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**--PART ONE--**

CHAPTER TWO: RECORDS INVENTORY

I. WHAT IS A RECORDS INVENTORY?

- A. A complete and accurate survey of an organization's file cabinets
  - 1. Describing
  - 2. Quantifying
  - 3. Recording information, so that the records can be analyzed for
    - i. Retention
    - ii. Protection
    - iii. Other purposes
- B. Vital because for all records by an organization
  - 1. Identifies
  - 2. Quantifies
    - i. Created
    - ii. Referenced
    - iii. Processed
- C. First phase in
  - 1. Development
  - 2. Implementation of a program
- D. Working document
  - 1. Records retention schedule
  - 2. Establishment of vital records program
  - 3. Other improvements to RM program

II. PLANNING THE INVENTORY

- A. Inventory=survey
  - a. Requirements for inventory depends on variety and complexity of records series, quantity of records, amount of collected data
  - b. Walk through survey
    - i. Count file drawers & cabinets
    - ii. Observe layouts and types of records & practices
      - 1. 50-75 drawers=8 drawers
      - 2. One records series=3 drawers
      - 3. One records form=30-45 minutes to complete, 16 forms/day
      - 4. Average of one analyst=150 cu. Ft. records/day
- B. Include the following
  - a. Commitment from top management
    - i. Preferably in writing
  - b. Est. of work schedule
    - i. Seq. of offices to be visited
    - ii. When each office is inventoried
    - iii. Coordinator for each office
    - iv. Supervisor to give clearance and approve schedule for inventory
    - v. Beginning and end dates for project
  - c. Commitment to staff and management
    - i. Memorandum sent to all supervisors and personnel concerning
      - 1. Nature of projects,
      - 2. Why being done,
      - 3. Affectation of normal routine,

4. Beginning date
- ii. Orientation session
- d. Project staff and training
  - i. Use of internal staff
    1. Advantages:
      - a. RM manager/analyst provides on-the-spot analyses
      - b. Trained analyst understands best techniques
      - c. RM/analyst will have to study the sheets—day-to-day management easier
      - d. Eliminates need to hire from outside
    2. Disadvantages:
      - a. Internal staff so small by time data collected virtually obsolete
      - b. Internal RM staff may not exist anyway
  - ii. Use of department staff
    1. Advantages
      - a. Each dept. must designate one or more own people to conduct inventory
      - b. People must be trained by RM in inventory techniques to collect in UNIFORM way to facilitate UNIFORM interpretation
      - c. Target date agreed upon by all concerned
    2. Disadvantages
      - a. Dept. may not be able to spare the personnel
      - b. Tendency to cover up known deficiencies
      - c. Personnel who conduct retention analysis may not have taken the inventory
      - d. Newly trained will miss deficiencies seasoned personnel will not
      - e. Inventory considered an “extra” assignment
  - iii. Outside consultant
    1. Advantages
      - a. Outside consultant has years of acquired experience (also may have analyst “on the side”)
      - b. Schedule developed by this consultant because they did inventory
    2. Disadvantages
      - a. None listed...?
- e. Statement of objectives & strategies
  - i. Immediate goals of the program
    1. Development of RRS
    2. Development of records storage and retrieval system of non-current records
    3. Improvement of
      - a. Active files management systems through micrographics,
      - b. Electronic imaging,
      - c. Better hard copy systems
    4. Development of vital records protection and security program
    5. Judicious use of filing equipment and floor space
  - ii. Secondary goals
    1. Correspondence management
    2. Reports control
    3. Forms control
    4. Office automation
  - iii. Strategies: obtain sufficient info. About various records so intelligent decisions made

