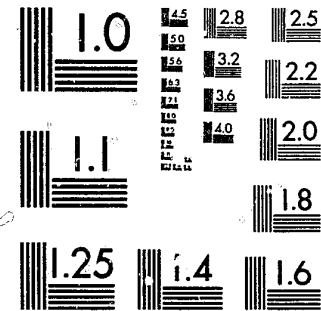


National Criminal Justice Reference Service

ncjrs

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U. S. Department of Justice.

National Institute of Justice
United States Department of Justice
Washington, D. C. 20531

9/16/83

FBI LAW ENFORCEMENT BULLETIN

MARCH 1983

88517
-88521

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by
FBI Law Enforcement Bulletin

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

Special Issue
**The Role of the Computer
in Law Enforcement**

FBI LAW ENFORCEMENT BULLETIN

MARCH 1983, VOLUME 52, NUMBER 3

EMG

Contents

- NCJRS
APR 13 1983
ACQUISITIONS
- 2 REJIS: A Computer Information Network 88518
By Steven F. Claggett
 - 10 National Crime Information Center—Your Silent Partner
By George Lyford and Udy Wood, Jr. 88519
 - 16 The National Stolen Art File 88520
By John B. McPhee, Jr., C. Thomas Spitzer, and Robert P. Sundin
 - 24 Microcomputers for Law Enforcement
By Lee McGehee and Glenn M. Whiteacre
 - 27 Sharing a Computer: An Economical Means to Obtain Data 88521
By James P. Damos
 - 32 Wanted By the FBI



The Cover: The efficient exchange of information is essential in today's criminal justice system. See article on REJIS, p. 2.

Federal Bureau of Investigation
United States Department of Justice
Washington, D.C. 20535

William H. Webster, Director

The Attorney General has determined that the publication of this periodical is necessary in the transaction of the public business required by law of the Department of Justice. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget.

Published by the Office of Congressional and Public Affairs,
Roger S. Young, Assistant Director

Editor—Thomas J. Deakin
Assistant Editor—Kathryn E. Sulewski
Art Director—Kevin J. Mulholland
Writer/Editor—Karen McCarron
Production Manager—Jeffrey L. Summers
Reprints—Marlethia S. Black



ISSN 0014-5688

USPS 383-310

Director's Message

The low-cost computer technology that is today making computers available, and affordable, for small business and home use also offers the opportunity for smaller police departments to duplicate many of the innovations that heretofore were only available to the largest law enforcement agencies. Use of the computer is cost-effective today to achieve better police service to our communities in crime statistics analysis, patrol deployment techniques, and other types of information retrieval.

Articles in this issue of the Bulletin illustrate the usefulness of computer technology, especially to the smaller police agency. Chief Damos of University City, Mo., and past president of The International Association of Chiefs of Police (IACP), leads the way with an explanation of distributed data processing, a concept which involves sharing a computer that also allows access to a regional criminal justice information system using IACP-developed software packages. Then, the system as a whole is developed in an article on REJIS, the St. Louis area Regional Justice Information Service that ties together police, sheriffs, courts, and corrections agencies into an information network.

Small department use of new microcomputers is detailed in an article from Florida, and one of the FBI's newest uses of computers, in the new stolen art file of the FBI Laboratory, is also explained in this issue. This central repository of computerized data and photographs of stolen and recovered art

works now holds more than 5,000 entries and should be invaluable in combating this growing crime problem. The reader is, of course, aware of the National Crime Information Center operated by the FBI for local, State, and Federal agencies, but we wanted all law enforcement professionals to have an overview of the current capabilities of this computer system.

Thoughtful police administrators, especially with knowledge of computer use that is growing within our population, are realizing the usefulness of the computer in information handling and analysis—and are recognizing the abilities of law enforcement personnel to develop programs most useful to police in this information field. Police managers also need to be aware of the importance of quality-control procedures to insure that the "computer error" well known to the consumer does not infect law enforcement computer use.

Computers can't replace competent police work, but they can be a tremendously useful tool, one that makes information work for law enforcement.

William H. Webster

William H. Webster
Director
March 1, 1983

88518



“REJIS exists to serve the public interest through developing and providing cost-effective information services for components of the justice community”

An efficient computer information network that draws on Federal, State, and local criminal justice data is enabling officials to cope with crime and criminal justice more economically. The network is the backbone of REJIS (Regional Justice Information Service), which serves a complex geographical area that includes the City of St. Louis, 92 incorporated communities in St. Louis County, many other communities in 3 adjacent Missouri counties, and 4 counties across the Mississippi River in Illinois.

REJIS provides data processing services and online information systems for 84 agencies, including police and sheriffs' departments, prosecutors, courts, correctional institutions, and probation/parole agencies. These services are provided for Federal, State, county, and local government agencies since REJIS is connected to computers operated by the Missouri Department of Revenue (DOR), the Missouri Uniform Law Enforcement System (MULES), the FBI National

Crime Information Center (NCIC), and the National Law Enforcement Telecommunications System (NLETS).

The proper functioning of justice today often depends upon the efficient interchange of information. Without it, systems overloaded by clients and paperwork cannot protect adequately the public, the police officer, or the person arrested. Even in a single city, a variety of justice agencies that must remain independent are highly interdependent on information pertaining to arrests, past records, court hearings, postponements, resettlings, and the like.

Established in 1973 by the City of St. Louis and St. Louis County, REJIS employs 88 individuals and has an annual budget of more than \$4 million. Housed in its facilities are an IBM 4341 model group 2, System/370 model 158 attached processor, 2 IBM 3705 communications controllers, 24 3350 disk drives, and 8 3420 tape drives. Linked to this central system are nearly 250 terminals, most typically IBM 3276 and 3278 display stations, plus 3 small

computers at distribution data processing sites.

The efficiency of REJIS has reduced costs or produced revenues for its users in many ways. In the past, the City of St. Louis lost income because only 19 percent of outstanding traffic tickets were collected. However, by using a system developed by REJIS called METERS (Metropolitan Tag Enforcement and Reporting System), the city collected more than \$1.9 million in parking fines from July 1978 to July 1979, the first full year of operation, as compared to collections of \$490,000 the previous year—without an increase in staff. Since then, the number of offenders with multiple parking violations has dropped 75 percent.

In St. Louis County, implementation of REJIS enabled the St. Louis County Police Bureau of Central Police Records to achieve substantial annual labor savings through a 19-person reduction in staff and additional operating space because of the removal of huge manual card-filing units. Informa-

REJIS

A Computer Information Network

By
STEVEN F. CLAGGETT*
*Institute for Law and Social Research
Washington, D.C.*

**Mr. Claggett formerly served as the general manager of REJIS in St. Louis, Mo.*



Mr. Claggett

tion retrieval and updating were enhanced and time once spent providing facts to other police agencies is now better allocated since most of the agencies are REJIS users and can access the data through their own terminals.

A total of 28 area municipal and associate circuit courts cope with growing case loads more efficiently with REJIS' Metropolitan Docketing System (MDS). At the Municipal Court of the City of St. Charles, for example, which handles 6,000 cases a year, MDS has reduced the manual workload by an estimated 30 percent, while providing needed information faster and more accurately.

However, more than monetary benefits are realized by this system. Within 3 days after terminal operators at the Eastern Region of the Missouri Division of Probation and Parole began entering their cases into the REJIS Correction System, their terminal printer began producing automatic arrest notices—notifications of computer matches or "hits" between persons arrested somewhere in the region and probationers or parolees under State supervision.

The eastern region handles more than 6,000 probation and parole cases at any given time or about 35 percent of the total State caseload of the Missouri Division of Probation and Parole.

Approximately 80 man-hours a week were required to check case records manually against 8-hour regional arrest summary reports. REJIS eliminates this checking. Also, because notifications flow off the printer 24 hours a day, 7 days a week, personnel know within minutes of a possible probation or parole violation.

Today, REJIS' online files enable each user via individual video terminal(s) to enter or update records in the system. The operator can quickly retrieve one specific record or several possible matching records. Besides giving REJIS users the fastest possible access to large files, the online systems insure that entries, corrections, or cancellations are equally rapid. This offers the quickest means to determine whether a person is wanted or property is stolen. It also reduces the chance of mistaken police action due to outdated information on a previously wanted person or stolen property that has been returned.

