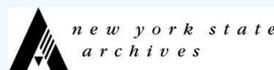


To Preserve and Protect:

Security Solutions for New York's Historical Records

Sponsored by:

New York State Historical Records Advisory Board



Outline

- Examination of the Problem
- Insider Theft
- Facility Design
- Security Technology
- Contractors and Vendors
- Research Room Design and Management
- Security Issues in Collection Management
- Exhibition Security
- Post-Theft Response
- Policies and Procedures

Examination of the Problem

RBMS Theft Reports 1993-2003

- 243 incidents of theft of library, archival and manuscript materials
- 80 (32%) were documentary thefts
 - 53% manuscript materials
 - 29% maps
 - 12% plates, prints, photos, memorabilia

RBMS Theft Reports 1993-2003

- East Coast: 59% reported incidents
- Mid-West: 14% reported incidents
- Remainder scattered across US

- 33% Large libraries with multiple incidents
- 12% Governmental archives
- 12% Private archives/individuals

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Society of American Archivists

SAA Security Roundtable Survey 2006-2007

- Distributed to SAA Institutional Members
- Of 500 surveys, 67 responded
- 13% of respondents (9 institutions) reported **at least one** theft between 2002-2007

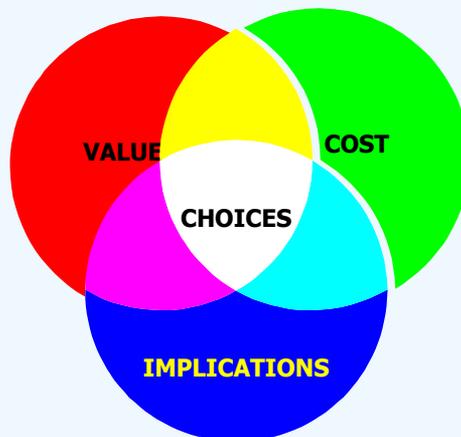
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Risk Managers

- Evaluate potential losses and harmful developments
- Determine impact of loss events
- Develop options to mitigate risks
- Study realistic options
- Perform cost/benefit analysis

Cost/Benefit Analysis



What gets stolen?

- Autographs
- Black history materials (especially from slavery era)
- Controversial topical materials
- Architectural drawings/plans for famous buildings
- Materials related to the occult
- Ephemera
- High-value collectibles
- Lighthouse-related items
- Maps

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What gets stolen?

- Memorabilia related to well known families, events, groups
- Native American documents (especially from frontier era)
- War-related materials
- Philatelic items
- Photographs
- Presidential materials
- Railroad-related materials
- Sports-related materials
- Vintage blank paper
- Documents with "PII"¹

¹ Personally Identifiable Information

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Other materials, too...

- Individuals may steal documents and files:
 - That prove or disprove claims or theses
 - To keep other people from accessing them
 - To cause or avoid embarrassment or implication
 - For convenience

Study of Bonded Employees

- 15% Honest
- 45% Very Dishonest
- 40% Relatively Honest

Warning Signs

Potential Insider Thief

- Establishes own rules
- Arrives too early/stays too late
- Works on weekends
- Leaves for no particular reason
- Warns when a supervisor approaches
- Refuses to go on vacation
- Aggressive collectors
- Sells historical items
- Struggling with debt
- Demonstrates irrational sensitivity to questioning
- Not a team player

Prevention

- Hiring Procedures
 - Background Checks
- Training and Staff Involvement
 - Orientation
 - Ongoing training and support
 - Managing change

Prevention

- Reduce Opportunities
 - Staff lockers
 - Limit unsupervised situations
 - No work areas within stacks
 - Key control
 - Mailroom Control
 - Exit checks
- Fair, Consistent, Sensitive

Facility Design

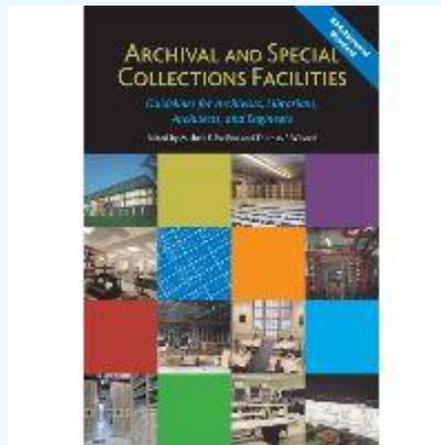


Thomas Wilstead, *Planning New and Remodeled Archival Facilities*.