- iv. Est. the following certainties:
  - 1. Reason or purpose for gathering information
  - 2. Benefit of having the information surpasses the reason for gathering it
- f. Design of inventory form
  - i. Must contain the following
    - 1. Dept. or organization name
    - 2. Name of the records series
    - 3. Purpose/desc. Of the records series to provide info. Necessary to research and determine retention requirements
    - 4. Time span covered (dates of records) provide growth rate and evidence of current retention practices
    - 5. Linear measurement of the series (# of feet series occupies in a cabinet or other housing unit and [for magnetic media] a count/estimate of tapes/disks in addition to linear measurement) to show
      - a. Total volume on hand,
      - b. Growth rate,
      - c. Equipment,
      - d. Utilization, base factor for calculating savings &
      - e. Benefits Records Center Space requirements
    - 6. Physical description (size and color for paper records, size of tape)
      - a. To select correct records housing and
      - b. To provide proper mental picture to analyst
    - 7. Method of housing (files, binder or loose)
      - a. To determine proper equipment
      - b. To sue for system evaluation and improvements
    - 8. Equipment description
      - a. To evaluate equipment utilization
      - b. To calculate costs and floor space
      - c. To plan efficient use of surplus equipment
    - 9. Date of inventory, name of contact, name of inventory analyst
      - a. To determine growth
      - b. To track information obsolescence
  - ii. Advanced
    - 1. Source of information
      - a. ID of alternate sources as vital records backup
    - 2. Any records created from info. In records series
      - a. Alternate source
      - b. Factor in retention
    - 3. Original & secondary purposes of records series
      - a. Useful in retention
      - b. Vital protection research
      - c. Document flow studies
    - 4. Original & secondary purposes of component docs that make up the series
    - 5. Flow of record or component from beginning to end
    - 6. Location of exact duplications
    - 7. Current practice or recommendations of user on retention periods

### III. INVENTORY METHODS

#### A. Procedure

- a. Dept. contact or liason
- b. Initial interview
  - i. Importance of organizational chart
    - 1. Primary
    - 2. Secondary

- ii. File lists
  - iii. Files labeled
  - iv. Stored records
- c. Cabinet numbering
  - i. Prepare numerical dot labels
    - 1. Each cabinet #ed
    - 2. Affixed at eye level
- d. Anatomy of doc-based information
  - i. Type
    - 1. Page/doc
    - 2. File
    - 3. Records series
  - ii. Usually, each series assigned a retention # after inventory completed
    - 1. Component files can assigned submembers
    - 2. Complete with form #s to track copies
  - iii. Inventory should reflect general description of records series
  - iv. A records series can also consist of only sequenced-arranged docs.
- e. Guidelines to completing inventory forms
  - i. Contact indicates to analyst contents of drawers and shelves
    - 1. Common name for series and section
      - a. Dot labels and title and owner (ascending)
      - b. Begin substance of true inventory
    - 2. Sections
      - a. One is common info
      - b. What all research based on
        - i. Legal
        - ii. Fiscal
        - iii. Historical
      - c. Answer
        - i. Who
        - ii. What
        - iii. When
        - iv. Where
        - v. Why
        - vi. How
      - d. Based on function
    - ii. Lists in detail the equipment used to house the series, total square feet
    - iii. Volume and time span of the records (entered at cabinet)
    - iv. # of references made to records series
    - v. Type of files supplied, recorded quantity
    - vi. Info about vital records protection
    - vii. Sorting and filing arrangement of series
    - viii. What series used to create inventoried records series and what are created by using inventoried series
    - ix. Duplicate copies locations, alternate sources locations
    - x. Functional information: material not usually gathered, but may be basis in more complex systems improvement studies
  - f. Variations in methods
    - i. Questionnaire methods
      - 1. Record
      - 2. Functional method
      - 3. Recommended retention period
        - a. Can provide list of common terms for Uniform Filing System or establish retention periods
        - b. Pro:
          - i. Quick,

- ii. Inexpensive,
    - iii. Limited purpose
  - c. Con:
    - i. No assurance of completeness
    - ii. Little information on problem definition
    - iii. Systems improvement
    - iv. Systematic evaluation
  - ii. Subject correspondence
    - 1. One records series
    - 2. Little detail
    - 3. More information necessary
  - iii. Statistical sampling
- g. Inventory of e-media