The computer automatically compiles listings or statistics which would take employees several hours or days to complete manually. These might include the names of all persons entering or leaving jail within a given month or types of sentences handed down during a year, by type of offense. Standard documents, such as summonses, jury notices, attorneys' reminders, and others, can be printed automatically.

Furthermore, through its interfaces with other law enforcement systems, REJIS provides, in effect, a nationwide data base—all available through the user's REJIS terminal. Via the Missouri DOR, for instance, REJIS users quickly obtain ownership data on vehicles, personal descriptors of licensed drivers, and their traffic violation records. The same type of

response can be obtained from other States via NLETS. The terminal network also provides a secure, high-speed message-routing system throughout the continental United States. Messages beyond REJIS' area go automatically through MULES and NLETS computer center in Phoenix.

Record privacy and confidentiality are high priority concerns. A full-time REJIS staff member audits users to ensure that information is being properly handled and advises them in matters such as location of display terminals in secure areas. Data on an individual are updated properly, accurately, and protected against misuse.

The roots of REJIS go back to the late 1960's when the Omnibus Crime

Control Act was passed and LEAA (Law Enforcement Assistance Administration) was established to help local units with funds. The response at the local level was often to buy computer hardware. This was true in the St. Louis area, and simultaneous requests for computers were made by many criminal justice agencies.

However, local political and business leaders have worked for years to achieve regionalization. The establishment of a Regional Justice Information Service was a logical next step. All users voluntarily participate and finance their own operations, with St. Louis County paying part of the fee for municipalities within its borders. There are no Federal or State subsidies.

Patrol officer radios dispatcher for a vehicle license number check to be searched through REJIS.





During the formation of a regional criminal justice information center, the St. Louis Metropolitan Police Department agreed to transfer all of its equipment and personnel to the new regional agency. More recently, the metropolitan police department installed a small computer, as have several other users, as part of the distributed data processing (DDP) concept which REJIS is developing. These distributed computers handle departmental accounting (payroll, budgets, and other local administrative data processing), compile local statistics, and analyze workloads to uncover problem areas within the department's operation, in addition to REJIS' data processing functions.

REJIS is controlled by a seven-member appointive commission representing police boards, the judiciary, criminal justice planning, government administration, and the citizens of St. Louis. According to a member of the commission, "REJIS exists to serve the public interest through developing and providing cost-effective information services for components of the justice community; supporting coordination and information exchange



among these components; conceiving, evaluating and recommending improvements; and implementing these as appropriately authorized."

Online Services

Stolen/Wanted/Towed Vehicles—One of the most used files on the REJIS system, it can be searched by various identifiers, primarily license plate number or vehicle identification number. The majority of vehicle records meet the criteria for the State Highway Patrol's MULES system and are automatically duplicated and forwarded to their system. Various records, such as stolen vehicles or felony-wanted vehicles, will meet NCIC criteria and are duplicated and sent to NCIC, in addition to being in both REJIS and MULES systems.

Adult Arrest—This system establishes the basic file data on an arrested person. The computer record contains his personal descriptors, complete data on the arrest incident, original charge(s), and the police disposition of the case. Prosecutors and corrections

"[The REJIS Corrections System] is basically a record-tracking system . . . which follows a subject from the time of initial incarceration to final probation/parole release."

agencies with authorized access can display the arrest record and use the data as the base for their own case record.

Field Interview Report—This is a local agency file for each agency to use in identifying suspects from fragmentary information such as nickname, appearance, physical location of a person or vehicle in a certain vicinity at a particular time, and complete physical descriptors of either people or vehicles.

Wanted/Missing Persons—This file contains a description of wanted or missing persons and the charge(s) or reasons why they are wanted and by whom. Records meeting MULES/NCIC criteria are added to those systems automatically as well.

Local Criminal History—This file contains the local criminal history of individuals entered by agencies within the region. In addition to providing complete background on the suspect, it can assist in identifying suspects from fragmentary information.

Municipal Police Management—Based on the dispatcher's incident log or calls-for-service radio tickets, this file enables police administrators to produce reports that show various types of calls for service received, officers/cars dispatched, elapsed time in handling various parts of the call and whole call, and the final disposition. It can be accessed to compile management reports or by using a radio ticket number to retrieve basic information about a specific incident.

Business File—This is a local agency file which enables the user agency to store the names and addresses of businesses, public buildings or residences, names and telephone numbers of key people associated with the business building or residence, and any special information such as location of alarm system deactivators, number/location of entrances/exits, or other information deemed necessary. This may be used by an officer who believes something is amiss at a particular location and needs to locate quickly a person to check the business, building, or residence.

Personnel—This provides an agency with a single source of quickly accessible personnel information for management and administrative purposes.

NCIC Inquiries—Authorized users can make direct inquiries to the FBI National Crime Information Center (NCIC) for items including stolen articles, stolen boats, stolen guns, stolen securities, and computerized criminal history on possible suspects.

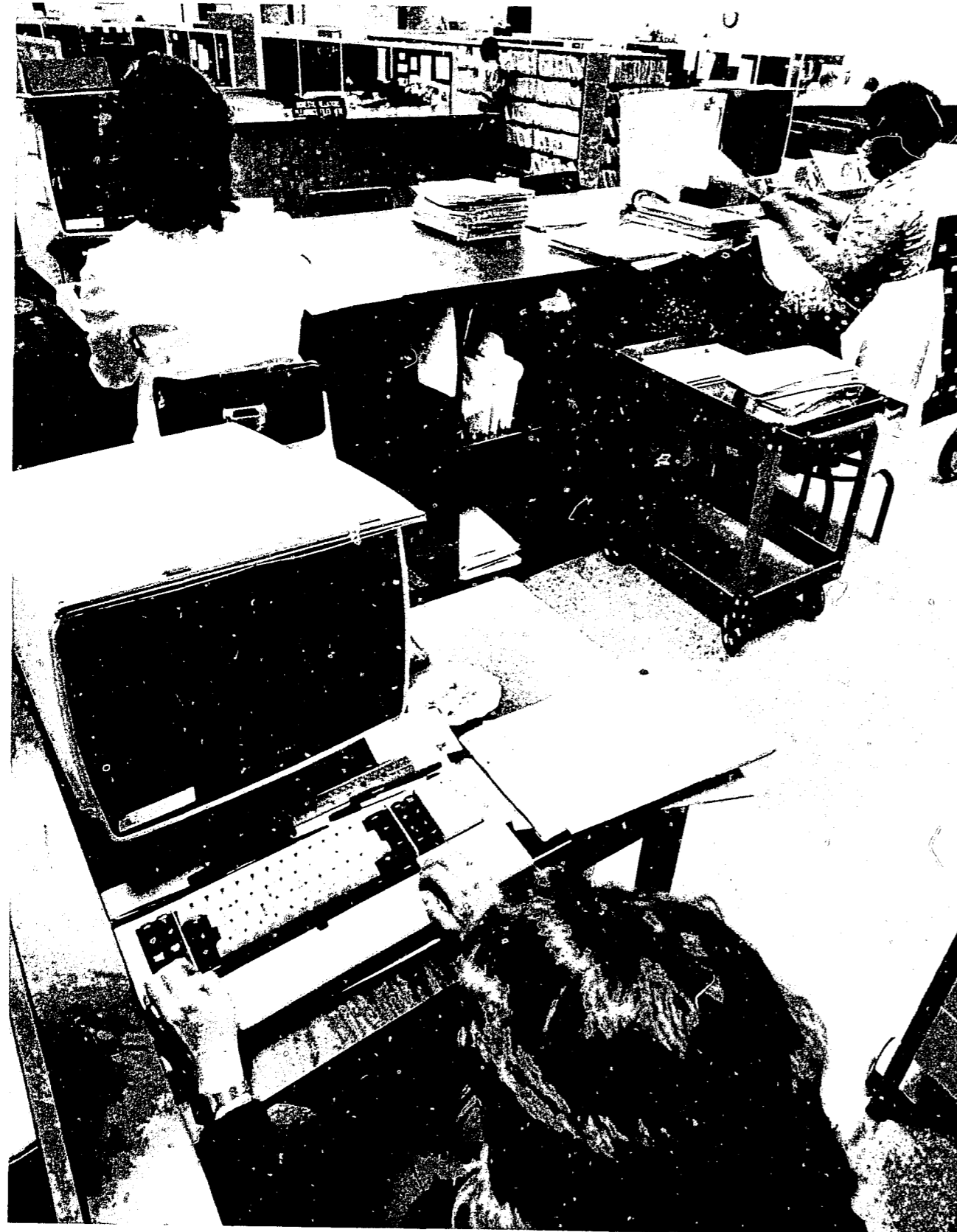
JURIS—This acronym stands for Juvenile Uniform Referral and Information System, which is accessed exclusively by 21st and 22d circuit juvenile courts. JURIS provides basic case or referral data about individual juvenile offenders, automatically prints management statistics and reports as arranged by each agency, monitors financial transactions, and summarizes the caseload and performance of juvenile officers.

