COMPUTERS AND THE LAW
By Joseph Vierra

COMPUTERS AND THE LAW

By Joseph Vierra

Something about the car parked on the shoulder didn't look right to him.

The young State Trooper pulled up behind the car, his turret flashing red, and got out to investigate.

As he approached from the driver's side he saw the door swing open. There was a blurred motion of an arm, a flash, and three shots at point-blank range. The Trooper died several hours later at the hospital.

The car had been stolen and the occupant classified as "armed and extremely dangerous." Had the Trooper known this, things might have ended differently.

That's one side of the coin—the tragic price paid by law enforcement officers for the lack of immediate information. But today, the computer is making itself felt in all areas of law and its enforcement and that's the other, brighter side of the coin.

INSTANT CRIME STATISTICS

The city of Chicago is a good example. From beat to boat all policemen have access to daily crime statistics including the plate numbers on all stolen cars. All files are immediately accessible from an IBM 1410 computer.

The computer also serves as a "home" for records on 90,000 persons and vehicles. Policemen in Chicago reportedly phone or radio questions to their private data bank at a rate of 1400 per day. The reply they receive (average 2 minutes) can mean a lot to a policeman—maybe his life. From such information patrolmen can categorize their suspect in a range that runs from "shoplifter" to "potential murderer."

Citizens also benefit. Patrol cars reach emergency areas in three to four minutes and since the system was established a few years ago there has been a decisive drop in Chicago's serious-crime rate.

And Chicago isn't the only city that is adding computers to its recruiting list. The results of a recent experiment called "Operation Corral" conducted by the New York City Police Department are equally surprising. Using a Univac real-time computer, "Operation Corral" checked on 183,950 cars in 158 days. Of these, 2932 were either wanted in alarms for stolen cars or plates, or on warrants as scofflaws. A total of 165 people were arrested, many of whom turned out to be wanted on more serious charges ranging from narcotics violations to grand larceny.

The Los Angeles law enforcement agencies too, are using the computer in many ways. Using the big System Development Corporation time-sharing system, computer usage aids in sophisticated detection. Elements of a crime—including words the criminal may have used — are keypunched and subjected to a computer search. The system retrieves synonyms, similar diction, or other related linguistic aspects that correlate with the input data. This material is then presented to the detective in the form of abstracts of reports on criminals. The investigators then piece together these abstracts in an effort to develop leads.

Similar generalized systems are also on the fire. A new direct digital communications technique developed by General Electric's Communication Products Department was announced recently. The development, reported at the first national symposium on law enforcement science and technology, permits cruising police patrol cars to communicate directly with central computers for on-the-spot checking of criminal records. Known as "digital overlay," the technique is awaiting approval by the Federal Communications Commission. The system uses two-way teletype terminals installed in squad cars.

Computer Usage undertook a project for the Los Angeles Sheriff's office some years ago. The project—covering advice and assistance to County officials in their task of developing specifications for computer manufacturers — highlights some of the problems faced by local justice agencies. The level of software sophistication and the price tags are high. Most work to date has been developmental, and it is only now that mass computer usage is becoming feasible in law enforcement.

THE LAW AND THE OPEN ROAD

The glut of cars smogging up the landscape may be a headache to you on your way down to the shore for a summer weekend. But it's a bigger—and more serious—headache to State officials responsible for issuing drivers' licenses.

It was once easy for someone to have his license revoked in one State and another issued in an adjacent State. Things have changed.

CUC designed and implemented a system for the Bureau of Public Roads (Department of Commerce) which helps the States control this problem. This system — the National Driver Register Service — stores information on people who have had their licenses "denied, terminated, or temporarily withdrawn." The system identifies the driver by name, date of birth, height, weight, sex, eye color and social security number.

From this data base, the system answers inquiries from the States as to whether or not a driver applying for a license

in one State has had his license revoked in another.

Today all the states plus four territories use this National Driver Registration Service which now lists over 1.1 million revoked licenses. The Registry handles 50,000 inquiries daily.

THE TOTAL SYSTEM

Beyond local efforts in crime fighting, one of the largest efforts in the use of computers in law enforcement is the development of the total system.

Considering the impact computers are making on all aspects of law and enforcement, this is likely to hold some fairly shocking procedures in store for those who run afoul of the law.

