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

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

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
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

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### 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

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


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
Avoid Exterior Hinges

Hardened Hinges Without Exterior Lock or Handle
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!

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

![Electronic Access Control Image](image)

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## Access Card Technology Comparison

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

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Keypad Locks

Biometric Verification

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

- Fingerprint
- Hand Geometry
- Face Geometry
- Earlobe Geometry
- Retina/Iris Patterns
- Voice Waves
- DNA
- Signatures
Fingerprint and Hand Geometry Scanners

Face and Iris Geometry Scanners
Detection Systems

Interior Sensors Model

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

1. Microwave, Active Ultrasonic, Active Infrared, Passive Infrared, Passive Ultrasonic, Audio
2. Mechanical Switch, Magnetic Switch, BMS
3. Acoustic, Shock
Problems with Motion Detectors

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

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
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

Typical CCTV Equipment
### Multiple CCTV Cameras Display

### 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
Covert CCTV Cameras

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
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

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 laws

**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

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**Daily Sign-In Register/Log Book**

Utopian University Library
Special Collections Research Room

Daily Register

Date: ________________
Name (please print clearly):
____________________________
Signature:
__________________________________________

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Call Slip/Request Form

Utopian University Library
Special Collections Call Slip

Collection Name or Item Description
Box #
Your name (print clearly)

<table>
<thead>
<tr>
<th>Date(s) received</th>
<th>Reader signature</th>
<th>Staff initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date returned

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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

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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**

<table>
<thead>
<tr>
<th>Allow</th>
<th>Forbid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laptops without cases</td>
<td>Briefcases, suitcases, computer cases, backpacks, purses</td>
</tr>
<tr>
<td>Note paper (or provide drilled paper)</td>
<td>Newspapers</td>
</tr>
<tr>
<td>Pencils</td>
<td>Coats</td>
</tr>
<tr>
<td>Necessities/valuables in clear plastic zip-top bag</td>
<td>Umbrellas</td>
</tr>
</tbody>
</table>
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

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
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.
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!)

If You Mark…

- Use both visible and hard-to-detect marks
- Follow Library of Congress Recommendations
  - [http://www.loc.gov/preservation/care/marking.html](http://www.loc.gov/preservation/care/marking.html)
- Use permanent ink
- Free ink available through the Library of Congress
REFORMAT!

Exhibition Security
Exhibitions and Loans

• In-House Exhibitions
  • Registrarial control
  • Secure cases
  • Secure spaces

• Loans
  • Loan agreements
  • Facilities reports
  • Packing and transportation

Secure Exhibit Cases
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

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
FBI Art Theft Program

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

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/daram/links/missingdocuments.html
Places to Report a Theft
Social Networking and Web 2.0

- Blogs
  - Hauls of Shame
- Facebook
  - NARA Archival Recovery Team
- Flickr
  - Denver Public Library
- Twitter
  - Los Angeles Stolen Bikes

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

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/
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?

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

• 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