## CHAPTER THREE: RECORDS RETENTION PROGRAMS

### I. INTRODUCTION TO RECORDS RETENTION SCHEDULING

#### A. Introduction

- a. Specifies length of time that business records are retained
  - i. Value of most information declines as time passes
- b. Provides for id of records must be maintained for business purposes
- c. Systematic destruction of records that no longer serve purpose
- d. Conservation of office space and equipment
  - i. Transfer of inactive files to offsite storage
- e. Permanent presence of historically appropriate records
- f. Four major points
  - i. Period of time records considered active and maintained in office area
  - ii. The point the records becomes semi- or inactive and transferred offsite
  - iii. Total period each records series maintained
  - iv. Designated of official (record) copy
    - 1. Method of destruction of each type of record
    - 2. Is the record vital?
    - 3. What media?

#### B. Program Justification: Business and Legal Benefits

- a. Two major objectives:
  - i. Economic:
    - 1. 30—60% more records retained than needed for business
    - 2. Rate of growth of 7-10% each year
    - 3. RRS function of controlling growth is principle economic justification
    - 4. Creates controlled balance between creation of new records and disposition of old ones (stabilizing growth)
      - a. Volume of records can be reduced by 40% or up to 30% if RRS not been properly maintained
      - b. Significant annual savings achieved when floor space freed
      - c. # of file cabinets reduced
      - d. Day to day retrieval and handling can be accomplished faster and more easily because unneeded records discarded and inactive records transferred to less expensive storage
    - 5. Economic benefits of retentions based on computations of cost maintenance and savings resulting from records destruction
      - a. Storing records in office is biggest overhead expense
      - b. Savings result from immediate and ongoing destruction of given quantities of useless records

- c. Plus lower maintenance costs resulting from transfer of certain quantities to less expensive storage areas
- d. Maintain separate benefit figures from first year on
- e. First year savings often based on rule of thumb form:
  - i. 1/3 of organization's records are active and would require maintenance in prime office space
  - ii. 1/3 are semi-active
  - iii. Remaining 1/3 are useless and can be destroyed immediately
- ii. Legal:
  - 1. Destruction in course of normal business
    - a. RRS=official policy for disposition=avoid legal problems
    - b. Associated with arbitrary disposition actions
  - 2. Compliance with government retention requirements
    - a. Disposition in compliance with the law
  - 3. Protection from risks of litigation
    - a. Helps corporations defend against lawsuits

## II. STEPS IN PROGRAM PLANNING & DEVELOPMENT

### A. 2 Basic Principles

- a. Customized schedule development
  - i. Generic retention schedules as reference
- b. Comprehensive program coverage
  - i. All paper records and information
  - ii. A good policy will address originals and copies
  - iii. Uniform Photographic Copies of Business and Public Records Act
    - 1. Records as Evidence Act=dups have same legal significance as originals
      - a. Copies may be subpoenaed
    - 2. Many organizations address private papers by discouraging or one-year retention

### B. Developing Retention Schedules: Initial Planning Steps

- a. Obtain approval
  - i. Directive issuing formal statement establishing the program
    - 1. Required cooperation and compliance of staff, assign responsibility for program development and operation
  - ii. Establish resources required for program development
    - 1. Single largest expense=conduct records inventory
  - iii. Assemble personnel resources
    - 1. Personnel vs. consultants

### C. Developing Retention Schedules: Major Steps in the Process

- a. Consult with the organization's legal counsel about legal retention research
- b. Conduct legal research to determine with records series must be retained to satisfy statutory or required retention requirements
- c. Interview managers, supervisors, users in departments about value of information
- d. Appraise records to determine retention values and retention periods
- e. Select format, prepare and distribute for review, revisions, and final approval

## III. LEGAL ASPECTS OF RETENTION SCHEDULING PROGRAMS

### A. Evidence of Systematic Disposition in Normal Course of Business

- a. Major objective: Organization has official policy for disposition of business information, policy implemented in normal course of business because law views as trustworthy
- b. Provides evidence that the destruction of records occurred in required course of business and not to conceal information or evidence

