

Video: Identification & Risk Assessment

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Video: Identification & Risk Assessment-

- Physical examination of carriers
- Physical Properties of Tape
- Handling Tapes
- Tape Storage
- For both Tape & Film
 - Macro Environment
 - Setting Priorities

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Physical examination of carriers

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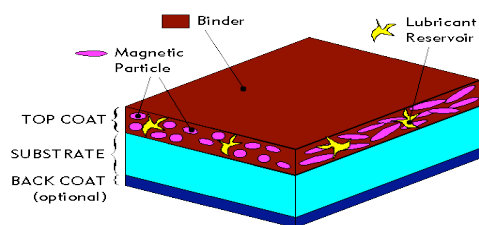
Physical Properties of Tape

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Structure of Tape

Van Bogart <http://www.clibr.org/pubs/reports/pub54>



- Binder--Functions as a carrier for the recording material & Bonds it to the substrate
- Substrate--Base material on which the recording material is coated (eg. an aluminum platter or a thin ribbon of polyester film)

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Tape Substrate

- Early tape used cellulose acetate
 - Moisture/hydrolysis
 - Vinegar syndrome
- More recent tapes are polyester terephthalate (PET) or polyethylene naphthalate (PEN)
 - Chemically stable
 - Resist hydrolysis and oxidation

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Magnetic Particles

- **Store recorded information**
- **Change in magnetic properties can result in loss**
 - ♦ **Magnetic remanence - ability to retain a magnetic field**
 - ♦ **Coercivity - ability to resist demagnetization**
 - ♦ **Magnetic deterioration of the metal particulate and chromium dioxide materials**

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Binder Layer

- Holds the magnetic particles to the base
- Where the problems are likely to occur
 - ♦ binder-base adhesion
 - ♦ oxide shedding
 - ♦ dropoff
 - ♦ hydrolysis
 - sticky shed
 - magnetic head clog
- Tape baking as one solution

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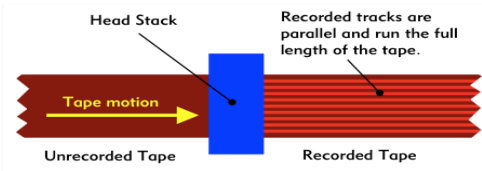
Video Cleaning Machine



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Longitudinal Recording

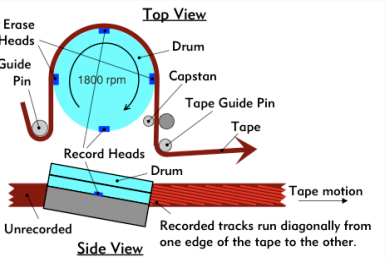
Van Bogart <http://www.clir.org/pubs/reports/pub54>