The REJIS Corrections System—Having two subsystems (institutions and probation/parole), this is basically a record-tracking system with the name ORION (Offender Records Information and Operations Network),

which follows a subject from the time of initial incarceration to final probation/parole release.

The institutions part of the system provides a means of establishing a new record when a subject is committed to a corrections facility and then recording or "tracking" each event during the subject's incarceration, such as cell assignment, movement into and out of the facility for various court appearances or other treatment, and automatic tracking of time served vs. time sentenced.

The probation/parole system provides the probation/parole officer with extensive background information on a "client," including individual arrest history, all previous local incarcerations, and the current probation/parole status of the client. Under an automatic arrest notification feature of this system, when an individual is arrested and entered into the computer by a REJIS user, the probation/parole files are automatically searched as part of the arrest entry into the computer. If the computer matches the record to a record of an individual on probation or parole, a special message is immediately sent back to both the arresting agency and the probation/parole office, notifying each that the arrested person is on probation or parole and has a possible violation of that status.



“The 84 users serviced by REJIS . . . generate 60 to 70 percent of the regional criminal justice information.”

TCIS—The Total Court Information System is a court system designed to handle court case information and management at a circuit court judicial level. The system speeds the judicial process by automatically monitoring court case information entered and preparing standard documents, thus reducing the time involved in typing and filing documents and preparing court case information.

Municipal Court Systems—Three separate systems have been developed for use by municipal and associate circuit court judicial levels: Metropolitan Docketing System (MDS), Metropolitan Tag Enforcement and Reporting System (METERS), and Docket Equalization. MDS is designed to handle automatic docket scheduling of cases, plus the automatic preparation of standard documents such as summonses, department of revenue conviction notices, and the preparation of various court judicial and administrative reports. These reports include areas such as defendant's prior driving conviction record (retrieved from State driver's registration files), unresolved case listing, judge's docket, failure to appear listing, and various similar reports or listings.

METERS was designed to handle the automatic tracking and accounting of very large volumes of parking tickets or “tags.” Once initially entered, the system takes over tracking each ticket until payment is made. If payment is not made within a specified period of time stated on the violator's ticket, the system will automatically print and mail

a final violation notice to the violator. If this is not paid within the prescribed time, the name, address, car license plate number, and description are automatically transferred to the police wanted persons file. After this point, the violator is immediately subject to arrest and the car to impoundment by any police officer finding the car or owner. The system also prints out listings of parking tag violators by specific geographical area, so police officers can watch for the cars and make the arrests whenever they are on routine patrol. The violation information is also automatically given to the officer whenever the officer stops a vehicle for any reason. The system also keeps full account of tags, issued, paid, and outstanding and revenues collected.

Docket equalization handles the scheduling of police officers for court appearances during their duty hours and works primarily to prevent an officer from accidentally being scheduled to appear in two or more courtrooms at the same time, as had occurred under manual scheduling.

PROMIS—The Prosecutor's Management Information System was designed to handle automated case records for a circuit or prosecuting attorney's office. The system provides for the immediate entry and modification relating to court cases being prepared, pending, or in trial. It can produce listings of all cases assigned to each trial attorney and the status of those cases for more efficient case-load scheduling.

The 84 users serviced by REJIS include only slightly more than half of the agencies large enough to warrant hookup to a computerized network.

Yet, these 84 users generate 60 to 70 percent of the regional criminal justice information. If the complement of REJIS users were increased to include the 150 largest agencies in the metropolitan area, approximately 95 percent of the area's criminal justice data would be available. Efforts will continue to incorporate more agencies into the REJIS network, particularly those in the high-crime areas of nearby Illinois.

The implementation of REJIS has been of great value to regional criminal justice operations. With vastly improved access to updated information, law enforcement agencies are realizing improved service to the public sector, tangible revenue savings, and a higher morale factor among enforcement personnel.

FBI

At the St. Louis city jail, prisoner census records are updated. Data range from detailed facts on an individual prisoner to prisoner court appearances, medical examinations, and other institutional schedulings.

88519

National Crime Information Center

Your Silent Partner

By
GEORGE LYFORD
and
UDY WOOD, JR.
*Special Agents
National Crime Information Center
Federal Bureau of Investigation
Washington, D.C.*

While on patrol, a Holmdel, N.J., police officer stopped a motorist for operating a vehicle with only one headlight illuminated. An inquiry of the National Crime Information Center (NCIC), via the New Jersey State system, resulted in a "wanted person" hit. The driver was wanted by Alabama authorities for murder and armed robbery charges dating back 9 years, and other records were on file from various New Jersey law enforcement agencies. The man was taken into custody for a variety of criminal and motor vehicle charges, after confirmation of the hits was received from Alabama and New Jersey jurisdictions, as well as other States. Alabama authorities agreed to delay extradition of the individual until he had answered to all charges in New Jersey.



Special Agent Lyford



Special Agent Wood

Everyday, police officers around the country observe and approach suspicious persons or investigate property discovered under questionable circumstances. These officers are performing their duties with the aid of NCIC, one of the most sophisticated law enforcement telecommunications network in existence today.

NCIC is managed by the FBI in cooperation with local, State, and Federal criminal justice agencies. NCIC is interfaced with the States' telecommunications networks via dedicated lines. General policy concerning philosophy, concept, and operational principles of the system is based upon the recommendations of the NCIC Advisory Policy Board to the Director of the FBI. The board is composed of 26 of the top administrators from criminal justice agencies throughout the United States. Through board input, changes in current file applications, the addition of new files, and new procedures are coordinated with all participants.

NCIC improves the effectiveness of law enforcement through the more efficient exchange of criminal justice information. This is accomplished by providing a central index where law enforcement agencies can post notices regarding stolen property, wanted and missing persons, and criminal histories. These notices are entered on-line by law enforcement agencies that have terminals connected to NCIC via their State telecommunications net-

works. Other law enforcement agencies coming into contact with stolen property or wanted or missing persons are, through contact with the posting agency, allowed to take appropriate action, such as recovering the property and/or detaining the person for further investigation.

NCIC became operational in January 1967, with five categories of records—vehicle, license plate, article, stolen and recovered gun, and wanted person files. Additional files on securities, boats, computerized criminal histories, missing persons, and Canadian warrants became operational at later dates. In January 1983, the Computerized Criminal History File was merged into and made a part of the Interstate Identification Index (III).

Initially, there were 15 NCIC participants, but participation has now grown to include virtually all Federal, State, and local law enforcement agencies throughout the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands, which have access to NCIC records either directly or through communication links to State and metropolitan area computer systems.

There are six areas of data contained in NCIC, and the information is restricted to that which is documented by official police, court, and corrections records:

- 1) *Stolen Property*—Including stolen motor vehicles, felony vehicles, stolen vehicle parts, license plates, stolen and recovered guns, stolen securities, stolen boats, and other serialized stolen articles such as televisions and refrigerators.
- 2) *Wanted Persons*—The personal description of persons for whom a warrant is outstanding in connection with a specified felony or serious misdemeanor offense.

"NCIC improves the effectiveness of law enforcement through the more efficient exchange of criminal justice information."

3) *Missing Persons*—The personal description of missing persons of any age who are under proven physical/mental disability or are senile, thereby subjecting themselves or others to immediate personal danger, the personal description of persons of any age who are in the company of another under circumstances indicating that their physical safety is in danger, a person of any age who is missing under circumstances indicating that his disappearance was not voluntary, or a person who is declared unemancipated as defined by the laws of his State of residence who cannot be entered in any of the previous categories. A parent or guardian of a missing child should file a report with the local authorities and should be prepared to provide all available medical information, including dental charts, blood type, and other identifying marks. The police should then enter this information into the NCIC. The 1982 Missing Children Act allows parents to contact the FBI to verify that this record is in NCIC. If it is not entered, the parents may request their local FBI office to have the record entered in the NCIC.