### B. Compliance with Document Discovery Orders and Subpoenas

- a. Discovery=legal procedure where 2 or more parties in legal proceedings share information from files which is pertinent to case

- b. “Subpoena duces tecum”—order to appear in court or produce documents
  - c. RRS makes it easy to locate and assemble categories of documents that may be maintained by many departments, thereby cost reduction
- C. Contempt of Court and Obstruction of Justice
- a. Contempt of court is committed whenever a court or administrative tribunal orders documents to be produced and the party defies the order by failing to deliver the documents or by deliberately destroying requested documents
  - b. Obstruction of justice statutes must also be considered when a company wishes to destroy records based on
    - i. Learning an investigation or proceeding in which documents might be relevant
    - ii. Government inquiry but before being contacted by authorities
    - iii. Voluntary cooperation with government authorities
    - iv. After court orders documents to be produced
- D. Anti-trust Litigation
- a. US anti-trust laws designed to promote free trade and competition and to inhibit monopolistic business practices that constrain competition or act in restraint of free trade
- E. Product Liability Litigation
- a. RRS can help to ensure companies which may be susceptible will preserve records that would be needed to organize successful defense
    - i. Examples:
      1. Research and product development records
      2. Design and engineering
      3. Quality control
      4. Product inspection
      5. Warranty
      6. Customer service

#### IV. CONDUCTING LEGAL RETENTION RESEARCH

- A. Planning the Legal Research
- a. Devising a plan
    - i. What general business activities may be subject to recordkeeping statutes or requirements?
    - ii. What products or services does the business provide that may be subject to legal recordkeeping requirements?
    - iii. What geography does the business occur in?
    - iv. Which of the organizations industries or business activities may be regulated by government?
    - v. What’s the organization’s litigation history?
    - vi. What’s the future role of legal counsel?
  - b. Types of situations—seven possible scenarios
    - i. No statutory or required regulations can be found which requires retention of given series
    - ii. Statute or regulation is found containing a requirement to retain a particular record or defined class of information for a specified period of time
    - iii. Statute/regulation found, but no time period specified
    - iv. Statute of limitation found which indicates record kept for specified period of time
    - v. Limitation of assessment period found in tax law or regulation, which indicates certain finance/acctg. Records should be retained over period of time
    - vi. Statute or regulations found that limits or defines certain action which results in certain retention periods
    - vii. Ruling from case law provides legal precedent to retention or certain records
- B. Researching Federal Requirements

- a. For many organizations, requirements will be primary source for determination the legal requirements for retaining records
  - i. Code of Federal Regulations
    - 1. Annual codification of rules during publication
  - ii. Federal Register: pending and final rules each business day
  - iii. Guide to Retention Requirements issued by Office of the Federal Register (See Superintendent of Documents, US Govt. Printing Office)
- C. Researching State Requirements
- D. Local and International Requirements
  - a. Consult of legal counsel
  - b. Research local and international
- E. Other Records Retention Sources
  - a. See: Legal Requirements for Business Records (3 vol. Sourcebook)
    - i. Lexis-Nexis
    - ii. Westlaw
- F. Statutes of Limitations
  - a. Statutes of limitations do not prescribe a retention period; they describe a period during which an organization can sue or be sued on a matter or the prescribed period during which govt. agency can conduct an investigation or audit a company
  - b. KEEP RECORDS FOR THE ENTIRE STATUTE OF LIMITATIONS PERIOD IF YOUR ORGANIZATION IS LIKELY TO BE PLAINTIFF (it will be likely to sue another party); DESTROY AT AN EARLIER DATE IF IT IS LIKELY TO BE A DEFENDANT (if your organizations is likely to be sued by another party and the other party may have little proof in its possession)
- G. Interpreting and Applying the Statutes and Regulations
  - a. Difficult to apply (general versus specific language)
  - b. Many not expressed as definite time periods
  - c. If government imposes records maintenance requirements but offers no guidance re: duration, it seems reasonable to conclude that regulatory officials could probably not enforce these regs. By imposing penalties; however, the org.'s retention policy for such records should be conservative, reasonable
- H. Documenting the Legal Research
  - a. The RM must document
    - i. The organization's attorneys should be provided with complete legal research documentation to enable them to determine whether the law has been reasonably applied
    - ii. It may be necessary at some future time to provide evidence to regulatory officials or to courts that the organization does its best to comply with all applicable legal requirements