Available at the SAA Bookstore <http://saa.archivists.org/store/planning-new-and-remodeled-archival-facilities/187/>

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Michele F. Pacifico and Thomas P. Wilsted, *Archival and Special Collections Facilities: Guidelines for Archivists, Librarians, Architects and Engineers*

Available at the SAA Bookstore <http://saa.archivists.org/store/archival-and-special-collections-facilities-guidelines/1355/>

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Planning a Secure Facility: Location

- Choose a safe site
 - Avoid high crime areas
 - Avoid heavily industrial area
 - Avoid flood plains

Planning a Secure Facility: Architects and Consultants

- Architect should be experienced with your type of facility
- State functional requirements relative to security
- Hire a security consultant

NBS Test Barriers

- 8" hollow core cinder block v. 12 lb. hammer = 2 minutes
- Brick veneer, concrete filled block v. 10 lb. hammer = 3 minutes
- 8" reinforced concrete v. conventional tools = 18 minutes
- Wood walls v. electric saw = 2 minutes

Raymond T Moore, *Barrier Penetration Tests*. Washington D.C., US Department of Commerce, 1974

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Perimeter Security

- Limit entry points
- Well-secured portals and windows
- Fencing
- Landscaping should avoid obscuring building and path views
- Lighted doorways, parking areas and paths
- Secure locks: interior or hardened hinges

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Avoid Exterior Hinges



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**Hardened
Hinges
Without
Exterior
Lock or
Handle**

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Think Zones!

- Perimeter
- Grounds
- Building Envelope
- Public Access Areas
 - Exhibits, restrooms, lockers
- Research rooms
- Staff workspace
- Mail room and loading dock
- Beyond confines of your unit
- Stacks
- Everything in between!

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Security Technology

Systems

- Access Control
- Intrusion Detection
- Surveillance

Manual Access Control

- Control Doors
 - Use key control
 - Use high-security hardware
 - Avoid sub-masters

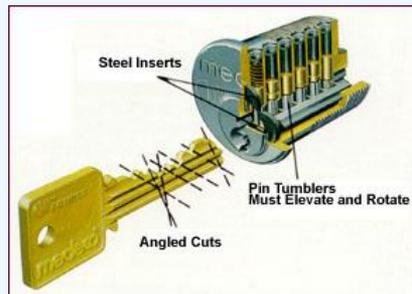
Locks

Key-in-Knob: Less Secure



Deadbolt: More Secure

Secure Keys



Electronic Access Control



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Access Card Technology Comparison

Type	Pros	Cons
Mag Swipe	Inexpensive	Easily defeated, disabled, or cloned; strip wears out; risky when combined with ID
RFID Prox	Wavable; stable; not costly; multi-functional	Brittle card; must be 128 bit encrypted; risky when combined with ID
RFID + PIN	Familiar ATM-card style technology; requires PIN for use	Door readers less reliable than prox; requires PIN for use
Fingerprint	IDs body part; positive personal ID; proven technology	Can be spoofed; easily vandalized; often requires multiple swipes
Other Biometrics	Highly Reliable	Expensive and complex; easily vandalized

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Keypad Locks



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Biometric Verification

Biometric verification is any means by which a person can be uniquely identified by evaluating one or more distinguishing biological traits, including:

- Fingerprints
- Hand Geometry
- Face Geometry
- Earlobe Geometry
- Retina/Iris Patterns
- Voice Waves
- DNA
- Signatures