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Helical Scan Recording

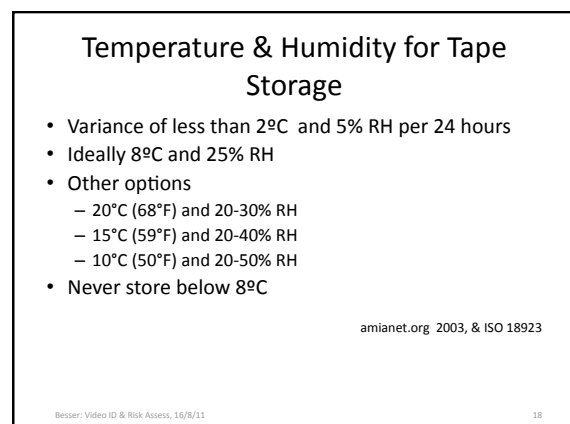
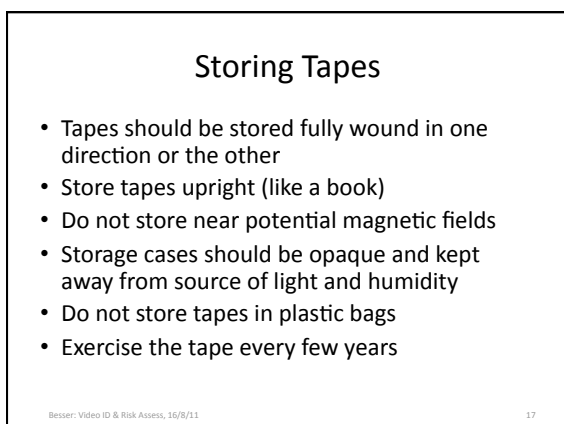
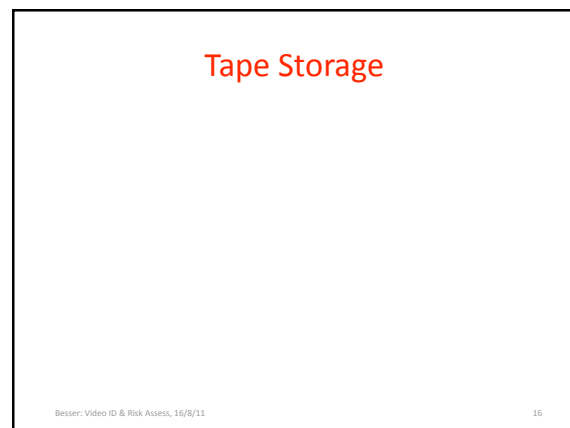
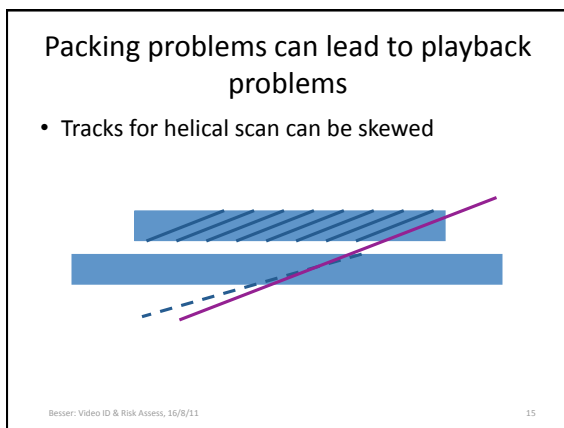
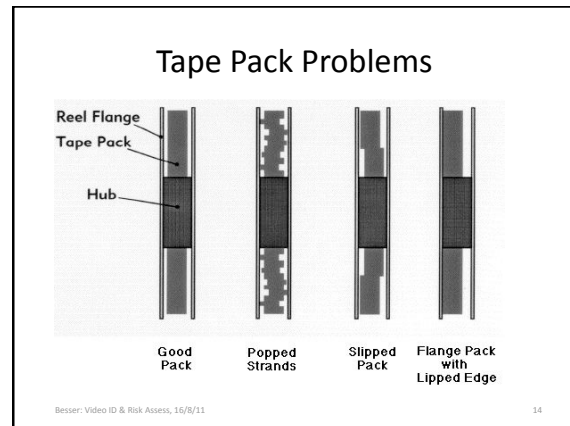
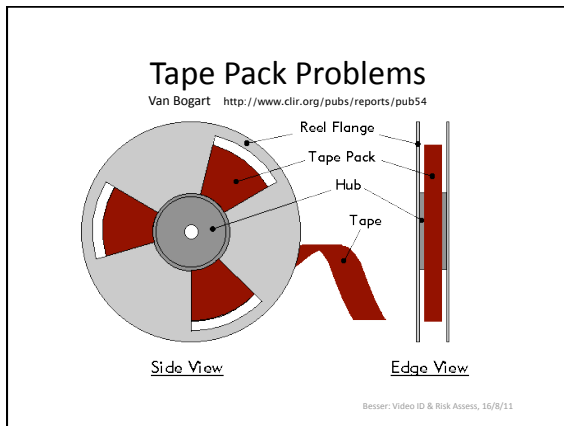
Van Bogart <http://www.clir.org/pubs/reports/pub54>



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Handling Tape

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VidiPax Video Preservation (Internship)



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Film & Video: Identification & Risk Assessment

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<http://www.tisch.nyu.edu/preservation>

- <http://besser.tsoa.nyu.edu/howard/Talks/>
- <http://www.nyu.edu/tisch/preservation/research/libraries/resources.html>
- <http://www.amianet.org/>
- <http://sunsite.berkeley.edu/Longevity/>
- <http://www.imagepermanenceinstitute.org/>
- <http://www.screensound.gov.au/screensound/screensof/>
- <http://www.iasa-web.org/tc04/>
- <http://www.digitalpreservation.gov/>
- <http://www.interpares.org>

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