## VI. RECORDS RETENTION DECISION-MAKING: THEORY AND PRACTICE

- A. Two Theories of Information Retention
  - a. Records Appraisal (begun by archivists)
    - i. Primary and Secondary Values of Information
      - 1. Primary [Administration/Operational]: Value of information in support of purpose for which it was created (maintain at or near point of use)
      - 2. Secondary [Research/Historical]: The actual or potential uses of information for purposes other than the purpose for which it was created (transfer to remote storage)
      - 3. Fiscal or legal values can be primary or secondary
      - 4. Rule: Expiration of primary value occurs when the records make their life cycle transition from active to semiactive or inactive state
      - 5. Inadequacies:
        - a. Does NOT adequately consider the risks, costs, liabilities of information retention as compared to benefits (in other words, no business context)



- c. 90% of all references to files are to records that are 3 years old or less

## VI. SCHEDULE ISSUANCE, APPROVAL, IMPLEMENTATION

### A. Department records series format

- a. Schedule for each department, division, or other organizational entity, and each series maintained by entity on schedule
- b. Functional format
  - i. Formatted by faction, class of records, major business functions (easiest, quickest to produce RRS in this format; but, harder to apply, imprecise, coverage not comprehensive)
- c. Integrated retention schedule and file format
  - i. Guide how to organize and format
- d. Select a form
  - i. Standard retention schedule form
  - ii. Narrative retention schedule format
  - iii. Computerized records management database
    - 1. Approval of retention schedules
      - a. Legal counsel
      - b. Chief financial officer
      - c. Controller
      - d. Tax Manager
    - 2. Designed to make it easier to demonstrate to courts, regulatory agencies that the schedules are organization's official Records Retention policy, which has been developed in proper, responsible manner

## CHAPTER FOUR: VITAL RECORDS PROTECTION AND DISASTER PLANNING

### I. BUSINESS IMPORTANCE OF VITAL RECORDS PROTECTION

#### A. Vital Records: Their Essential Characteristics

- a. Vital Records: Information needed to reestablish or continue an organization in the event of a disaster
- b. Must be described as irreplaceable and required to operate the business either during the disaster or immediately afterwards
- c. Intrinsic uniqueness (est. legal statutes of organization as business entity, docs the assets and liabilities of the organization from a financial perspective, docs the operations of the organization which enable production processes or other work to be accomplished)
  - i. People
  - ii. Property (inventory, land, equipment)
  - iii. Capital
  - iv. Records

#### B. Disaster Recovery Planning and Its Relation to Records Management

- a. Disaster: unplanned, calamitous event that makes it impossible for an org. to perform critical business functions for period of time
- b. Disaster recovery planning: advance planning and necessary preparations to minimize loss and ensure continuity of critical business functions

#### C. The Basic Elements of Vital Records Protection

- a. May consist of active, inactive records
  - i. Records that need to be accessed may be imaged, copied
  - ii. The main purpose is to protect "essential information" contained in the records instead of the records themselves, although "evidential value" of the record must also be protected and considered
- iii. Initiating the Program
  - 1. Must be endorsed by senior management
  - 2. S.M. must write directive formally establishing program for systematic protection of all vital records, assigns the responsibility

for program development and implementation to RM dept., solicits cooperation of all personnel