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Fingerprint and Hand Geometry Scanners



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Face and Iris Geometry Scanners



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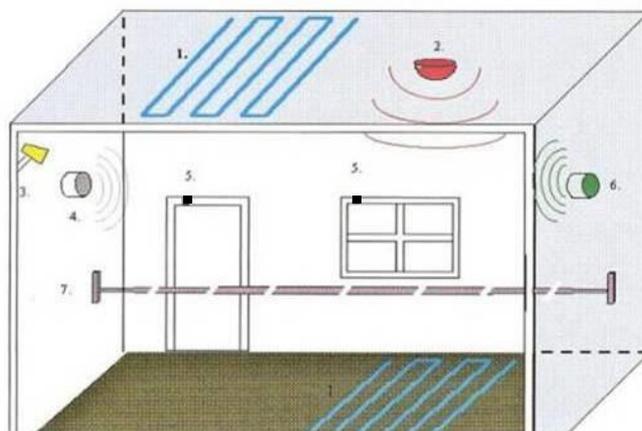
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Detection Systems

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Interior Sensors Model



- 1 Fiber Optic Wall/Ceiling Sensors
- 2 Volumetric Sensors¹
- 3 Video Motion Detector
- 4 Vibration Wall/Ceiling Sensors
- 5 Door/Window Control²
- 6 Glass Break Sensors³
- 7 Photoelectric Beam

¹Microwave, Active Ultrasonic, Active Infrared, Passive Infrared, Passive Ultrasonic, Audio

²Mechanical Switch, Magnetic Switch, BMS

³Acoustic, Shock

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Problems with Motion Detectors

ALARM TRIGGER	PASSIVE IR	MICROWAVE	ULTRASONIC
Curtain Movement	Errors Possible	OK	Avoid
External Movement	OK	Avoid	OK
Fluid Movement/Pipes	OK	Avoid	OK
Heating	Avoid	OK	Errors Possible
High Humidity	Errors Possible	OK	Errors Possible
High Pitched Noise	OK	Avoid	Avoid
High Temperatures	Avoid	OK	Errors Possible
Microwave Interference	OK	Errors Possible	Errors Possible
Reflections	OK	Avoid	OK
Sunlight	Avoid	OK	OK
Shocks/Vibrations	OK	Avoid	Avoid
Vermin, Cats, Dogs	Avoid	Avoid	Avoid

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Intrusion Detection

- May make loud noise at point of intrusion
- May send immediate report to a 24/7 central station
- Should record location, date and time of intrusion

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CCTV Basic Applications

In Archives and Special Collections

- Perimeter Security
 - Parking Lots
 - Emergency Exits
 - Loading Docks
- Research Room
 - Monitor Researchers
 - Record Researcher Activity
- Area Surveillance (Overt and Covert)
 - Stacks
 - Work Areas
 - Offices

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Typical CCTV Equipment



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Multiple CCTV Cameras Display



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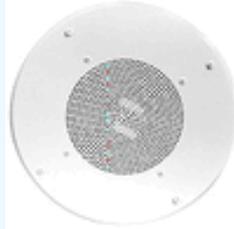
Recording CCTV

- Install digital CCTV recorders with server or high capacity on-board storage with storage media downloading
- Capability to:
 - Temporarily record unauthorized emergency exit use
 - Permanently record research activities in research room

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Covert CCTV Cameras



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Construction and Renovation

- Collections are especially vulnerable during construction and renovation.
 - Walls, doors, barriers breached
 - Ubiquitous construction workers
 - Risk of fire and water incursions
- If possible:
 - Provide continuous staff supervision
 - Temporarily move collections to a secure location

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Construction and Renovation

Northeast Document Conservation Center

<http://nedcc.org/free-resources/preservation-leaflets/3.-emergency-management/3.9-protecting-collections-during-renovation>

**Preservation Leaflet 3.9:
Protecting Collections During Renovation**

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Contractors and Vendors

Security Vendors

Choose the right vendor!