Computer usage was highlighted at the First National Symposium on Law Enforcement Technology held last month at Illinois Institute of Technology. Ideas and information on the development of new and improved methods of crime control and prevention were discussed. One speaker, John E. Gaffney, Jr., of IBM's Center for Exploratory Studies said, "the eventual police command and control system will take advantage of the technologies and techniques developed both for military command systems and large scale, communications based computer-controlled data systems employed in the civil sector."

Following the trend, the Justice Department is granting $7 million this year for research and development into the improvement of law enforcement through computer usage. Reportedly, this money will be granted mainly for the development of computer files of criminals' habits and physical appearances, and for data transmission equipment including high speed systems for circulating data concerning stolen property.

The FBI will be running a mass test of its new computer system. The system contains arrest records filed for several years by 13,000 agencies. The test area, not yet selected, will be the pilot for a nation-wide computer system.

BAT CAVE COMPUTER—OBSOLETE

On stream now are equally far reaching computer systems that put Batman's Bat Cave Computer back in the stone age. If the Dynamic Duo's Gotham was located in New York State, it would soon be part of a law enforcement network reaching state-wide through the long tentacles of third generation computers to catch up with increasingly mobile criminals.

The New York State Identification and Intelligence System, NYSIIS (pronounced NIGH-SIS) is the name of this fearless crime fighter.

A team of CUC analysts and programmers is in Albany right now working on the design and implementation of NYSIIS. The system, when complete, will pool the information resources and needs of New York State's 3600+ agencies concerned with the administration of criminal justice.

Basically, NYSIIS will be an information storage and retrieval system, using a computer facility (The Burroughs B-5500) in Albany and an advanced communications network throughout the State. NYSIIS, created by statute in June 1965, will go "on-line" early in 1968 to a limited extent. Right now, the software design has been largely completed and a portion of the system is being implemented, or in software terms, programmed.

NYSIIS is concerned at present with the identification of criminals. It is divorced from enforcement per se. Rather, it functions as an information service bureau for existing criminal justice agencies. This role in New York—and throughout the United States—is a crucial one for two reasons.

First, the rapidly increasing population coupled with increased urbanization, has created more crime. This increased crime coupled with the criminal's increased mobility, makes such a system mandatory for contemporary society.

The second reason is a legal one. The Supreme Court recently pointed to the need for "scientific investigations" in its recent decisions on confessions and admissions. NYSIIS, in Dr. Robert R. J. Gallati's words, is "the largest study group at any level of government in this country today that is actually engaged in research and development work for entirely new areas of the scientific investigation of crime."

Dr. Gallati, Director of NYSIIS, puts the nature of NYSIIS succinctly: "Our every step is a first step and learning to walk is difficult."

Let's take a look at NYSIIS in action. Suppose a police officer in Binghamton, New York arrests a suspect on a charge of larceny. The "Booking/Arraignment" process alone (this is the time between the formal police charge and appearance of the suspect before a magistrate) requires the police to have certain facts.

They must be able, for example, to make a positive identification of the suspect. And, to determine the prisoner's disposition at the arraignment, they have to know his prior record of arrests and convictions and his current criminal justice status.

Clearly, the most important fact about the arrestee is positive identification. And, this can normally be achieved only through his fingerprints.

The police in Binghamton maintain fingerprint records of persons previously arrested by them. In all, the Binghamton Police Department has records of less than 7,000 individuals. (Some small criminal justice agencies maintain prints in case folders, or some other order than the fingerprint classification, further complicating rapid file search and positive identification.)

The Binghamton Police may well have to turn to other police agencies or the FBI Identification Division in Washington, D. C.—and wait days for a response.

The determination of a suspect's criminal record is essential for determining his disposition at the arraignment. Investigation, for example, requires police to solve the case and identify the criminal. Here, clues—handwriting, leads, prints, names, chemical stains—can lead to the crime's solution. The road to the criminal, however, is dependent on how much the investigator can learn about him, how much information can be retrieved and analyzed to support the conclusion that he could, in fact, commit the crime under investigation.

Throughout New York, investigating officers face critical problems in response time. These delays are met by working with more limited information or by extending the time limit and holding a suspect on a technical charge (like vagrancy) until an acceptable data base can be developed.

This is one of the key issues that led NYSIIS to the conclusion that "the central clearing house responsible for providing coordinated information must have the capabilities of a computer at its disposal."