4) *Federal and State Criminal History Records*—The records of recent and significant criminal offenders are indexed in the III to facilitate the interstate exchange of these records. Record requests from authorized NCIC users are processed through III which results in a record response from participating State agencies, the NCIC Federal Offender File, and/or the FBI Automated Identification Division System (AIDS).

5) *Criminalistics Laboratory Information System (CLIS)*—The Criminalistics Laboratory Information System presently has a General Rifling Characteristics file that can determine the possible make and model of a firearm from the rifling characteristics present on a fired bullet and the possible make of a firearm on the basis of markings on a fired cartridge case.

6) *Canadian Warrant File*—In June 1980, Canada began the selective entry of wanted persons into NCIC. These records are for individuals where the possibility

of international movement is suspected. The Royal Canadian Mounted Police also has access to all NCIC files, except for the Interstate Identification Index.

Security and Privacy

NCIC records are made available to authorized criminal justice agencies for the purpose of locating stolen property, identifying wanted and missing persons, or locating information on the past criminal activity of persons who are being processed through the criminal justice system.

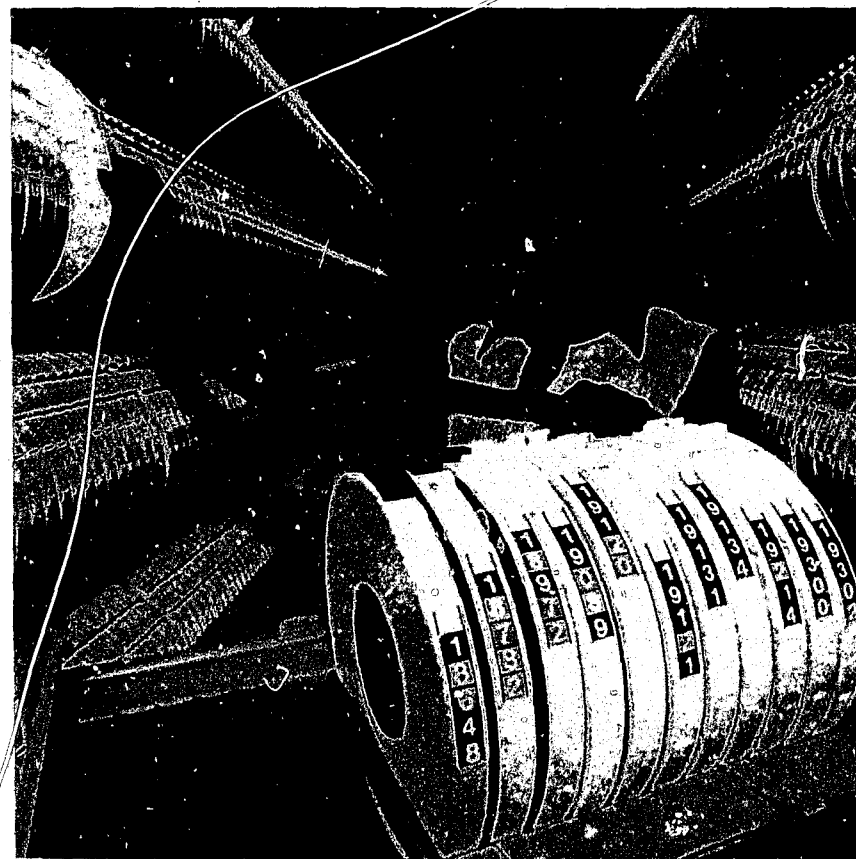


Figure 1

Vehicle File

- 1) Temporary felony vehicle—90 days.
- 2) Vehicle without vehicle identification number (VIN)—90 days.
- 3) Vehicle with VIN—year of entry, plus 4 years.
- 4) Aircraft with VIN—year of entry, plus 4 years.
- 5) Vehicle part with serial number—year of entry, plus 4 years.

License Plate File

- 1) 1 year after expiration year of tag.
- 2) Nonexpiring tags—year of entry, plus 4 years.

Boat File

- 1) Boat with hull identification number (HIN)—year of entry, plus 4 years.
- 2) Boat without HIN—90 days.

Gun File

- 1) Stolen guns remain in file until removed by entering agency.
- 2) Recovered gun—year of entry, plus 2 years.

Article File

- 1) Stolen articles—year of entry, plus 1 year.

Securities File

- 1) Unrecovered, stolen, embezzled, or counterfeited securities except travelers checks and money orders—year of entry, plus 4 years.
- 2) Travelers checks and money orders—year of entry, plus 2 years.

Wanted Person File

- 1) Temporary felony want records—48 hours.
- 2) All other "Wanted Person File" records remain in the file until removed by the entering agency.

Missing Person File

- 1) Missing Person (juvenile)—Automatic removal when person reaches age of emancipation.
- 2) All other missing persons records remain in file until removed by the entering agency.

Probable Cause

An NCIC hit alone is not probable cause to arrest. NCIC furnishes the inquirer information indicating that a person is wanted or an article is stolen, as well as the date of warrant or date of theft. This information, coupled with other evidence, will assist the officer in arriving at sufficient legal grounds for probable cause to arrest. In some circumstances, the hit, confirmed with the originating agency, may be the only evidence necessary. For instance, this may be true when a hit on a stolen car or other stolen property is made very close to the time of the actual theft, when a hit indicates that a car was recently used in a bank robbery, or when the car is in the possession of fugitives. As time lapses, the significance of the hit generally decreases. A hit on a record 1 or 2 years after the car was stolen would, in itself, be inad-

equately probable cause for an arrest since it would be possible that the vehicle was then in the possession of an innocent purchaser rather than the thief. To make an arrest in this case would require that the officer have additional evidence to warrant probable cause.

Hit Confirmation

When a hit is made, the agency making the inquiry must contact the originating agency (ORI) of the record possibly identical with the person or property in question to confirm that the warrant is still outstanding, the person being questioned is identical with the subject of the record, and to obtain

extradition information. In the case of property records, the inquiring agency must verify that a theft report is on file, the property is identical with the record, and obtain information concerning return of the property to the rightful owner.

There are certain requirements for hit confirmation responses. These procedures require the ORI to respond within 10 minutes of a hit confirmation request.

File Retention

Since there are retention periods for each NCIC file, an inquiry on a particular item producing a "no hit" response should not result in the automatic assumption that the item is not stolen. (See fig. 1.)

Offline Searches

During the course of some investigations, information may develop which does not lend itself to online inquiries. In such cases, departments may wish to request offline searches of NCIC records.

An offline search is a special inquiry of NCIC for information which cannot be obtained through the use of an online inquiry. An offline search may be made against two sources of NCIC records:

- 1) The NCIC data base of active records, which is on line 24 hours a day, 7 days a week; or
- 2) The NCIC historical data, which is maintained off line on magnetic tape. Historical data include records that have been removed from the NCIC active data base due to record cancellation, record retention expiration, or record clearance and the transaction log, which contains all NCIC transactions, such as inquiries, entries, etc.

"The NCIC offline search is a unique tool designed to assist an investigator by providing lead information."

Although an NCIC offline search can be made with only one search parameter, searches including all available information are more effective. Searches may be made on nonunique personal descriptors, such as sex, height, weight, estimated age, and hair coloring, to identify a wanted, missing, or deceased person or on a partial vehicle identification number to identify a car. Gun make, article type, securities descriptors, date of theft, and date of warrant may also be used as offline search parameters. Inquiries on a large number of securities believed to be stolen may be handled quickly via the offline search rather than a time-consuming individual operator online inquiry. Data retrieved as a result of an offline search can be provided on a printout or magnetic tape.

The NCIC offline search is a unique tool designed to assist an investigator by providing lead information. For example, during the course of an investigation of a bank robbery, it is imperative that an investigator have all available information pertinent to the case. The getaway car is described as a green sedan with only a partial license plate number, "123____," available. This information is insufficient to make an online inquiry of NCIC; however, an offline search of the NCIC Vehicle and License Plate Files may be made. The known digits may not be the first three digits of the license plate number—the possibilities are numerous. The information may include from one to all but one digit of the number, and the known numbers may be searched in any position.