- Check with local law enforcement agencies
- How long has the vendor been doing business in your area?
- Request local references
- Technicians should be factory-trained
- Employees should be bonded

Security Vendors

Write a good service contract!

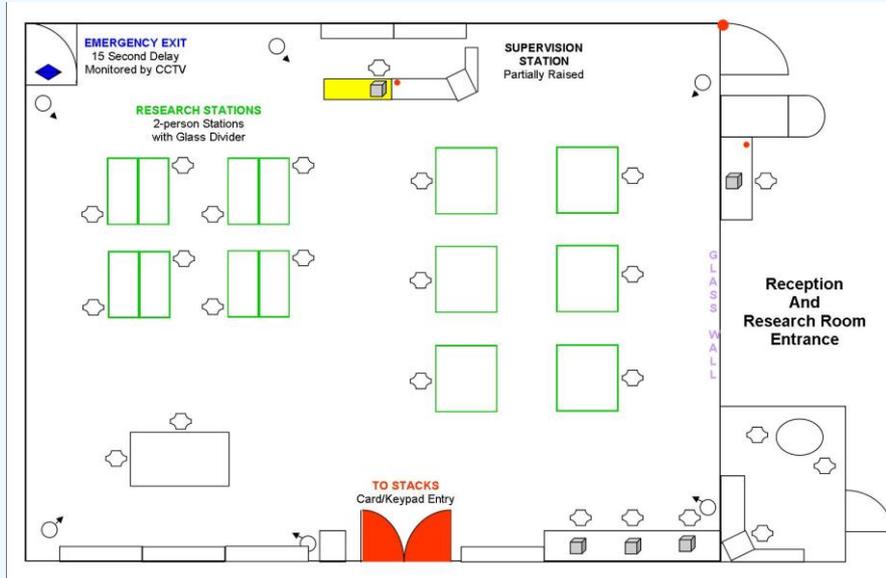
- Specify maximum “down time” (24 hours maximum)
- Local service
- Periodic testing
- Who will respond?

Research Room Design and Management

Elements of Research Room Design

- Doors, buzzers and locks
- Windows
- Pillars, obstructions
- Lockers/Checkroom
- Staff desks
- Researcher desks
- Lighting
- Registration point
- Reserve and reshelving areas
- Monitoring equipment

Research Room Design



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Cornell University Kroch Restricted Access Reading Room



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Essentials

Things to Know

- Who comes into the research room (Registration)
- What comes into the research room (Rules)
- Applicable NYS laws¹

Records to Create/Retain

- Individual registration forms
- Daily sign-in register/log book
- Request forms/call slips
- Missing item records

http://www.rbms.info/committees/security/state_laws/new_york.shtml

Daily Sign-In Register/Log Book

● ●
Utopian University Library
Special Collections Research Room
Daily Register

Date: _____

Name (please print clearly):

Signature:

Call Slip/Request Form

Utopian University Library Special Collections Call Slip

Collection Name or Item Description

Box #

Your name (print clearly)

Date(s) received	Reader signature	Staff initials

Date returned

Missing Item Record

Report of Missing Manuscript/Document

Reported By _____ Date Reported Missing _____
Collection _____ Missing Item(s) _____
Container Number _____ Location Number _____
Date or Other Circumstances When Missing Item(s) Is/Are Known to Have Been in
Custody _____
Is A Microfilm or Photocopy of the Missing Item(s) Known to Exist? (Y/N) _____
Reports of Searches: (Attach Reports That Give Brief But Complete Details on Any Steps
Taken to Locate the Missing Document, Including Dates of the Search, Initials of Staff
Members, Locations Searched, etc.) _____

Route This Report to: [e.g.] Director, Assistant Director, Head of Security, Head of
Reference

Copy to: Missing Materials File

**How long should you keep
these records?**

FOREVER!

Registration

- Establishes:
 - Identity of individuals entering research room.
 - Register Research Assistants and anyone else accompanying the visitor.
 - Research needs of the visitor.
- These functions may be addressed in a single interview or separate interviews.

