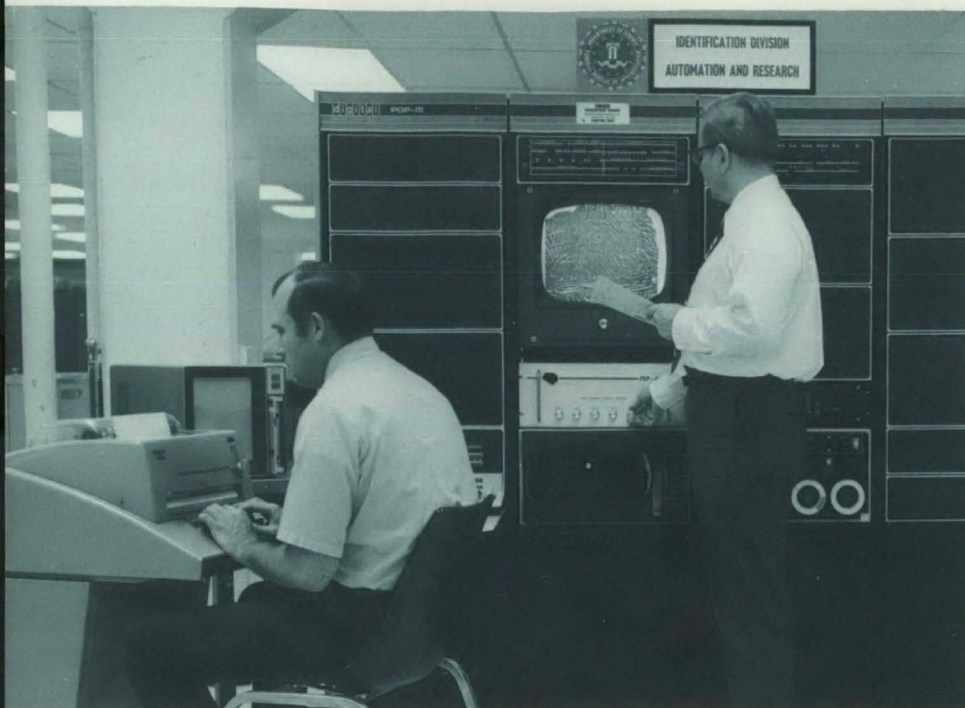
community directed at finding ways to increase the speed by which information is communicated within the criminal justice system. Facsimile equipment is presently being employed, or considered, by several agencies as a means of increasing the speed of transmitting fingerprint card data. Until now the main impediment to the wide use of facsimile for such purposes has been the high cost of the communication facilities required to support high-resolution equipment.

Since the FBI's automatic fingerprint identification system requires only certain selected data from fingerprints for registration, classification and matching purposes, complete fingerprints need not be transmitted to perform fingerprint identifications, as is the case with facsimile devices. Consequently, less data are required to be transmitted, resulting in shorter transmission times; and, since the data are in digital rather than analog form, they can be transmitted over less expensive, lower grade communication lines. This suggests that it may well be possible some day for distant law enforcement agencies to possess remote fingerprint reader terminals which would extract the needed characteristics from fingerprints and transmit them to the FBI Identification Division over the National Crime Information Center communications network for on-line searches of the FBI computerized fingerprint file.

The realization of these and other potential capabilities would result in immeasurable benefits to all of law enforcement. Our former FBI Direc-

*"The automated fingerprint identification process will terminate with a verification step to insure the accuracy and integrity of the system."*





The FINDER system control station consisting of a teletypewriter, a computer, an operator display scope, and a magnetic tape unit.

tor, the late John Edgar Hoover, assessed the value of a fully automated fingerprint identification system in these words, "Eventual success in this project will constitute the most significant advance in law enforcement since the adoption of fingerprints as a means of identification."<sup>5</sup> We believe you will agree. FBI

#### REFERENCES

<sup>4</sup> Thornburg, D. D., and Madrazo, F. G., "Semi-automated Latent Fingerprint Processing System," *Proceedings of 1972 Carnahan Conference on Electronic Crime Countermeasures*, University of Kentucky, Lexington, Ky., Apr. 1972.

<sup>5</sup> Testimony of John Edgar Hoover, Director, Federal Bureau of Investigation, before the Subcommittee on Appropriations, House of Representatives, U.S. Congress, Mar. 17, 1971.

## FBI FILM ON CRIME SCENE SEARCH

The FBI has available a 16 mm., color sound film entitled "Searching the Crime Scene." The film which depicts the proper method of conducting crime scene searches is for use before law enforcement groups only. Those agencies and departments which would like to use the film in connection with their training programs should contact the local FBI office for assistance in this regard.