This type of search may also be done on a partial vehicle identification number (VIN). An offline search of the data base of active records might reveal that the vehicle in question was stolen, as was the case recently in Idaho. Law enforcement officials in that State recovered a 1978 pickup truck and established that the last three digits of the VIN were 103. NCIC was requested to run an offline search of all pickup trucks of the make stolen after November 1, 1977, and having a VIN ending with 103. A review of the resulting printout revealed that the truck had been stolen in Sacramento, Calif., on July 2, 1979. As this example demonstrates, the offline search provided information that led to the location of the vehicle theft. In some cases, an offline search might even provide identifying data on the suspect(s) involved in the vehicle theft.

Even in cases where all VIN's and serial numbers have been obliterated beyond restoration, offline searches may be of value. Recently, a Florida police department recovered a sports car with no recognizable VIN's or serial numbers. An offline search was made of all stolen cars of that type fitting the description of the vehicle in question. The furnished printout supplied a list of stolen vehicles matching the recovered car. Investigators contacted the owners of these vehicles and were able to locate the owner of the vehicle in question by obtaining from him 16 personal points of identification on the vehicle.

Offline searches may also aid investigators in murder cases. In the fall of 1980, the Salt Lake City Police Department discovered the body of an apparent murder victim, who was identified 2 weeks later by his parents. After identify-

ing their son, the couple, not finding his van, filed a theft report, giving a complete description—make, model, color, license plate number, etc. The Salt Lake City Police then entered a record for the van as a stolen vehicle in the NCIC and requested that an offline search of the Vehicle File be made to determine whether any inquiries had been made on the vehicle between the time when the victim's body was discovered and the van was discovered missing (approximately 2 weeks).

An offline search revealed that during the 2-week period, an inquiry resulting in a negative response had been made on the vehicle by a Las Vegas police officer. After contacting the Las Vegas Police, the Salt Lake City Police subsequently recovered the weapon used in the murder and identified a suspect. A short time later, again as a result of an NCIC hit, the suspect was arrested while driving the victim's van in Oregon.

NCIC offline search possibilities are infinite. Searches may be limited to a certain time frame or to the records and/or transactions of a particular State or city.

Conclusion

The National Crime Information Center, your silent partner, provides vital criminal justice information quickly and efficiently, perhaps making the police officer's job a little less hazardous.

FBI

88520

All artworks in this article have been stolen and are still reported missing.

Renoir, "Danse a la Campagne"



Jackson, "Bronc Stomper"



Berthon, "Les Boules de Neige"

Bacon, "Small Head on Blackground"



Santoro, "Grand Canal and Santa Maria De La Salute"



The National Stolen Art File

By
JOHN B. MCPHEE, JR.
C. THOMAS SPITZER
*Special Agents
Laboratory Division*
and
ROBERT P. SUNDIN
*Writer
Office of Congressional and Public Affairs
Federal Bureau of Investigation
Washington, D.C.*

"Art theft has become a burdensome crime problem resulting in great financial losses, as well as substantial personal and cultural losses."

Theft of valuable art in the United States and throughout the world has been increasing at an alarming rate. Art theft has become a burdensome crime problem resulting in great financial losses, as well as substantial personal and cultural losses. In the United States alone, the estimated annual monetary loss from art thefts exceeds \$50 million.¹ Worldwide, the value of all stolen art not recovered is estimated to exceed \$1 billion.

There are many reasons for the increasing number of art thefts. The monetary value of most art is going up rapidly, making art an effective buffer against inflation. Art is viewed as a sound investment for the future, resulting in an increasing number of persons, including small investors, holding private collections. Because many museums, galleries, and homes lack proper security, artwork can be easy prey for thieves. Art is also susceptible to theft because of its relative portability.



Special Agent Spitzer Special Agent McPhee



Mr. Sundin

An oil-on-canvas painting, for example, can be quickly removed from its frame, rolled up, concealed, and transported with little difficulty.

Another major factor in the growth of stolen art is the difficulty in identifying and associating recovered art objects with those reported stolen. Works of art generally carry no identification number, and owners sometimes can provide only limited, vague, or incomplete descriptions of the stolen pieces. When art is recovered, investigators may have little or no knowledge of a work's origin, title, or artist, thereby making it difficult to return to the rightful owner. Art thefts present special problems to all levels of law enforcement.

In the past, information concerning stolen art was maintained only in the indices of the agency to whom the theft was reported. Since information in these cases was limited to the geographical area of the theft, dealers in stolen art could operate freely in areas distant from the original theft site.

Establishing the National Stolen Art File

In response to existing problems, and in an effort to assist law enforcement investigators of stolen and recovered art, the FBI established the National Stolen Art File (NSAF) at FBI Headquarters in Washington, D.C. With its National Stolen Art File, the FBI has developed new techniques and augmented existing resources to reinforce the effectiveness of its art investigations.

The National Stolen Art File was implemented in its research stage by the FBI's Laboratory Division in May 1979. As a computerized index of stolen and recovered art, the NSAF serves as a central repository of data and photographs of art reported stolen by local law enforcement agencies and FBI field offices. The NSAF also includes information and photographs of art that has been recovered but whose origin or ownership is unknown or in question.

To be included in the NSAF, stolen or recovered art objects must meet certain criteria. The FBI Laboratory Division defines an art object as a "two or three dimensional object that was created by, or created under the direction of, an individual considered by the art community to be an artist or designer." The NSAF is currently limited to paintings, prints, and sculptures.

"Art thefts present special problems to all levels of law enforcement."



Drovo, "David"

"All art objects that come under the investigative interest or control of law enforcement agencies, and whose ownership is questioned, should be searched through the NSAF."

Only art objects valued at \$2,000 or more will be considered for search or entry in the NSAF. This monetary amount was chosen to separate valuable works of art from those works prepared by amateurs or hobbyists. Requests for searches or entries in the NSAF must be of a criminal nature and must be submitted through the local FBI field office or police agency.

How the NSAF Works

The National Stolen Art File employs a computer interfaced with a computer-driven microfiche viewer. The computer is designed to contain descriptive data, and in many instances, photographs of stolen and re-

covered art items. The items are entered in the file under two basic categories—stolen or recovered—according to the circumstances under which they came to the attention of the reporting law enforcement agency.

Information concerning a particular artwork is coded for the computer according to a wide range of descriptive items, including dimensions, composition, subject matter, principal colors, signatures, etc. Also, every effort is made to obtain a photograph or facsimile of the art object in question. The descriptive data and photograph of the item are entered into corresponding parts of the computer system. The photograph is placed in the

visual section of the system called the microfiche. The microfiche viewer, an important component, is a major advantage of the NSAF. Art objects can be more readily associated with the aid of conveniently stored and accessible photographs, a helpful supplement to the descriptive summary. The computer terminal provides the operator with the descriptive summary and photograph, each displayed on a separate viewer. Over half of the art objects indexed in the NSAF are now accompanied by a photograph.

Submitting Stolen Data

An investigating agency wishing to submit information concerning stolen art for inclusion in the NSAF should submit a form FD-531 (Stolen Art Data Sheet), available at all FBI field offices. One form FD-531 and a photograph should be submitted for each stolen item. If the information requires expeditious handling, the inquiry can be handled by telephone, with paperwork and photographs following. Telephone inquiries should be directed to the Document Section, Laboratory Division of the FBI at (202) 324-4452.

When information contained in the inquiry is received by the NSAF, the data from the form FD-531 is encoded for the NSAF computer. A search is then made through the recovered section of the file in an effort to associate the questioned item with an object currently on file. If such an association is made, both contributing agencies will be notified. The Laboratory's art file provides investigative assistance—"lead" information—only. Therefore, information obtained from the NSAF must be verified and authenticated by the contributing agencies.

Rembrandt, "Old Man with a Divided Fur Cap"



Picasso "Homme a La Casquette"



The submitting office is advised of all negative searches of the NSAF. Since this file does not contain all thefts at this time, a negative response should not be construed to mean the questioned item is not stolen.

When a contributing law enforcement agency locates an item previously reported stolen or missing, it should promptly advise the NSAF of this information by letter so the item will be removed from the file. This is essential to maintain accuracy in the program.

Submitting Recovered Data

All art objects that come under the investigative interest or control of law enforcement agencies, and whose ownership is questioned, should be searched through the NSAF. These items may include art objects that have been seized, found abandoned, or merely reported by a legitimate source as being stolen.

When requesting a search of a recovered item, a completed Stolen Art Data Sheet should be submitted, insuring that the "recovered" block is marked. A photograph of each art object should be attached. As in the case of reporting items which require expeditious handling, inquiries may be made by telephone, with paperwork and photographs following.