One of the interesting technical aspects of the NYSIIS system concerns the "communications module." In the Burroughs system, it's called the "Handler." No matter what it's called, it's got a rough job.

CUC also has the responsibility for the design of this communications module which basically exercises control over on-line devices. If you figure that the NYSIIS system will ultimately have 12 teletype units and 30 cathode ray tubes you get some idea of the complexity required of the "Handler." And, if you stop to consider that, by 1970, NYSIIS will offer a 100% direct access system and store over 1 billion characters on disc, you realize how sophisticated the communications module will really have to be.

Ultimately, NYSIIS will have 18 capabilities—

• Criminal history

• Fingerprints
• Fraudulent checks
• Personal appearance
• Name searches
• Warrant and wanted notifications
• Intelligence & organized crime
• Pattern analysis
• Stolen motor vehicles
• Selected social history
• Modus operandi
• Missing persons
• Permits and jobs
• Stolen property
• Property marks
• Scientific and criminological research
• Handwriting
• Voice prints

The first of these capabilities—criminal history—is referred to as Building Block One. This Building Block is the massive first step, the computerization of criminal history, fingerprints, fraudulent checks and personal appearance information. These capabilities will be supplemented by a statewide facsimile transmission network—like remote input-output terminals for hard copy.

NEW TOOL FOR LAWYERS

It would be a mistake, however, to leave a brief discussion of computers and the law with a description of law enforcement technology. Although the most heavily funded—and most critical—area, enforcement is only a part of the computer's role in the law.

One part of the legal profession that has surely discouraged many a budding Daniel Webster is legal research. Picture a law student performing brilliantly throughout law school, finishing near the top of his class, agonizing over preparation for the bar exams and making it, first time out.

What's in store—a spectacular opportunity in the upper echelons of corporate legal practice? A humble but satisfying independent practice? Or, perhaps a junior partnership in a law firm? Never! Most likely he's on his way to one of the most gruelling "internships" around as a law clerk researching cases for the preparation of briefs.

That this may not always be the case can be seen in the formation of such groups as New York State's Legal Retrieval Center or the nonprofit corporation, the Lawyers Center for Electronic Legal Research, announced recently. The Lawyers Center, first specializing in the labyrinth of

Federal tax law will be entering tort and contract law. Its services, available to attorneys at a reported $25 a question, could be in operation within a couple of years, according to Thomas C. Plowden-Wardlaw, vice-president and director of the Center. Mr. Plowden-Wardlaw commented, "The use of computers to retrieve legal information is the most important change in the administration of law since the advent of written law reports."

The Center's computer system would provide the lawyer with citations to all relevant authorities and precedents in response to a question. Several states already have statutory research systems in operation which gather and search statutory complaints. The University of Pittsburgh has set up a system that is presently being used in New York, New Jersey, Pennsylvania, Ohio, Kansas, Texas and Nebraska. The actual texts of the statutes are used for the searching base. In 1965, in New York State, close to 500 searches were performed in the legislative area alone.

Another proof of the active interest in computer usage on the part of the legal profession is the joint American Law Institute and American Bar Association course "Law and Computers in the Mid-Sixties." The course covered problems and potentials inherent in the use of computers. In addition to covering the impact of computers on banking, insurance, and labor law, the course covered such questions as the admissibility of certain types of computer evidence and the civil liability of certain types of computer usage.

In addition to adding muscle to the law, the digital computer makes a better than fair librarian and typist as well. For example, every Monday morning a computer-produced list of all bills complete with identification and sponsor, is given to the committee chairmen of the New York Senate. And computer usage makes administering of education laws —through the analysis of budgets and expenditures—more meaningful and economic.

PROBLEMS SEEN

Computers are sure to cause problems too. For instance, who is to blame if a non-computerized railroad is involved in a train wreck. Modern traffic control systems almost necessitate computer controlled accuracy. Is the railroad guilty of negligence? If the railroad is computer controlled and an accident occurs, who is to blame—the system, the manufacturer, the railroad or all three?

Suppose a man is injured because his employer did not use a computer when it was available to test the reliability of certain equipment? These are problems that the lawyers in the near future will have to solve.