- D. Vital Records Protection: A Form of Business Interruption Insurance
  - a. Vital RM is insurance policy
  - b. Risk analysis: RMs must consider the nature of potential disasters that an organization might be subject to the likelihood of these disasters, and the consequences should they occur
  - c. Preliminary evaluations helps to decide if protection is needed to what degree by id'ing organizational objectives and types of disasters that would pose a reasonable threat
- E. Seven Classes of Disasters
  - a. Class One: National, International consequence
    - i. Each organization should determine what role is likely to play in reconstructing and reestablishing function in society
  - b. Class Two: Local/Regional Catastrophe
    - i. Must continue with municipal services
    - ii. Vital records might be roster of all city's employees, temp places for housing, blueprints and major buildings
  - c. Class Three: One that destroys the major buildings of an organization during work hours, but is only destruction in area
    - i. Still major disaster
  - d. Class Four: Identical to #3, except occurs during non-working hours
  - e. Class Five: On or 2 functions in organization
    - i. May cost millions of dollars if records destroyed are not readily available elsewhere
    - ii. So destroyed records may be vital, but component, while important, is not vital
  - f. Class Six: Affects one subfunction
    - i. Duplicate set of these records, maintained at another site on a daily basis, would provide appropriate protection for these vital records
  - g. Class Seven: Lost or Stolen Document
    - i. Common security problem, don't overlook

## II. IDENTIFYING VITAL RECORDS

- A. Most difficult aspect of vital records program
  - a. Step One: Identify the FUNCTIONS essential to primary mission of organization
  - b. Step Two: Identify the RECORDS whose informational value is so great and consequences of losses so severe, special protection is justified to reduce the risk
  - c. Very selective and only for absolutely essential information
  - d. Only 2-7% of total records are vital, depending on type of organization, nature of business, degree of risk
- B. Records protection priorities
  - a. Vital Records
    - i. Highest protection priority: essential to protect the critical financial, legal, and operational function of the organization and its customers, employees, shareholders, or other client groups
    - ii. Could not be replaced at any cost
  - b. Important Records
    - i. Secondary protection priority: could be replaced or recreated (use cost analysis)
  - c. Useful Records
    - i. Lowest Protection Priority: would be inconvenient to lose and useful, but not essential, to organize in resuming normal business
- C. Using Records Inventory Data and Conducting Management Interviews
  - a. Understand differences among vital, important, and useful
  - b. Specific terms: how would affect entire organization's ability to conduct business?
  - c. Records series:

- i. Absence of records series, affects organization
- ii. Operational, financial, legal consequences
- iii. What couldn't be replaced?
- iv. What is located in remote locations?
- v. What could be recreated by internal resources, reassembled from external sources, replacements would be...?
- vi. How soon after disaster would records series be needed to resume business operations?
- vii. Practical to duplicate docs in records series to create extra security copy for offsite storage?
- viii. When information loses it vital quality
- ix. Available for expenditures for information protection

#### D. Vital Records Analysis and Summary Work Sheets

- a. Vital records worksheet
  - i. Name of the record (Vital Records Classification)
  - ii. Supporting documents necessary to aid in reconstruction of vital records (Vital Records Documents)
  - iii. Cross-references should be made to coordinate instruction (Retention and Disposition Schedule)
  - iv. Sources of copies (Distribution of copies)
  - v. Reason of Protection: brief statement of purpose and value
  - vi. Protection Method: type of protection
  - vii. Filing: manner in which records will be filed
  - viii. Retention: length of time records will be maintained
  - ix. Cost: cost of maintaining vital record

#### E. Defining acceptable level of risk

- a. Qualitative approach: reasonable judgements resulting from loss of information
- b. Quantitative approach:  $R=P \times C$ 
  - i. R=risk, or annualized loss expectancy
  - ii. P=probability, such a loss will be sustained in a given year
  - iii. C=Cost, cost to replace information so it can be used to resume normal business operations
- c. Probable annual dollar loss organization would experience should it lose information in particular records series (particularly useful in making decisions as to whether to protect important records of secondary protection priority)