(Mr. Lear)

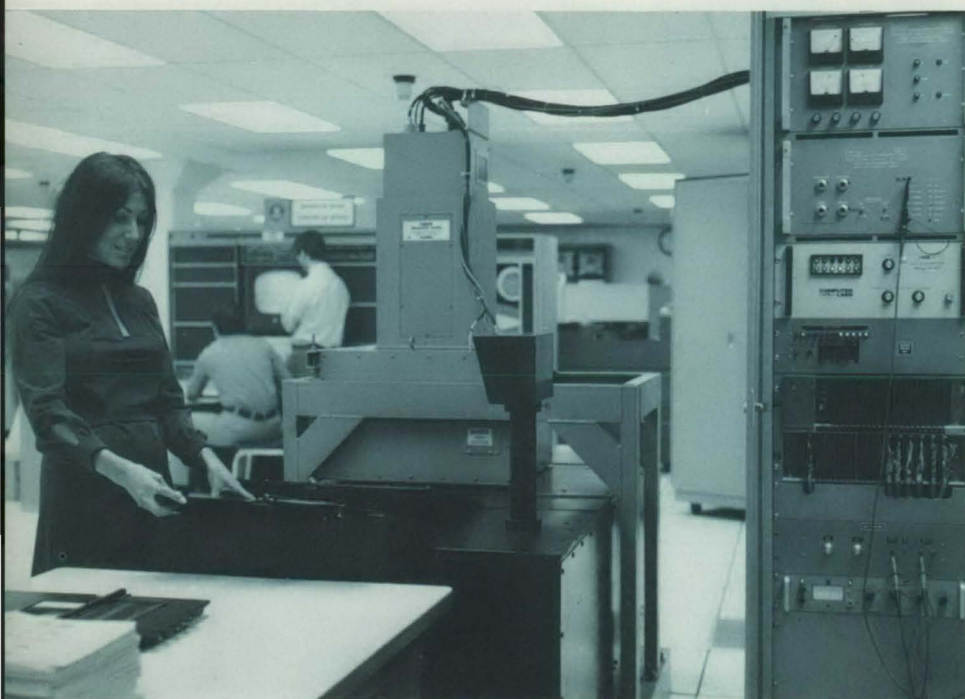
## NCIC

As of May 1, 1973, there were 4,192,342 active records in NCIC with the breakdown showing 129,609 wanted person, 811,764 vehicle, 252,384 license plate, 706,828 article, 594,279 gun, 1,393,097 securities, 6,852 boat, and 297,529 criminal history records.

In April 1973, NCIC network transactions totaled 3,214,733, averaging 107,158 daily. The record for the number of transactions processed in a day was broken on March 20, 1973, with 129,364 transactions.

NCIC Newsletter 3-73

FBI Law Enforcement Bulletin



Visible are the scanner and card-moving mechanism (center foreground), the control station (left background), and the preprocessor (right background).



# NATIONWIDE CRIMESCOPE

## CRIME FIGURES—1972

According to preliminary year-end statistics tabulated by the FBI, serious crime in the United States declined 3 percent in 1972. This is the first actual decrease in crime in 17 years.

During 1972, 94 major cities reported actual decreases in serious crime, compared with 53 cities in 1971, 22 cities in 1970, and 17 cities in 1969.

Nationally, serious crime declined 8 percent in the final quarter of the year, after registering a 1-percent increase through the first 9 months of 1972.

Violent crime increased by 1 percent in 1972, compared with a 9-percent increase the year before. Robberies, however, which make up the largest number of crimes in the violent category, showed a 4-percent decrease in 1972. Murder was up 4 percent in 1972, aggravated assault increased 6 percent, and forcible rape increased 11 percent over the previous year.

Property crime decreased 3 percent, compared with a 6-percent increase in 1971. Auto theft declined 7 percent, larceny \$50 and over dropped 3 percent, and burglary was down 2 percent.

Cities over 100,000 population reported an average decrease of 7 percent in the volume of Crime Index offenses. Crime in suburban areas increased 2 percent, compared to an 11-percent in-

crease in 1971, while crime in rural areas went up 4 percent compared to a 6-percent rise in the previous reporting period.

Geographically, the Western States reported a 2-percent rise in the volume of Crime Index offenses. The Southern States reported a decrease of 2 percent, the North Central States 3 percent, and the Northeastern States 8 percent. (U.S. Press Release and U.S. Supplement 3-28-73)

## BOMBING INCIDENTS

During the first 4 months of 1973, a total of 520 bombing incidents were reported throughout the Nation and Puerto Rico. Of the 520 incidents, 264 involved the use of explosive bombs while the other 256 were incendiary attacks. A total of 735 devices were used in connection with the bombing situations. Thirty-seven persons were injured and three deaths were reported in connection with these bombing attacks.

Geographically, the Western States reported 201 bombing incidents during the first 4 months of 1973, the North Central States 128, the Southern States 108, the Northeastern States 78, and Puerto Rico 5.

The leading targets during these 4 months were residences which suffered from 168 attacks. Commercial operations and office buildings were victims of 116

bombings. School facilities were targets of 45 reported incidents. Sixty-three were directed at vehicles; 23 were against law enforcement personnel, buildings, and equipment; and the remaining incidents involved other miscellaneous targets.