When information contained in the inquiry is received by the NSAF, the data is searched through the stolen section of the file in an effort to associate the questioned recovered item with an object listed as stolen. If such an association is made, both contributing agencies are notified. In the event an association is not made during the search of the file, the information is placed in the recovered portion of the file for future reference, unless advised to the contrary by the contributor. This recovered information remains on file and is checked against all subsequent stolen entries.

The NSAF makes no definite determination as to the positive identification or authenticity of recovered items. It only provides information of possible investigative assistance to the contributing agencies. Any positive identification, including authentication of the questioned items recovered, must be made through the original contributing office. A determination of lawful ownership is a legal problem and must be handled by appropriate agencies or by a court of law.

To maintain accuracy of information, it is necessary periodically to validate the information on stolen and recovered art. Twice a year, each contributor is provided a computerized list-



“Nearly 5,000 fine art objects . . . are now indexed in the computer.”

ing of all items in the file attributed to that agency.

These listings must be checked for accuracy, making changes where necessary, and returned to the NSAF within 45 days. If the validation is not returned within the allotted time, the items contained in the file attributed to that agency are purged.

Stolen Paintings Recovered

A recent recovery in Phoenix, Ariz., of two stolen paintings is an example of the effectiveness of the program. A telephone call was received from the Phoenix FBI Office requesting a search of the NSAF for two paintings. As a result of the search, associations were made of descriptions of both paintings with descriptions of two paintings stolen from the Art Fund Gallery in Washington, D.C.

The Phoenix Office was promptly advised by telephone of these associations. The following day, FBI Agents arrested a 37-year-old man in connection with the theft of the two paintings worth approximately \$35,000. In this case, as in others, the NSAF provided crucial information leading to the successful resolution of an art theft case.

The National Stolen Art File also serves as a valuable intelligence source. A search of the file could be of assistance to investigators being offered works of art under suspicious circumstances. The search may reveal that the item offered is of the same title and artist as an object on file listed as stolen. However, if no association is made with items on file, the art object offered could represent a reproduction or “fake.” The FBI Laboratory may also serve as a resource center providing helpful direction about other agencies or art associations to contact in order to gain additional information regarding a particular work of art.

Nearly 5,000 fine art objects—a variety of stolen paintings, prints, and sculptures—are now indexed in the computer. The FBI plans to increase the capabilities of the NSAF by entering additional works on a continuous basis, expanding the index, and refining coding procedures. This will improve the speed and accuracy with which a stolen or recovered artwork may be associated.

Although stolen articles such as coins, antiques, and stamps are not entered in the NSAF, the system has the potential to allow items of this type to be included in the future.

An Invitation to Use

The NSAF is now available to all law enforcement agencies for both input and inquiries. It is maintained in one location to ensure a high degree of accuracy in the program, and both the visual interpretation and computer encoding of the art objects are done by the same personnel.

The National Stolen Art File addresses what, in the past, was an investigative problem and provides a valuable new tool to law enforcement personnel. The program’s accessibility and speed are of obvious value to law enforcement in its battle against art theft.

The FBI welcomes and needs your participation in this program to improve its overall effectiveness. Inquiries should be directed to: National Stolen Art File, Laboratory Division/Document Section, Federal Bureau of Investigation, Washington, D. C. 20535. Telephone: (202) 324-4452.

FBI

LEFT
Lautrec, “Le Jockey”
BELOW
Picasso, “Tropical Plants”



Durer, “The Last Judgment”



Footnote
Donald L. Mason, “Art Theft Investigations,” *FBI Law Enforcement Bulletin*, January 1979, pp. 14-18.

Microcomputers for Law Enforcement

By
LEE MCGEHEE
Chief of Police
and
GLENN M. WHITEACRE
Criminal Information Planner
Police Department
Ocala, Fla.

Imagine a police agency purchasing a complete computer system for less than the cost of a patrol vehicle! It was only 20 years ago that the New York City Police Department reported that it had spent over \$300,000 for its computer system.¹

Police administrators have long recognized the value of computers for records management, crime analysis, manpower deployment, and other vital areas. The ability to manage information over short and long terms is directly proportional to the success of an individual or an agency. Until recently, however, computers have not been financially feasible for most police agencies. The National Crime Information Center (NCIC), established by the FBI in 1967, provided the only computerized resource for many departments. Other police agencies were able to use their State government's computer, but they were required to share it with other agencies. Consequently, only a few programs for law enforcement could be developed.

Until recently, computers were practical only in large applications, such as NCIC. Because of cost and size, very few administrators believed that computers could make a significant contribution to efficient operations.

In the 1970's, however, there was a technological explosion. At the core of this revolution was the microprocessor, an electronic computer engraved on a silicon chip smaller than a thumbnail.

The microprocessor—with more power in its tiny circuits than a 1950's computer—has given us microwave ovens, video games, electronic watches and microcomputers. Although these computers are known by many names—personal, desktop, and mini, the correct term is microcomputer.

The microcomputer consists of a typewriter-like keyboard and a small video screen. Computer instructions called "programs" are written into the computer either through the keyboard or through a prerecorded magnetic tape of disk. Specific crime or management data can be entered in the computer and stored on magnetic disks so it can be recalled and analyzed whenever needed.

Advantages of Microcomputers

One of the major advantages of a microcomputer is its cost. A good system consisting of computer, printer, and other necessary equipment can be purchased for a few thousand dollars; however, a police agency may obtain a basic system to perform limited functions for only several hundred dollars. Many departments have started with a limited system.

A microcomputer does not require extensive training to operate. It is no more complicated than using a typewriter. The computer language, called BASIC, is written in English rather than a complex code, allowing a person to do elementary programming after a short learning period. Yet, when properly programmed, a microcomputer can perform any police data analysis required for most agencies.

Because of its cost and portability, this type of computer may be dedicated to one police function or it may be shared by many functions. Its versatility can eliminate the problems of having to share computer systems with other government departments.

Police Applications

The Ocala Police Department began using microcomputers in 1980. The system was rudimentary—a 4k computer using cassette tape for storage and no printer—but the results were very successful. Since this primitive beginning, the department has developed a microcomputing network consisting of several microcomputers being used in nearly every area of the department.

A crime analysis program was the first program to be developed. Certain preventable crimes were chosen for the analysis. Data entered into the comput-



Chief McGehee



Mr. Whiteacre

er included patrol zone, time of day, day of week, type of crime, and a brief summary of the incident, which included M.O. data. The microcomputer analyzes this data and provides reports summarizing crime occurrences by the various factors.

The computer's major value is its search capability. The program includes an "open word search." Specific words such as pistol, diamond, or daylight may be entered and all crimes with this word in the summary appear on the screen.

The crime analysis program allows distribution of summary reports on a regular basis, plus special reports as required. A detective, for instance, working a burglary where a certain silver pattern was stolen could query the computer for all cases involving that same pattern. He could then obtain a composite of all suspect and M.O. data developed in the other cases.

A patrol officer may use the crime analysis reports for determining his preventive patrol strategies. If an officer's patrol zone is experiencing armed robberies of convenience stores, the officer may obtain a printout of robberies by time, location, name of store, and any other useful data. He can then concentrate his patrol activities on these potential targets.

There is a need in law enforcement to manage criminal investigations properly. Most police agencies split the investigative process with patrol officers conducting the preliminary investigation and detectives proceeding from there. Assigning cases to detectives, insuring followup, and evaluating effectiveness are all areas that may be improved by using microcomputers.

The Ocala Police Department's program insures that all criminal cases assigned to a detective are recorded properly. Cases are entered by the detective assigned to the case, case number, type of case, and date of assignment. If a case is cleared, the type of clearance—arrest, exceptional, unfounded—is entered. Court disposition data is recorded later. Summary reports are prepared by individual detectives, showing cases assigned by type, cases closed by number and type of closure, and convictions obtained. Data are available on a monthly, yearly, and 5-year history basis. Summary reports for the entire division are also prepared.

Since Ocala's case management system uses a priority criteria based on identifiable leads, this microcomputer program distinguishes between those cases that have been assigned for followup and those cases that have been placed in an inactive status.

Programs were also designed for a field interrogation file and a latent fingerprint file. The field interrogation file stores and retrieves sequentially four pieces of data from field interrogation reports prepared by patrol officers—name, patrol grid, case number, and date of contact. An officer may search by any of these areas. The stolen property files allows the entry of either serialized or nonserialized property data. A search, using the "open word search" discussed earlier, may be made when necessary. Items may be searched by case number, specific brand name, subject, serial number, or physical description.

