



U.S. Department of Justice

National Institute of Corrections

*Information Center*

---

*1790 30th Street  
Boulder, Colorado 80301  
(303) 444-1101*

**Preliminary Bibliography**  
**on**  
**Technology in Corrections**

**Prepared for Dianne Carter and Richard Barnhart**

**September 1991**

## **BAR CODING. AFIS, ROBOTS. AND DNA**

### **“Robotic Room Service - An Overview and Update.”**

Kolodzieczak, Ron; Henningsen, Michael  
American Jails, Volume IV, No. 1 (May/June 1990).

### **“Automated Fingerprint Identification-Emerging Technology for Corrections.”**

Dechman, Gordon  
Corrections Today, Volume 50, No. 4 (July 1988).

### **DNA Profiling: For Positive Identification.**

1990

5 p.

A Technology Assessment Program Bulletin (September 1990). Washington, D.C., U.S. Department of Justice.

**Forensic DNA Analysis: Issues.** Washington, D.C.: U.S. Department of Justice.  
NCJ-128567 (June 1991).

### **“Jail Robotics: The Wave of the Future.”**

Kolodzieczak, Ron; Plummer, Charles C.  
Lame Jail Network Bulletin, Volume 1, No. 4 (March 1990).

### **“Prince George’s County Tests Bar Code Technology.”**

Cohen, Al  
Lame Jail Network Bulletin, Volume 2, No. 2 (October 1990).

### **Planning Guide: Correctional Facility Applications for Automatic Guided Vehicles**

Rapp, Marcella C.; Henningsen, Michael  
1991

66 p. + 1 videocassette

CS: Apogee Robotics (Fort Collins, CO)

The various applications of Automatic Guided Vehicles (AGV’s) in the correctional environment are described. They include: food service, people movers, surveillance operations, commissary & library services, warehousing operations, and vending machine movement. A videotape depicting the Alameda County automatic delivery system is included. Contains copyrighted material.

Main topics addressed: Security Surveillance systems

### **“Technology Enhances Property Control Systems.”**

Barbour, Gary R.; Huestis, Robert P.  
The Police Chief, Volume LVII, No. 4 (April 1990).

## **Uses of Bar Code Technology**

1990

1 v.

Uses of bar code technology from various states for operating a cashless canteen, managing capital assets, and controlling warehouse goods are described. Not copyrighted. Main topics addressed: Security commissary.

## **INNOVATIVE COMPUTER APPLICATIONS**

### **Computers In Criminal Justice Administration and Management: Introduction to Emerging Issues and Applications (2nd ed.)**

Archambeault, William G.; Archambeault, Betty J.

Anderson Pub. Co. (Cincinnati, OH)

1989

268 p.

"An introduction to computers as management tools with emphasis on microcomputer applications in the administration of American police, court, corrections, and juvenile organizations," is presented. Chapters include: Computer Assisted Monitoring of Offenders; Computer Assisted Instruction (CAI): Theory, Applications and Issues; Data Base and Management Information Systems: Microcomputer Applications; and Emerging Justice Issues in Computer Technology."--Authors preface, p.vii. Copyrighted. Main topics addressed: Computer information management, management information systems, education.

### **The Correctional Service of Canada's New Executive Information System**

1991

25 p.

CS: Correctional Service of Canada (Ottawa, Ontario)

A brief description of the Correctional Service of Canada's Executive Information System (EIS) includes a profile of automated systems and EIS software. System features are further described in material provided by the supplier. Not copyrighted. Main topics addressed: Information system corrections, Canada.

### **Developing a Strategic Support System: Putting Social Science Research Into Practice to Improve Prison Management (Revised)**

Saylor, William G.

1989

18 p.

CS: U.S. Bureau of Prisons. Office of Research and Evaluation (Washington, DC)

"Prepared for the American Society of Criminology Meetings, November 11, 1988, Session 157." A strategic support system and a management information system are defined in relation to the Bureau of Prisons and compared and contrasted with each other. The implications of implementing this information system for the Bureau of Prisons is also discussed. Not copyrighted. Main topics addressed: Information system prisons management, information systems, Federal Prison System.

### **Information Systems Long Range Plan**

1990

115 p.

CS: Indiana Dept. of Correction. Division of Information Management Services (Indianapolis, IN)

The purpose of this plan is to address the issues surrounding the development and implementation of an automated accountability system that will record information and assist with management decision making activities. The application systems to provide this capability are identified. A preliminary implementation schedule and estimated resource requirements are disclosed. Not copyrighted. Main topics addressed: Information system corrections (Indiana), management information systems, decision making, planning.