During April 1973, 122 actual and attempted bombing incidents were reported. (Press Release 3-22-73)

## LAW ENFORCEMENT OFFICERS KILLED

A total of 46 local, county, and State law enforcement officers were killed due to criminal action during the first 4 months of 1973.

On a regional basis, 26 officers were killed in the Southern States, 10 in the Western States, seven in the North Central States, and three in the Northeastern States.

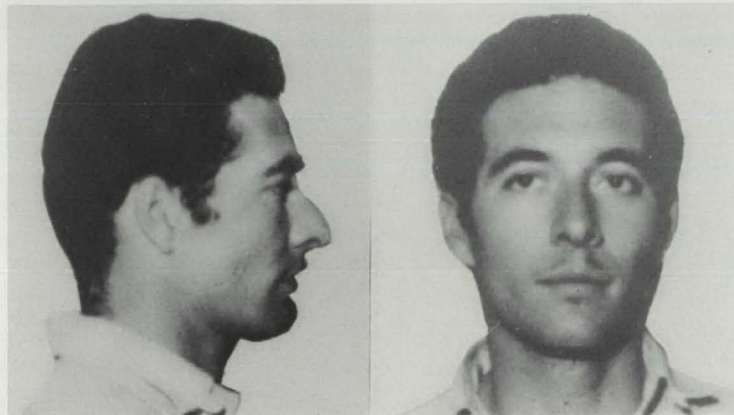
Twelve officers were killed while making traffic stops; 11 were slain handling disturbance calls; eight while attempting arrests for crimes other than robbery and burglary; six in connection with robbery matters; four in connection with burglary matters; three while investigating suspicious persons; and two met death at the hands of prisoners.

Forty-four of the 46 officers slain during the first 4 months of 1973 were killed through the use of firearms. Thirty-one of these slayings were committed through the use of handguns.

(Press Release 3-7-73)



# WANTED BY THE FBI



**FREDERICK IRVIN JONES**, also known as **Fred Jones**, **Frederick Ervin Jones**, **Frederick Irvin Jones**.

## Interstate Flight—Jailbreaking

Frederick Irvin Jones is being sought by the FBI for unlawful interstate flight to avoid prosecution for jailbreaking. A Federal warrant for his arrest was issued on April 23, 1968, at Indianapolis, Ind.

On April 7, 1968, Jones and a co-defendant escaped from the Montgomery County Jail, Crawfordsville, Ind., where they were awaiting trial on a local charge of conspiracy to commit a felony. They allegedly overpowered and severely beat the jailer. The sheriff, while attempting to aid the jailer, was also reportedly beaten and suffered broken ribs and other injuries.

## Caution

Jones allegedly has stated he will not be taken alive. He reportedly is usually armed and should be considered very dangerous.

## Description

Age..... 32, born June 6, 1941, Crawfordsville, Ind.

Height..... 5 feet 10 inches.  
Weight..... 150 pounds.  
Build..... Medium.  
Hair..... Dark brown, curly.  
Eyes..... Blue.  
Complexion..... Medium.  
Race..... White.  
Nationality..... American.  
Scars and Marks..... Birthmark left side of face, fingers of left hand deformed; tattoos: "FRED" on left forearm; sword, two spades between thumb and index finger left hand; eagle on upper right arm.

Occupations..... Carpenter apprentice, laborer, maintenance worker, and mechanic.

Remarks..... Reportedly plays the cornet and frequents night spots.

FBI No..... 634,461 D.

Fingerprint classification ..... 18 L 1 R III 5

S 1 R III

Ref: TRT

TTR

Right index fingerprint.



## Notify the FBI

Any person having information which might assist in locating this fugitive is requested to notify immediately the Acting Director of the Federal Bureau of Investigation, U.S. Department of Justice, Washington, D.C. 20535, or the Special Agent in Charge of the nearest FBI field office, the telephone number of which appears on the first page of most local directories.



# Crime Prevention Mobile Exhibit



The sheriff of Hillsborough County greets visitors as they enter the exhibit.

Designed to stimulate public awareness and interest in the overall prevention of crime and delinquency, the Crime Prevention Mobile Exhibit of the Hillsborough County, Fla., Sheriff's Office began a tour of Florida communities in August 1972. The purpose of the tour is to foster and improve communication and mutual understanding between the sheriff's department and the communities it serves.

The exhibit's mobility permits its display to all segments of the community and in every corner of the county. During the first 7 months of its operation, the exhibit was visited by approximately 66,000 persons at various locations throughout the county such as schools, civic and shopping centers, and the Florida State Fair. It has proved to be an effective law enforcement tool in educating the public and enlisting citizen support.

Visitors view three-dimensional exhibits inside the mobile unit.





UNITED STATES DEPARTMENT OF JUSTICE  
FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D.C. 20535

**OFFICIAL BUSINESS**

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JUS-432

THIRD CLASS

## INTERESTING PATTERN



The fingerprint pattern illustrated resembles a central pocket loop-type whorl. However, a close examination reveals the presence of a loop pattern appearing to the inside of the right delta below the whorl. In the Identification Division of the FBI, this pattern is classified as an accidental whorl with a meeting tracing.