A detective assigned to the pawnshop detail collects pawn tickets on a regular basis. He then checks the property shown on the pawn ticket with the stolen property file. This effort has been highly successful in recovering stolen property.

f8521

"A microcomputer can provide storage for massive criminal intelligence data while conforming to legal mandates."

The latent fingerprint file was previously maintained manually. The department's fingerprint examiner and the microcomputer programmer developed a system for classifying the single prints for microcomputer entry. Now, if a latent fingerprint is lifted at a scene and can be classified, its classification is entered into the microcomputer which then lists all potential suspects.

Information concerning ongoing criminal activities is a vital and sensitive part of law enforcement. Information that is maintained must be handled under the strictest legal guidelines. A microcomputer can provide storage for massive criminal intelligence data while conforming to legal mandates.

One recent investigation involved telephone toll call records. Several thousand telephone numbers were listed over several weeks. It became impossible for the crime analysts to tabulate, cross-check, and verify the numbers manually. A microcomputer program was written in approximately 1 hour, and it took another 3 hours for a typist to enter the telephone numbers with date and time information. Two printouts were provided from this information. The first printout listed in proper order every call with the numbers, dates, and time. The second printout listed each number only once but gave a complete count with the date and time the number was first called. The investigator could also obtain specialized reports, such as a listing of all calls between two dates or all calls with a specific area code.

The employee records file provides a computerized record of each

department employee. It includes all payroll, leave, and salary data. Employee history, such as date of hire, transfer, promotions, and disciplinary action, is included. Additions or modifications may very easily be made.

A program to maintain employee training records is now being prepared. This program will record all employees' training, specialized skills, foreign languages spoken, and other essential skills. A search ability will be included to allow a listing, for example, of all police officers who have or have not attended a specific training course.

The department has recently implemented an innovative field training officer (FTO) program. A microcomputer program was prepared to monitor the progress of all field trainees. It allows the FTO coordinator to enter into the microcomputer weekly progress reports prepared by the field training officer. Information is available on whether the trainee's progress is acceptable when compared both to his own record and to those with average progress levels. A record is also kept on the amount of instruction time spent on each specific training area, allowing it to be determined whether a trainee's lack of progress in a particular area might be due to inadequate instruction hours.

Unlimited potential lies in using a microcomputer for word processing. Every police agency has form letters that must be used. A commercially available word processing program will allow standard correspondence to be written into the computer. Names, addresses, and dates may be left blank. When the correspondence is needed, the program is entered into the computer, the necessary names or other data are entered, and the correspondence may be printed in a matter of seconds.

A word processing program is particularly advantageous when typing lengthy investigative reports. This program allows the information to be typed on the video screen. Words may be edited, and sentences may be moved, deleted, or shortened. Entire paragraphs may be moved to another area of the report. When the report is correct, it may be sent to the computer's printer. The versatility of a word processing program offers unlimited benefits for a police agency.

Conclusion

We have discussed only a limited number of applications for using microcomputers in law enforcement. The diversity of programs are limited only by the imagination of the police administrator. The Ocala Police Department is developing applications for departmental budgeting, inventory control, evidence tracking and control, criminal intelligence files, increased records management capability, and patrol manpower deployment.

The incredible advancement in microcircuitry will have tremendous impact on law enforcement. The police administrator must be prepared to use the developing technology, whether it be smaller portable radios or microcomputers. For the small police agency, the microcomputer is not a future wish—it is an available tool for more effective management. **FBI**

Footnote
"The Police and the Computer", *Police Management Review*, vol. 3, No. 2, October 1965.

Sharing a Computer

An Economical Means to Obtain Data

By
COL. JAMES P. DAMOS
Chief of Police
University City, Mo.

Information—those in the law enforcement profession couldn't perform successfully without it. Knowing exactly who and what any given situation involves is of utmost importance to a law enforcement officer. It is information which assists an officer in using other skills and tools for maximum effectiveness or protection.

The capabilities and value of computers in supplying large amounts of information have long been recognized by law enforcement agencies nationwide. However, retrieving the right kind of information from computers continues to be a problem for many. Even with continuing advancements in computer technology, the cost and involved technical questions which must be answered before buying and operating computers is oppressive for all but the largest departments. In many instances, smaller police departments obtain the much needed information from larger departments or statewide law enforcement computer networks. This forces the department to adopt the standards of the larger department and limits the amount of information that is relevant to the smaller department's needs. However, distributed data processing (DDP) is a method which has remedied this problem.

Distributed data processing involves sharing a small local computer that has the capability of "talking" to other computers. The system provides small departments with high-speed, automated local criminal information at substantially reduced costs without hampering retrieval of automated State and national criminal information.

In 1980, The University City, Mo., Police Department incorporated DDP into their computer operations in an effort to augment information capabilities while considering budget limitations. The department had been tied into the St. Louis Metropolitan Police computer since 1967 and had advocated the establishment of a region-wide automated information system for all criminal justice agencies in the Greater St. Louis area. The Regional Justice Information System (REJIS) became operational in 1973 and provides a wide variety of county, regional, State, and national criminal justice information to its users.



Colonel Damos

In September 1978, the University City Police Department received LEAA funding for an "Integrated Criminal Apprehension Program" (ICAP) project. The ICAP project required more timely and detailed local criminal information than was available. The department asked the REJIS staff for alternative solutions on how to gain the needed information while retaining access to larger pools of information. In addition to police information needs, the city administration was buying expensive

Five major benefits are derived from this arrangement. First, the police department is able to retain full access to county, regional, State, and national criminal information files. Second, by using their own computer, the department could run as detailed an analysis of local criminal activity as often as they wanted and in the format which would best meet the department's needs. Third, the city administration would not have to purchase the expensive services of a commercial data



The director of the Integrated Criminal Apprehension Program retrieves data from one of the police computers.

computer time from a local commercial data processing firm to handle the city's revenue accounting and code enforcement tasks. REJIS presented the concept of distributed data processing, which required the acquisition of a small inhouse computer to be shared by the city administration and the police department that would still allow police access to the REJIS computers.

Also, the inhouse computer enables the city to expand automated services into many departments and activities which previously could not justify purchasing automated services. Finally, the arrangement places all responsibility for technical support and computer programming with REJIS. This eliminated any further need to be involved in hiring and maintaining a computer staff.

```
[/POSSE]
- UNIVERSITY CITY POLICE DEPARTMENT -
- - - POLICE OPERATIONS SYSTEM MAIN MENU - - -
ENTER A SYSTEM COMMAND OR
SELECT ONE OF THE FOLLOWING COMMAND GROUPS

/ARR - ARREST INTERFACE MODULE
/CFS - CALLS FOR SERVICE MODULE
/JUV - JUVENILE INDEX MODULE
/INV - INVESTIGATIVE SUPPORT MODULE
/NAM - MASTER NAME INDEX MODULE
/OFF - OFFENSE/INCIDENT MODULE
/PER - PERSONNEL MODULE
/PRD - PROPERTY INDEX MODULE
/TAB - CODE TABLE MAINTENANCE
/UCR - UCR REPORTS MODULE

/REPS - REPORTS
```

DDP programs have a main menu which enables a user to select one of five command groups.

tomization also allows programs to be written for some city departments that were not previously automated.

DDP Results

The first POSSE module to be developed under DDP is the 12 different calls-for-service (CFS) reports. These show type of calls or activity by time of day, day of week, or by specific patrol area/beat, providing extensive data with which to verify or establish various shift assignments and set up individual beat patterns for maximum responsiveness. All 12 CFS reports are available to watch commanders within 10 minutes of each shift change, with all previous shift information included. This permits literally a shift-by-shift responsiveness.