### **Models of the Criminal Justice System: A Review of Existing impact Models**

1990

69 p.

CS: Abt Associates (Cambridge, MA)

SP: U.S. Bureau of Justice Statistics (Washington, DC)

In order to prepare for designing and developing a Federal criminal justice model relevant to the President's "National Drug Control Strategy," existing computer models of local, state, and Federal criminal justice systems are examined. Modifications that would be necessary to existing models are discussed. New models that would have to be developed to meet the requirements of the "National Drug Control Strategy" are described. Not copyrighted. Main topics addressed: Information management, computers, information system parole prob, drug control laws.

### **Quality Control for Prisons: The BOP's Key indicators/Strategic Support System**

Saylor, William G.

1989

7 p.

CS: U.S. Bureau of Prisons. Office of Research and Evaluation (Washington, DC)

The Key Indicators System, a "comprehensive and unique data management system," is described. The system contains extensive information on each Bureau of Prisons institution, region, security level, and the Bureau nationally, including information about rated capacity, admissions and discharges, average daily population, inmate demographics and numerous other categories. The system provides "quality control standards" and a means for "determining conformance to policy." (p.1 -2). Not copyrighted. Main topics addressed: Information system prisons, management information systems, Federal Prison System.

## GENERAL TECHNOLOGY

### **Criminal Justice, New Technologies and The Constitution: Special Report**

U.S. Government Printing Office (Washington, DC)

1988

CS: U.S. Congress Office of Technology Assessment (Washington, DC)

Areas of new technology that are examined include: Investigation, Identification, and Apprehension; Decisionmaking: Social Sciences and Computers and Correctional Supervision and Treatment. Main topics addressed: Criminal justice system, home detention, computers, management controls, rights of offenders, constitutional legal issues.

### **“Corrections Technologies Offer Efficiency.”**

Jones, Henry A.

1991

3 p.

Lame Jail Network Bulletin, Volume 2, No. 4 (June 1991).

### **Emerging Technologies and Community Corrections**

1989

123 p.

CS: American Correctional Association (Laurel, MD);

National Institute of Corrections (Washington, DC)

**SP:** National Institute of Corrections (Washington, DC)

CN: NIC-88C04GGY8

Technologies currently used in community corrections are identified, examined, and described in terms of their applications, focusing, where possible, on cost/benefits, efficacy in controlling offenders, and impact on staff, offenders, and agency operations. Issues surrounding emerging technologies are also discussed along with their implications for community corrections in policy, program development, and management practices. (p.8). Not copyrighted. Main topics addressed: community based corrections, information technology, computers, education.

### **“High-Security Technology: Are We Using What We Have?”**

1990

7 p.

Singletary, Harry K., Jr.

Proceedings, ACA Annual Conferences 1990.

## **Impact of Technology on Adult Correctional Institutions**

Latessa, Edward J.

1988

443 p.

CS: University of Cincinnati (Cincinnati, OH)

SP: National Institute of Corrections (Washington, DC)

CN: NIC-GS-8

The impact of newly developed technological equipment on correctional institutions is assessed by examining published literature, a survey of departments of corrections, a survey of new and renovated institutions, and site visits. Seven areas of technology are focused on: perimeter security, locking systems, internal security, internal surveillance, fire security, communications, and management information systems. Title of Project is "Study of the Impact of Technology in Prisons." Includes bibliography. Not copyrighted. Main topics addressed: security, information system (corrections), surveillance systems (corrections).

## **NIC Corrections Quarterly Summary. Survey Results. First Quarter, 1991.**

### **"Forensic Science and Criminal Justice Technology: High-Tech Tools for the 90s."**

1991

5 p.

National Institute of Justice Reports. Washington, D.C., U.S. Department of Justice. June, 1991, No. 224.

## **Proceedings, 1990 Carnahan Conference on Security Technology**

De Vore, R. William

1990

53 p.

CS: University of Kentucky. College of Engineering (Lexington, KY)

Automated command control systems, fibre-optic sensors in physical security, integrated electronic security systems, MIS reports to manage personnel, and protective measures against terrorism are among the topics presented. Copyrighted. Main topics addressed: security, management information systems, terrorism.

## **"The Utilization of Technology in Correctional institutions."**

Travis, Lawrence F. III; Latessa, Edward J.; Oldendick, Robert W.

1989

6 p.

Federal Probation, September, 1989.

## OPTICAL SCANNING

### **image Processing for the Public Sector**

1991

15 p.

A Government Technology special report.

### **Public Sector Counts on Optical Technology for the 90s**

Newcomb, Tod

Government Technology, v.3 n.4, p.1,6,14

1990

6 p.