THE ROAD AHEAD

Crime is easily one of our Nation's most serious social ills. Recently after 18 months of careful research, President Johnson's Commission on Law Enforcement and Administration of Justice reported that overt crime in the United States is a national disgrace. And overt crime is only the top of the iceberg.

In a 300-page report submitted a few months ago, the Commission reported that the overall crime rate in this country has been steadily on the way up in recent years. In 1964 it rose by 13 per cent, in 1965, 5 per cent and last year 11 per cent. Perhaps computerized crime detection is only one of the ways the computer can be brought to bear on the problem. Maybe the most significant contribution that computer usage has to make in the area of crime is in prevention.
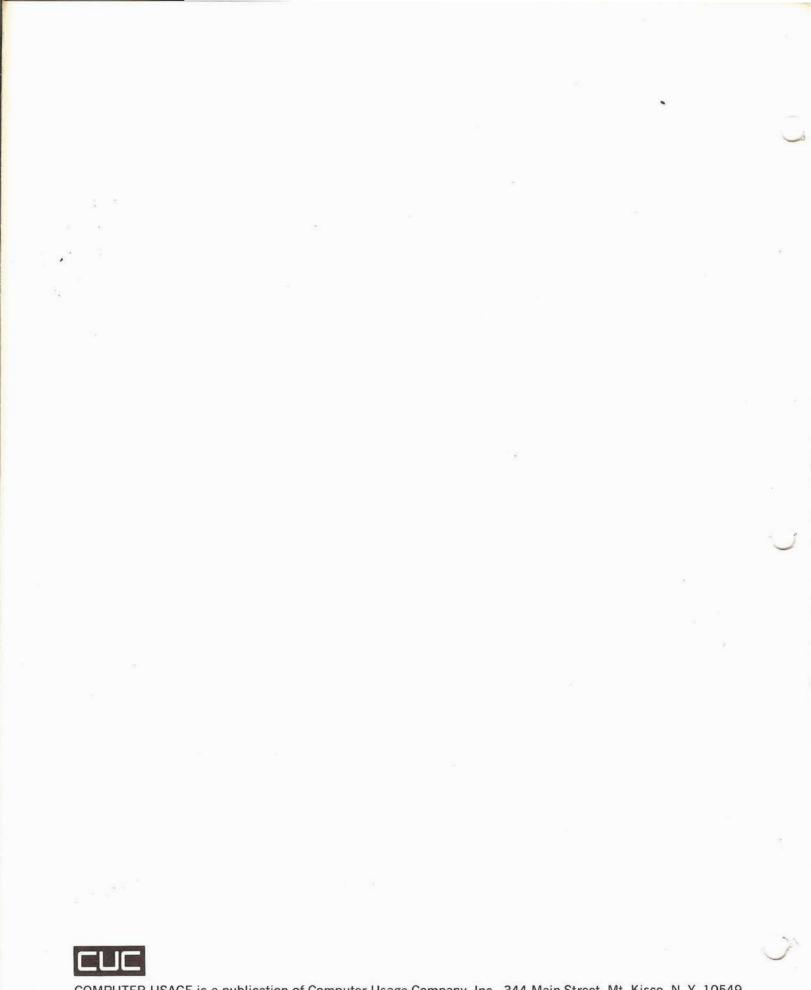
It is not a new idea. The Justice Department has granted the 143 year old Franklin Institute in Philadelphia $78,000 for a crime prevention study. The study includes working with a local police department to try to pinpoint all the factors involved in crimes committed in one day. With the results, the experts hope to find some social pattern that would facilitate deploying police protection in a scientific way—rather than using intuition. Scientists have found that in many cases tangible factors play an intricate part in crime—weather, payday, neighborhood and other socio-economic conditions that can be tabulated. The goal—predicting crimes on an hour-by-hour, neighborhood by neighborhood basis. The computer program that might enable such a breakthrough was demonstrated last month by a team of scientists from the Institute.

Whatever the solution, it will be enhanced by computer usage. There are few areas or professions that inherently need the computer's talents as desperately as law and its enforcement.

Joseph Vierra joined CUC in 1962 as a client representative. He had previously been a Marketing Representative to the Federal Government for both Minneapolis-Honeywell and for Remington Rand.

In 1965, Mr. Vierra was made Manager of CUC's Washington office and successfully guided that office until last month when he was appointed Northeastern Regional Manager.

He holds degrees from the College of the Pacific and the University of Lausanne.