Identification

- Require two forms of ID
- At least one must be government-issue photo ID
- Attempt to verify IDs when possible
 - Published Guides
 - Scanners
 - Internet Search
- Be aware of falsified IDs

Limit What Comes In

Allow

- Laptops without cases
- Note paper (or provide drilled paper)
- Pencils
- Necessities/valuables in clear plastic zip-top bag

Forbid

- Briefcases, suitcases, computer cases, backpacks, purses
- Newspapers
- Coats
- Umbrellas

Assign Seats

**SIT WHERE
YOU'RE
TOLD.**

Sign in Dorothy's Chatterbox Café, Lake Wobegon, Minnesota

Handling of Material

- Limit circulation
- Do not allow researchers to barricade themselves behind boxes or carts
- One box open at a time
- One folder on desk at a time
- *Do they need to use originals?*

Duplication

- Don't make it more difficult or expensive than necessary
 - Theft may occur for convenience or cost-savings.
- Use colored paper for copies
 - Helps facilitate theft detection at exit checks.
- Self-service copiers may provide a venue for theft

Monitoring the Room

- Never leave the room unattended
- Face researchers at all times
- Don't be distracted by other tasks
- Use your ears
- Walk the room frequently
- Rotate attendant staff frequently

Material Return and Exiting

- Check inside the container
- No materials should be left on desks during lunch or other long breaks
- Researchers must stop at attendant desk before exiting or visiting lockers
- Researchers' belongings should be examined by room attendant and at facility exit

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Suspicious Behaviors

- Moving too rapidly through documents
- "Cruising" the research room
- Examining materials on other tables or carts
- Scanning materials being used by other researchers
- Moving to dark corners or away from visible areas
- Making frequent trips to lockers, copier, reference desk, restroom, or outside
- Requesting collections unrelated to stated research topic

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Suspicious Behaviors

- Working near the floor, under the table, or in lap
- Frequent looks at attendants, cameras or mirrors
- Shielding position from electronic or human monitors
- Paying more attention to the surroundings than the research
- Putting hands in pockets, under the table
- Frequent stretching, clothing adjustments, bending, reaching or scratching

Suspicious Behaviors

- Moving desktop folders, papers, laptops or boxes to create a barricade
- Efforts to engage staff or other researchers in long conversations
- Behaving obnoxiously to encourage avoidance by staff or other researchers

Interventions

- Begin with a “customer service” approach
- If behavior is suspicious, but theft is not observed:
 - First Approach: Friendly, make eye contact, offer help
 - Second Approach: Warn researcher, quietly alert Supervisor
 - Third Approach: Bring in Supervisor

Interventions

- Researcher may have accidentally mixed collection materials in personal possessions.
- Researcher may have “accidentally” mixed collection materials in personal possessions.

Interventions

- When contacting a Supervisor or Law Enforcement, do not tip off the subject or others in the research room.
- Law may permit reasonable detention if theft is suspected, but **never touch the subject**.
- If subject flees, do not attempt to stop, but do attempt to get license plate or vehicle identification information.

Security Issues in Collection Management

Appraisal and Acquisition

- Inventory valuables
- Don't broadcast information
- Seal and number
- Timely transfer
- Check on arrival
- Appraisals for financial value must be conducted at the repository and must be supervised

Tamper-Evident Tape



Accessioning

- Use secure temporary storage
- Register accessions upon arrival
- Restrict access to accession records

Processing and Storage

- Properly designed processing workroom
- Match the processor to the collection
- Good work habits
- Identifying, copying and sequestering vulnerable items (or: The Hazards of MPLP)
- Box labels
- Locator File
- Mark shelves and aisles innocuously

Deaccessioning

- All deaccessions of intrinsically valuable materials should be documented in:
 - Accession Register
 - Accession Folder
- Senior Archivists should sign off on documentation.
- Deaccessioning form should accompany transferred intrinsically valuable items.