The reports have opened a new program possibility. By knowing the precise activity trends, University City can call for assistance from victim service counselors and have these professionals available to help crime victims locally during those times when

DDP Meets Local Information Needs

There are three major packages of computer programs which can provide a police department with detailed local criminal activity analyses. The first package is called POSSE (Police Operations Support System—Elementary) and is a group of nine modules which automate various aspects of police management information needs. The other two packages are called CASS (Crime Analysis Support System) and IMIS (Investigative Management Information System) or detailed crime analysis and investigation information reports. These packages were developed through the joint cooperation of LEAA and the International Association of Chiefs of Police (IACP) as a set of computer programs designed to serve small police departments that did not have outside information sources. These packages are serving

as a guide to REJIS in developing similar packages to run in the DDP environment. The city administration is having programs developed which include financial accounting, city budgeting, municipal code violation and tracking, personnel, payroll, and general management information. These programs have the advantage of being made to fit the city's unique needs and existing forms, rather than forcing the city to change to standards and forms not useful to the administrators. The cus-

```
[/CFSR]
-- UNIVERSITY CITY POLICE DEPARTMENT --
CALLS FOR SERVICE REPORTS MENU
)SELECT ONE OF THE FOLLOWING REPORTS(

CODE DESCRIPTION CODE DESCRIPTION
CFS01 - DAILY SUMMARY CFS07 - RESPONSE TIME ANALYSIS BY
PATROL AREA
CFS02 - PATROL AREA GRID BY HOUR OF DAY CFS08 - RESPONSE TIME ANALYSIS BY
CALL TYPE
CFS03 - ACTIVITY ANALYSIS BY PATROL AREA CFS09 - TIME CONSUMED - CALL TYPE BY
HOUR OF DAY
CFS04 - ACTIVITY ANALYSIS BY DAY OF WEEK CFS10 - TIME CONSUMED (HOURS)
PATROL AREA GRID BY SHIFT
CFS05 - ACTIVITY ANALYSIS BY HOUR OF DAY CFS11 - TIME CONSUMED - HOUR OF DAY
BY DAY OF WEEK
CFS06 - SELECTED ACTIVITY ANALYSIS BY
HOUR/DAY OF WEEK CFS12 - TIME CONSUMED - PATROL AREA
BY HOUR OF DAY

WAIT - WAIT FOR BACKGROUND JOB TO END
(ST05)
```

After selecting "/CFS" under the POSSE menu, there are 12 different reports which analyze the department's calls for service.

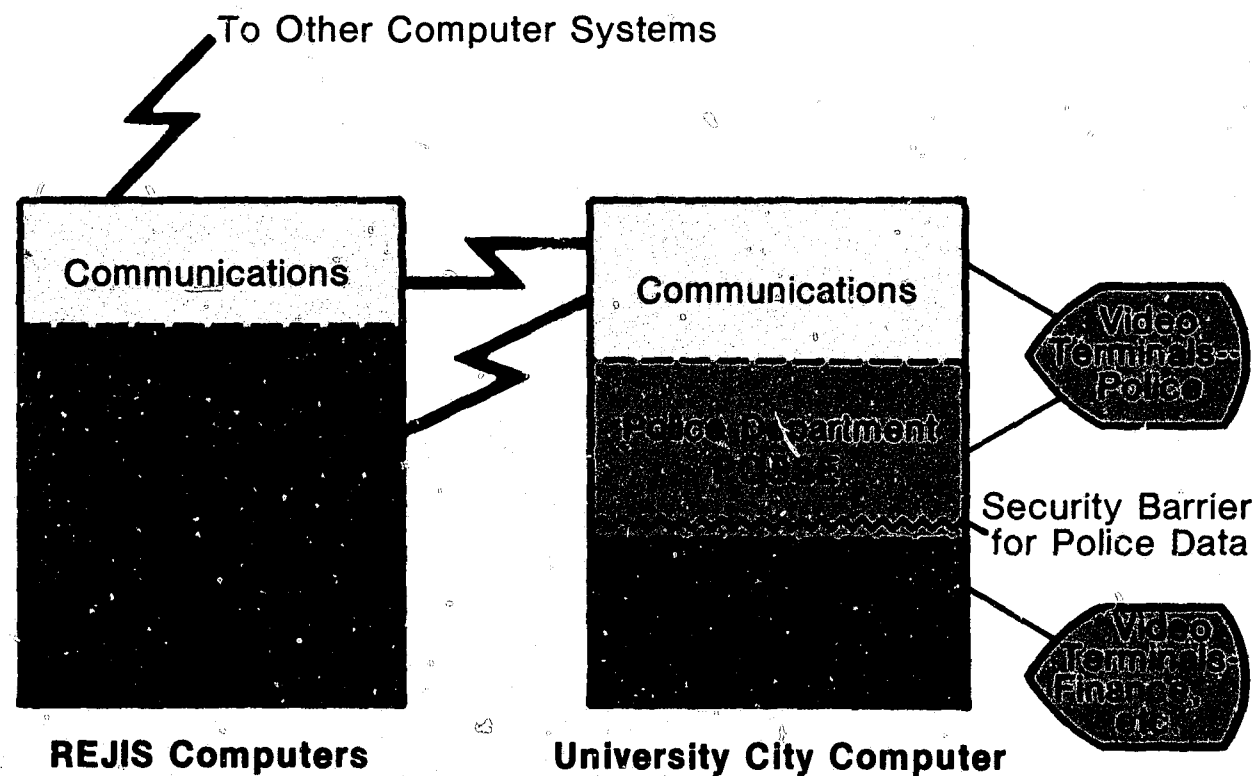
they are most needed. The offense record module (which includes the master name index and property files) automates the current manual process of typing the department average of 8 to 10, 3 x 5 cards per incident, filing them in different files, pulling them for court appearances, updating them, and refiling. Once an operator enters the information, it is automatically broken into various required segments and filed instantaneously.

For the University City Police De-

partment, the system has begun to show a variety of results, including significant financial and personnel time savings and information that provides for multiple clearances of crimes. Under the uniform crime reporting (UCR) module of the system, at least 2 man-days per month are saved. The record room clerk merely instructs the system to run all required UCR sheets via a single terminal entry. All required information is pulled by the computer and arranged, with entire forms showing

completed data automatically printed. Another personnel time savings which has been realized is the computerized realignment of patrol beats. Prior to iCAP and computerization, University City had five patrol districts (beats). An analysis of calls for service showed that one beat was writing nearly 50 percent of all patrol division reports and was functioning in a strictly reactive state to calls for service. Since that time, the department has gone to seven realigned beats, which now allow

What is DDP? (Distributed Data Processing)



time for officers to undertake "directed patrols" and go after the crime "hot-spots" the computer is pinpointing.

Information as to criminal history or stolen/wanted vehicles continues to be obtained from the larger regional, State, and national files and is available through the police department terminals on the minicomputer. This enables the police to access any level of information needed through one device.

The use of an inhouse computer has allowed automation to be extended to more units within the department, such as the detective bureau and the crime analysis unit. Before DDP, it was not uncommon to have information requests being made of the communications dispatcher, while an officer or detective used the record room terminal, with other officers and the record room personnel waiting to use the terminal. The investigative officers can now accomplish more in their own work areas, while at the same time the record room activity moves smoother and faster without the constant foot traffic interference and tied-up terminals.

The city administration will also show dramatic results with customized programs developed to match their exact needs. According to the director of finance for University City, discontinuing the services of an outside data processing firm will mean the immediate savings of \$100,000 in annual processing fees. The city's data processing costs in effect will now become a constant in place of the variable and always increasing fees charged by the data processing firm. The city expects the inhouse computer system to pay for itself within 2 years from this saving alone.

The Future of DDP

DDP is only the beginning, both in the development or modification of programs to run under DDP and in the tremendous potential for use by the numerous criminal justice agencies. At this point, several subsystems of POSSE are still being developed, and the other systems, such as CASS, IMIS and FMIS (Fleet Management Information System), are being evaluated or scheduled for development under DDP. Also being reviewed for possible development are various fire department and municipal court docketing systems. The latter programs would enable the expansion of inhouse automation into other municipal functions. This kind of assistance holds significant benefits for employees, city management, and taxpayers in these times of restrictive government budgets. Employees can be freed from the drudgery of boring manual tasks and be assigned to more significant, productive work duties. For city management and the taxpayers, it is a means of fixing costs at given steady levels and getting more service for the same amount of tax dollars.

Scores of police agencies throughout the Nation have now institutionalized programs that are enabling their agencies to become much more

effective, efficient, and productive during these times when all governments are being confronted with the realities of cutback management. Since the success of the University City pilot DDP project, a number of other St. Louis County municipalities are closely examining it for use in their own cities. As one police chief stated, "With the development of POSSE by REJIS for the St. Louis area, we recognized an operation that is ideal for medium-sized departments from both the standpoint of capability and cost."

FBI

END