

**Struggling with Electronic Records**  
**Yours, Ours, Theirs ...**

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**President**  
**Naremco Services Inc**

**ARMA Liberty Bell Chapter**      **12 Feb 2009**

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**Sources**

- **Regulations**
  - FAR 4.703[d]
  - IRS RevProc 98-25
  - SEC CFR 17a4
  - Graham-Leach-Bliley
  - HIPAA

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**Sources**

- **Developments**
  - FRCP 16 & 26 – Litigation
  - Sarbanes-Oxley
  - Unexpected Events
  - The 'Nets & The 'E's

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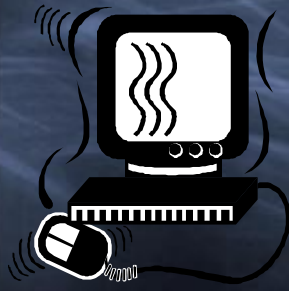
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### The 'Nets



- **Inter**
  - between
- **Intra**
  - within
- **Extra [VPN]**
  - outside

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### The 'E's

- **E-Mail**
- **EFT**
- **EDI**
- **EPOS**
- **EDMS/ERMS**



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### Definitions

#### Digital Records

Information maintained in a coded numeric format [e.g., binary, hexadecimal] that requires conversion from the storage format for normal comprehension.

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**Definitions**

**Backup/Disaster Recovery**  
Protection of digital information to permit resumption of a business operation if production data is lost or destroyed.

**Vital Records Procedure**

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**Definitions**

**System**  
A group of related computer data, applications, and documentation that support a specific business function.

**Payroll, Purchasing, Payables**

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**Media Options**

**Optical**

- Ablative
- Magneto-Optical
- Phase Change

**Magnetic**

- Ferric Oxide
- Chromium Dioxide
- Metal Particle

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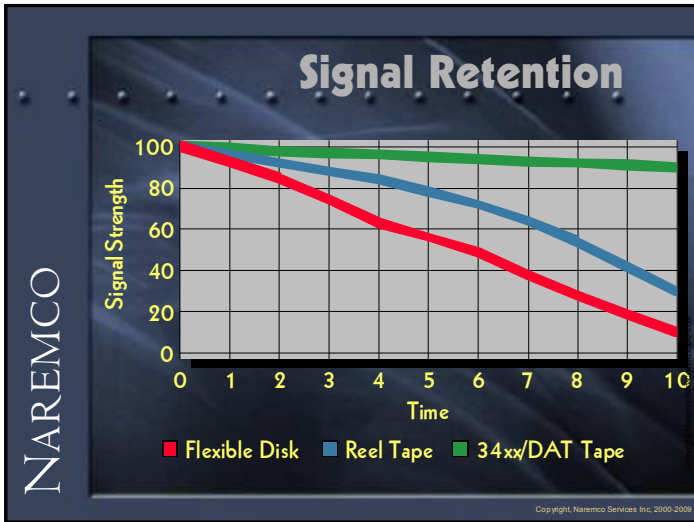
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- ### Recording Formats
- **CD-ROM**
    - Constant Linear Velocity
    - ISO 9660 et al.
  - **WORM**
    - Constant Angular Velocity
    - ISO 10885
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- ### Retention Media
- **Magnetic**
    - 9 Track Reel Tape
    - 34/35xx, LTO, DAT, etc.
    - Floppy Disk; USB Drive, etc.
  - **Optical**
    - CD-ROM/DVD
    - **WORM**
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**Database Data Retention**

- **Scheduled Snapshots**
  - Annual
  - End of Cycle
- **Transaction Audit Trail**

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**Database Retention Format**

**Transformed**

- Flat File
- XML
- Data Warehouse

**Native**

- DBMS
- Hexadecimal
- Proprietary
- Application Maintenance

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**Desktop Objects**

**Retention**

- By Content
- Media Neutral

**Definition**

- MS Office
- Adobe
- Other Application Data

**NAREMCO**

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**Compound Document Format**

**Transformed**

- *Integrated Format*
- *Portability [PDF/A]*

**Native**

- **Data, Text, Spreadsheet**
- **Graphic**
- **Application Data**

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**'Net Retention Formats**

- **Text**
  - HTML, DHTML, XML ...
- **Multimedia**
  - GIF, WAV, MPEG ...
- **Applications**
  - Active X, Java, ...



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**Digital Data Tracking**

- **RM Software Standards**
  - **DoD STD-5015.2 [USA]**
  - **ERMS [UK]**
  - **MoReq [EU]**
  - **VERS [Australia]**
  - **OAIS [Europe]**

**Includes E-Mail!**

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## E-Mail Issues

- **Volume**
  - 12 Billion E-Mails/Day In the US
  - 650 Billion/Day Globally
- **Terabyte of E-mail**
  - About 6 Months Volume
  - \$125,000/Year to Manage
- **Lost productivity**
  - \$250 - \$1,000/User/Month
  - 1,000 person org = \$12,000,000/Year

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## E-Mail Issues

- **Retrieval**
  - 11 Hours [Average]
    - Recover an E-Mail
    - More than One Year Old
    - From an Archive
  - Unable to Retrieve
    - Message > 6 Months Old
    - One-Third of Organizations

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## E-Mail Options

- ◆ **Do Nothing**
- ◆ **Keep Everything Forever**
- ◆ **Delete messages older than ...**
- ◆ **Limit Mailbox to ... MB/GB**
- ◆ **Manage E-Mail as Records**

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### E-Mail Policy

- **Organization, not Individual**
- **Centrally Managed**
  - Not Personal Shared Drives, OR
  - Individual PCs
- **E-Mail = Envelope, not Record**
  - Retain by Content
  - Legal Holds When Necessary
  - Timely Disposition
- **Etiquette, Use Limits,**

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### E-Mail Retention

- **Sent AND Received Messages**
- **Attachments**
  - Part of the message, or
  - Separately and linked
- **Metadata**
  - Date, Time, IP Addresses
  - Sender and Addressee(s)
  - Subject and Content
- **No .PSTs!!!!**

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## Struggling with Electronic Records

Yours, Ours, Theirs ...

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**ARMA Liberty Bell Chapter 12 Feb 2009**

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