The government's involvement in optical technology for managing information in the 90s is discussed. Copyrighted. Main topics addressed: Information technology.

### **“Records Management in the 1990s.”**

Arkenau, Daniel L

1990

FBI Law Enforcement Bulletin, Volume 59, No. 6 (June 1990).

### **Report on Optical Scanning Data Entry for the Florida Department of Corrections, Seventh Judicial Circuit**

1987

CS: R.J. Kelly and Associates (Tallahassee, FL);

Florida Dept. of Corrections (Tallahassee, FL)

SP: National Institute of Corrections (Washington, DC)

CN: NIC-GR-9

Title of project: Feasibility Study for the Utilization of Optical Scanning Devices in Probation/Parole.

## TRAINING TECHNOLOGY

### **Communications Technologies in Adult, Career, and Vocational Education**

Kerka, Sandra

ERIC Digest, n. 81

1989

2 p.

CS: ERIC Clearinghouse on Adult, Career, and Vocational Education (Columbus, **OH**); Ohio State University. Center on Education and Training for Employment (Columbus, **OH**)

SP: U.S. Dept. of Education. Office of Educational Research and Improvement (Washington, DC). Types and uses of communications technologies (CT) and their instructional effectiveness are discussed. Issues in the use of CT for adult, career, and vocational educators are reviewed. Not copyrighted. Main topics addressed: Education, information technology.

### **Computerized Interactive Video Training Program**

1989

10 p.

CS: Florida Dept. of Corrections. Bureau of Staff Development (Tallahassee, FL)

This brief description offers information on the philosophy of the program, hardware configuration, courseware, and locations within Florida of Computerized Interactive Video systems. Not copyrighted. Main topics addressed: Training technology, computers, Florida, training curricula-general.

### **Directory of Distance Education Through Telecommunications: A Directory of NUCEA Institutions: Utilizing Telecommunications in Distance Education**

Willis, Sue; Bridwell, Susan E.

1989

137 p.

CS: National University Continuing Education Association. Division of Educational Telecommunications (Washington, DC). Copyrighted. Main topics addressed: Training technology, telecommunications, topical directories, educational methods.

### **Interactive Video In Vocational Education**

Kerka, Sandra

ERIC Digest, n. 51

1989

2 p.

CS: ERIC Clearinghouse on Adult, Career, and Vocational Education (Columbus, OH); National Center for Research in Vocational Education (Columbus, OH)

SP: U.S. Dept. of Education. Office of Educational Research and Improvement (Washington, DC). Delivering individualized instruction, types of video technology, five phases of interactive video design, producing interactive video materials, and using interactive video in instruction are topics addressed in this overview. Not copyrighted.

## **HIGH TECH COMMUNICATION SYSTEMS**

### **Arraignments Via Two-Way Interactive Audio and Video Links**

1990

1 p.

CS: US West Communications (Portland, OR); Multnomah County Sheriff's Office (Portland, OR)

A brief description is provided on the two-way interactive audio and video links used to conduct arraignment in Portland, Oregon, while the prisoner remains at a Correctional institute 45 miles away. Not copyrighted. Main topics addressed: Jail relationship, Oregon, courts.



**“A Systems Management Approach to Mobile Data Terminals.”**

Smith, Les  
1988

3 p.

The Police Chief, Volume LV, No. 5 (May 1988).

**Jail Technology Symposium: Safety and Identification Systems, Panel Discussion.**

Burns, James W.  
198-?

The pros and cons of different types of body alarm systems are discussed, including fixed location devices, radio frequency devices, infrared systems, and ultrasonic systems.

**COUNTING**

**Prisoner Inventory Control System**

1989?

1 p.

CS: Prince George's County Government. Dept. of Corrections (Upper Marlboro, MD)  
The three main components and desired uses of the Bar Code System are discussed. This system utilizes encoded wrist bands for inmate tracking and headcounts. Not copyrighted. Main topics addressed: Surveillance systems, Maryland.

**“Wrist Watch.”**

Warren Rohn; Ostroski, Trish  
1991

3 p.

New bracelets assist inmate identification.

Corrections Today, Volume 53, No. 4 (July 1991).

**HAIR ANALYSIS**

**Hair Analysis for the Detection of Drug Use In Pretrial, Probation, and Parole Populations.**

Baer, James D.; Baumgartner, Werner A.; Hill, Virginia A.; Bland, William H.  
1991

8 p.

Federal Probation (March 1991).

## HIGH-TECH SECURITY

### **Contraband Control and the Use of X-rays In the Prison Environment**

Sexton, Peter S.

Pacific Law Journal; V.16, 409-430

1985

Main topics addressed: Contraband, searches, California, rights of inmates.