Moving

- Read shelves first
- Have staff work with movers
- Trucks locked and sealed in presence of staff member
- No stops en route if within one day's travel
- Carts should be stretch-wrapped

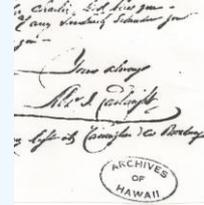
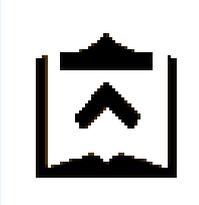
To Mark or Not to Mark?

- Pros:
 - May discourage theft
 - May facilitate recovery
- Cons:
 - Permanent defacement of item
 - Time-consuming
 - May encourage mutilation

Marking: Options and Alternatives

- Stamp on face
- Stamp on verso

Examples of Stamps:



Marking: Options and Alternatives

- Microdot
- Microembossing and microdebossing
- Perforation (Never!)



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If You Mark...

- Use both visible and hard-to-detect marks
- Follow Library of Congress Recommendations
 - <http://www.loc.gov/preservation/care/markling.html>
 - Use permanent ink
 - Free ink available through the Library of Congress

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REFORMAT!

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Exhibition Security

Exhibitions and Loans

- In-House Exhibitions
 - Registrarial control
 - Secure cases
 - Secure spaces
- Loans
 - Loan agreements
 - Facilities reports
 - Packing and transportation

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Secure Exhibit Cases



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Exhibition Loans



- Standard Facility Report
 - 26 page Form covering:
 - Building construction and security
 - Environment
 - Fire Protection
 - Handling and packing
 - Insurance
 - Dedicated Security Section (Part 5)

Available for purchase at:

www.aam-us.org

\$15.00 AAM Members

\$20.00 Non-Members

Post-Theft Response

Before a Theft Occurs

- Establish a policy outlining procedures for:
 - Discovery of theft or mutilation in progress
 - Internal and external
 - Discovery of a past theft or mutilation
 - Perpetrator unknown
 - Suspicion of internal theft
 - Suspicion of researcher theft
 - Suspicion of non-researcher external theft

Do...

- In instances of probable theft (internal or external), immediately:
 - Contact law enforcement
 - Eliminate subject's access to all materials, facilities, services, networks and equipment
 - Document all details of the incident
 - Date, time, place, person(s), material(s)

Don't...

- In instances of probable theft (internal or external), don't:
 - Interrogate the suspect yourself
 - Touch or change any element of the crime scene (including computer files)
 - Trust the subject
 - (e.g. to surrender keys at a later date, to voluntarily return alienated materials, etc.)

After a theft, you will need to:

- Determine the extent of the theft
- Interact with law enforcement and courts
- Coordinate internal communications
- Create and maintain extensive records
- Manage external communications:
 - Media
 - Donors
 - Profession
- Address psychological/emotional impact

Gathering Evidence

- Detailed, copy-specific descriptions of missing materials
- Relevant video files or security system logs
- Chain of custody documentation (including call slips, copies of electronic records, etc.)

Gathering Evidence

- Indications of unauthorized physical access to restricted areas
- Reports of missing cataloging or circulation records
- Indications of database tampering
- Reports on indications of systematic patterns of materials loss

Gathering Evidence

- **If insider theft:**
 - Examine collections related to research or collecting interests
 - Examine collections accessioned, cataloged, etc. by subject
 - Examine collections accessed by subject
- **If researcher theft:**
 - Examine other collections used by the same researcher
 - Examine collections that were used by others on the same days that the subject was present

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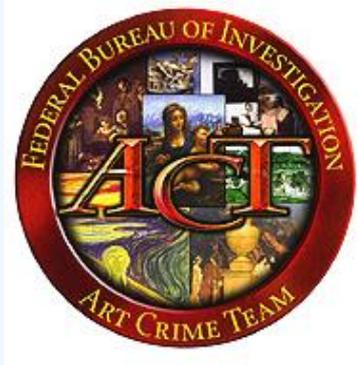
Reporting the Theft