### III. SELECTING METHODS OF PROTECTING VITAL RECORDS

#### A. Onsite protection: an organization's premise at or near the point of creation or use

- i. Vital Records buildings
  - 1. Detached and inconspicuous, fire-resistant
  - 2. Adequate humidity, temperature, ventilation, lighting
- ii. Standard Records vaults
  - 1. Fire-resistant enclosure within office, building
  - 2. onsite—as close to users as possible
  - 3. the purpose is to maintain an interior temperature so that paper records or other media housing will not be subject to combustion or data loss
  - 4. Standard records vaults may be designed to provide 2, 4, 6 hours of protection
  - 5. NFPA (National Fire Protection Association)
  - 6. Chapter Two of Standard for the Protection of Records: walls, ceiling, floor, door, and penetrations of enclosures
  - 7. Vault doors with Underwriters Laboratories seals
  - 8. Archival records: 60 degrees F
    - a. Humidity: 50%, plus or minus 5%
    - b. Microfilm: 20%--30% (ANSI)

- 9. EPA: halon is ozone depleter
  - iii. File Rooms for Important Records Storage
    - 1. Larger than vaults, less fire-resistant
    - 2. See Chapter Three of NFPA Standard for Protection of Records
    - 3. Restrict the use of these rooms to important/useful but nonessential records
    - 4. Requires the room to be fire-resistant enclosure with insulated openings in fire-resistant building
    - 5. Sprinkler protection, file room door
  - iv. File rooms
  - v. Fire-resistant filing cabinets and safes
    - 1. Always better than leaving vital records unprotected and exposed to hazards of fire
    - 2. risk depends on environment in which they're placed
    - 3. sole means of vital records protection in non-fire-resistant buildings would expose the organization to higher risk and thus unwise protection strategy
    - 4. best used for small quantities of very active vital records that need to be kept close to user for immediate reference
- B. Offsite protection: storing of original records (Duplication and dispersal is variant of offsite method)
- a. Store records at offsite storage
  - b. Advantages of commercial vital record protection facilities
    - i. Greater protection and security
    - ii. Easy accommodations of expanding record volume
    - iii. Professional staff to provide fast, accurate, low-cost retrieval
    - iv. Availability of specialists to consult with on problems of equipment, methods, and procedures
  - c. Considerations for selecting and operating a remote storage site
    - i. Safe distance from home office
    - ii. Controlled by organization and available for use in emergency and regular audit
    - iii. Site where company officials can establish emergency operations with survival rations and shelter for personnel
    - iv. Minimize risk of damage from any and all hazards: fire, flood, earthquakes, winds, etc.
    - v. Operating personnel should receive maximum security clearance
    - vi. Provide all necessary records services
    - vii. Emergency communication to connect the remote facility and home office
- C. Duplication and Disposal of Vital Records
- a. Prepare extra copies when record is created
    - i. Place them in 2<sup>nd</sup> location for business needs
  - b. Schedule reproduction of existing records to maximize cost, use repro. For purpose other than protection
    - i. Built-in or improvised: copies are created in normal course of business and routinely dispersed to remote locations
      - 1. Must be regular, on-going
      - 2. The copies can be obtained promptly
      - 3. Little additional cost for this method
    - ii. Improvised or designed dispersal
      - 1. Creating an extra copy specifically for dispersal to remote location for vital records purposes
      - 2. Extra-copy method more economical than duplicating
        - a. After creation, because employs existing office procedures and requires little additional expense

- iii. Microfilm is used when nature or volume of the records is so small that filming is most feasible means of duplicating
  - 1. can reduce your space by 98%
  - 2. fast, little storage space
  - 3. safest, most economical method of vital records protection
  - 4. potential danger in storage in insulated filing cabinets
    - a. Safes, vaults constructions with crystalline insulating material (generates interior steam when heated by fire, steam raises internal temp...steam enters microfilm containers and destroys the records (**best to place in airtight containers**))