### **Detention Grade Lock Test Report**

1990

10 p.

CS: Naval Civil Engineering Laboratory. Security Engineering Division (Port Hueneme, CA) Operational load tests were conducted on six detention grade locks to determine how well the locks performed when binding force was applied against them. A partial list of Security Engineering Division's publications is included. Not copyrighted. Main topics addressed: Security

### **"Electronic Control Systems-New Products Mean improved Performance."**

Kraus, Charles

1988

3 p.

Corrections Today, Volume 50, No. 4 (July 1988).

### **"Electronic Perimeter Security - Making Towers Obsolete."**

Newman, Marsha J.

1989

2 p.

Corrections Today, Volume 51, No. 4 (July 1989).

### **"High-Tech Security Systems-What to Know Before You Buy."**

Berglund, Dennis H.

1988

3 p.

Corrections Today, Volume 50, No. 4 (July 1988).

### **"Modern Security in a Direct Supervision Jail."**

Giordano, Carl

1988

2 p.

Corrections Today, Volume 50, No. 4 (July 1988).

## **New Technologies in Perimeter Security, Including Electronic or Lethal Systems**

1990

1 v.

Design criteria guidelines for security fences and several kinds of security perimeter fencing used by various states are identified. Not copyrighted. Main topics addressed: security.

### **“Security Glazing-New Technology Offers New Options.”**

Foster, Michael

1989

3 p.

Corrections Today, Volume 51, No. 4 (July 1989).

### **“Technology and the Direct Supervision Jails.”**

McCulloch, Duncan J.; Stiles, Tim

1990

6 p.

American Jails, Volume III, No. 4 (Winter 1990).

### **“Two Prisons Showcase New Electronic Perimeters.”**

Lemon, Max

1989

1 p.

Correction News, Volume 3, No.3 (September 1989) California Department of Corrections.

## **The Ultimate In Positive Identification: EyeDentification System 7.5**

1988

33 p.

The 7.5 reads an individual's unique retinal eye pattern to identify individuals for security purposes. Main topics include: security, identity photographs, South Carolina. Contains copyrighted material.

## **USE OF VIDEO IN INSTITUTIONS**

### **Evaluation of the Use of Closed Circuit Television In Felony First Appearances**

Newman, Una Hutton; Kaiser, Laurel I.; Flynn, Mary

1985

CS: Dade-Miami Criminal Justice Council (Miami, FL)

Prepared for: The Honorable Gerald T. Wetherington, Chief Judge, 11th Judicial circuit: at the request of: The Honorable Marshall H. Ader, Administrative Judge, County **Court**, Traffic section. Main topics addressed: Jail relationship, television programming, first offender.

**Microwave Network Improves Court Security and Reduces Manpower.”**

Van Landingham, Jim

1980

2 p.

The National Sheriff, Volume 40, No. 3 (June/July 1988).

**Use of Closed Circuit Television for Arraignments**

Corrections Information Series

1985

CS: Library information Specialists, Inc. (Boulder, CO);

National Institute of Corrections Information Center (Boulder, CO)

SP: National Institute of Corrections (Washington, DC)

CN: NIC-DL-1

Main topics addressed: Jail relationship, courts, television programming.

**Video Security Systems, 2nd Ed.**

Bose, Keith W.

Butteworths (Stoneham, MA)

Main topics addressed: Surveillance systems, security.

**GENERAL TRENDS\***

**“Crime In the 1990s: A Federal Perspective”**

Edited by:

Seng, Magnus J; Frost, Thomas M.

1989

4 p.

Federal Probation (December 1989)

**“Correctional Programs in the Year 2000.”**

1989

63 p.

The June 9, 1989 Conference on Issues in Corrections, A Record and Proceedings.  
Washington, D.C., Federal Bureau of Prisons.

**“Corrections 2000: Preparing for the Future.”**

Collins, William C.

1990

4 p.

American Jails, Volume IV, No. 1 (May/June 1990).

\*See, also, Inmagic printout. Titles with asterisks are also included.

**Corrections-Heading Into the 21st Century.**

Saxton, Samuel F.

17 p.

**‘The Future of Law Enforcement: Dangerous and Different.’**

Toffler, Alvin and Heidi

1990

4 p.

FBI Law Enforcement Bulletin, Volume 59, No. 1 (January 1990).

**The New Realities.**

Drucker, Peter F.

1989

**264** p.

**No Escape-The Future of American Corrections.**

Dilulio, John J., Jr.

1991

**272** p.

**What Futurists Believe.**

Coates, Joseph F.; Jarratt, Jennifer

1989

**326** p.