- Administration and Security staff
 - Use caution; you may be reporting to the thief
- Appropriate law enforcement agencies
- Other repositories, especially in the region
- Related professions
 - Archives, libraries, museums, municipal clerks, historical societies, genealogical societies
- Sellers
- Donors, Funders and Trustees
- The Public

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FBI Art Theft Program



www.fbi.gov/hq/cid/arttheft/arttheft.htm

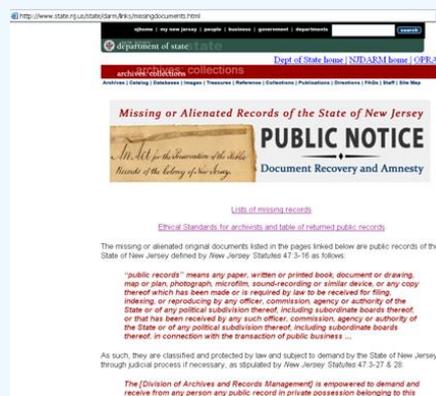
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Places to Report a Theft Your Website



National Archives and Records Administration
www.archives.gov/research/recover



New Jersey State Archives
www.state.nj.us/state/darm/links/missingdocuments.html

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Places to Report a Theft

Social Networking and Web 2.0



- Also:
 - RSS Feeds, Newsletters, Forums, etc.

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Other Places to Report Theft

- Archives & Archivists Listserv
 - www.archivists.org/listservs/arch_listserv_terms.asp
- Antiquarian Booksellers Association of America (ABAA)
 - www.abaa.org/books/abaa/databases/stolen_search.html
- Ex Libris Listserv
 - <https://list.indiana.edu/sympa/arc/exlibris-l>
 - Museum Security Network
 - www.museum-security.org/

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Theft Reports Database

**Association of College and Research Libraries:
Rare Books and Manuscripts Section**

www.rbms.info/committees/security/theft_reports/index.shtml

1987 - 2010

Searching for Stolen Property

- eBay
 - www.ebay.com
 - www.bayprospector.com
 - Search Terms:
 - Manuscript
 - Document
 - Map
 - Photograph
 - Etc.
 - Search Categories:
 - Collectibles/Postcards & Paper
- Sellers
 - www.manuscript.org
 - www.abaa.org

Recovery

- In most jurisdictions, stolen material remains the legal property of the original owner, but...
 - Laws vary by state and country
 - Negotiation may work
 - Replevin: a civil suit to recover lost property

Hearts and Minds

- Influencing the courts
- Influencing public opinion
- Influencing legislation

Model Legislation Should Specify

- What materials are covered by the law?
- What constitutes the repository's premise?
- What constitutes unlawful behavior?
- What are the penalties?
- What actions are employees empowered to take during a suspected theft?
- What notices must be posted to alert researchers to the law?

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Policies and Procedures

Security Program and Security Policy Design

- Security Policies
- Security Officer/Security Committee
- Security Audit/Assessment

Security Audit

- Collection Components
- Incidents of Theft
- Current Security Policies
- Staffing Patterns
- Perimeter Security
- Elevator and Stairwell Security
- Door Security
- Alarm Systems
- Zone Security
- Post-Theft Procedures

Three Levels of Protection

- Good Protection
 - Determine vulnerabilities
 - Develop security plan
 - Emphasize staffing policies and training
 - Enhance perimeter protection
 - Collection protection

Three Levels of Protection

- Better Protection
 - All good protections, plus:
 - Employ a security consultant
 - Enhance physical facilities protection
 - Enhance collection protection
 - Investigate insurance for most valuable items

Three Levels of Protection

- Best Protection
 - All good and better protections, plus:
 - Guards
 - Electronic access control systems
 - Intrusion detection and alarm systems
 - Appraisal, inventory and duplication of items worth more than \$1,000.00 in the marketplace