## VI. PROTECTING VITAL ELECTRONIC RECORDS

- A. Protection and Security of PC-based Records
  - a. 1993: 45 million microcomputers in the US expected to increase to 65 million by 1995 growth rate est. 12—20 million new units/year
  - b. Importance of PC data backup
    - i. Perform regular, frequent backups
      - 1. To prevent crashes
      - 2. Back up to tape
  - c. Types and Frequency of PC Data Backups
    - i. Full system backup
      - 1. Produces duplicate copy of all hard-disk files
    - ii. Differential backups
      - 1. Backups of all files that have been changes or updated since the last full backup
    - iii. Incremental backups
      - 1. Copy only files changed since last incremental backup ggreatly reduces time and media requirements
  - d. Backup of PC-Data on Local Area Networks
    - i. 1993: 600,000 sites, 16 million computers connected
    - ii. Centralized network strategy, tape cartridges
      - 1. Sufficient storage capacities for large quantities of vital LAN-based data
      - 2. Optical disk-based systems for network-wide backup
  - e. Software Backup Options for Vital PC Records
    - i. Use of operating software's backup utilities slowest method, prone to error
    - ii. Use of special backup software
      - 1. Can be purchased from software vendors
      - 2. Easier, faster to use
      - 3. Error detection and ability to control backup units
      - 4. Automate backup from hard disk to removable diskettes and vice versa (restoration)
    - iii. Automatic, online backup software
      - 1. Minimum of user intervention
      - 2. Recognizes new or updated files...then compressed and encrypted, transmitted via standard telephone lines to remote protection site
      - 3. Vendor charges subscriber a fee including software license fee and spec. amt. Of backup time
- B. Onsite Storage of Removable Media
  - a. Diskettes most vulnerable
    - i. Use specially-designed fire-resistive storage cabinets as onsite protective method
- C. PC Security Against Human & Technical Threats
  - a. Password Protection
    - i. Make PC data files irretrievable by persons who do not know the proper password code



- b. Must be restored immediately upon removal
- c. Fungicides:
  - i. Thymol
  - ii. Formalin
  - iii. O-phenyl
- E. Air-Drying Paper Records
  - a. Air-drying method most effective if records damp but not completely soaked when records not threatened by mold/mildew, quantity is small, full recovery completed in 72 hours
  - b. Place in cool, dry room and remove from file cabinets to provide max exposure to air flow; large fans circulate air over records; heated fans in cold temps.
- F. Vacuum Drying Water-Soaked Records
  - a. Vacuum freeze drying
  - b. Thermal vacuum freeze drying
  - c. Vacuum drying
    - i. Each of these uses airless chambers to remove water from the records; wet records placed in the chamber; aire removed from chamber, negative air pressure created; water is vaporized and removed as steam
- G. Recovery of Water-Damaged Microfilm
  - a. Film, fiche, can be restored if water-soaked but not subject to raised temperatures...imperiled at 150 degrees F
  - b. Duplicate copies should always be stored in offsite storage location
  - c. Wet silver halide or emulsion films, keep in clean, cold water; preserve integrity of cartridge information; reprocess onto new silver film
  - d. Wet vesicular or diazo copy film if not exposed to high temp: wash in cool water, dry with paper towels (if masters in good condition, require no immediate recovery)
- H. Recovery of Magnetic Media
  - a. Water soaked but not exposed to high temperatures
  - b. Imperiled at temperatures in excess of 150 degrees F
  - c. Diskettes threatened with loss of data +125 degrees F or humidity +80%
  - d. Process: hand-dry the tapes with lint-free cloths, run them through tape cleaner or winder (not on regular tape drive); run them over cleaning tissues; when dryn, run over tissues and blades; read and copied onto new media

## VI. VITAL RECORDS PROGRAM IMPLEMENTATION

- A. Secret/confidential records secured by storing them in containers or areas with key; authorized personnel only
  - a. Test program by simulating disaster
- B. Vital Records Master List
  - a. Each department with complete list of all vital records
  - b. Records needed to maintain essential operations following a disaster; recreate legal and financial positions; meet obligations
- C. Transfer of Vital Records
  - a. No records should be destroyed without notifying originating department of intent to destroy
  - b. Make audit periodically: review dates on records maintenance program cards or vital records control cards and compare date of receipt of docs with frequency on vital master list
- D. Vital Records Manual
  - a. Manual:
    - i. Describe procedures of vital records protection program
    - ii. Vital records master list should be explained
    - iii. Devoted to instruction for reconstruction of vital records in the event of disaster and use of equipment is available