

Visual Materials Session Review 2007

Session #: 402

Session title: Preserving Your Audio and Video Assts: A Simple Physical Examination to Evaluate the Condition of Tape Materials in a Collection

Number of VM Reporters contributing comments: 3

Reporter 1's VM experience level:

Archives Profession: 10+ years

VM Specialization: Major VM focus

Reporters 2's VM experience level:

Archives Profession: 2-5 years

VM Specialization: Major VM focus

Reporter 3's VM experience level:

Archives Profession: 10+ years

VM Specialization: Generalist w/ significant VM

Speakers:

Peter Brothers (Specs Bros., LLC)

Description from program:

How much do you know about the tapes in your care? Some are safe to use, others are not. How can you tell the difference? International experts have developed a simple test that can help. The straightforward test procedures, presented with accompanying explanations and visual examples, are quick, reliable, and easy to perform and require no equipment. Now published in both National and International Standards, this test is an invaluable tool for all archivists and conservators.

Summary of session:

In a short session, Brothers presented a seven-step basic inspection to determine condition of magnetic tape as well as pre-inspection steps. He stressed preservation handling and some basics about magnetic tapes. Brothers used Power Point of handout with additional slide examples of what to note during inspection (not part of handout.)

Presentation was a show and tell dealing with such things as noting type of tape, format, manufacturer, length and any other information on the box in pre-inspection, then basic handling techniques, how to inspect the tapes for problems and mention of the International Standard pertaining to the inspection.

Six pre-inspection steps were taught to correctly identify tape types and to prepare for the condition inspection. Seven examination steps were presented. To quote from the handout, "While this examination does not identify all problems that can occur in tape, if your tape fails any of the inspection criteria, it is endangered and needs attention. Attempts to play back such tapes before treatment place them, and your machinery, at risk." Versions of the inspection are included in ISO 18933-2006 and AES49-2005. The seven steps are, briefly (these are amplified in the hand-out):

1. Check physical container for damage that compromises the structural integrity of the container itself.

2. Check the interior of the container and the edges of the tape for patterned black, brown, or mustard colored contamination and for fuzzy or thread-like growth that indicates the presence of fungus. Tape with fungus can present a health hazard: if fungus is suspected do not continue inspection.
3. Smell the tape as soon as it is removed from its container. (A description of odors and the deterioration they indicate follows in the hand-out).
4. Check the tape edge and the reel/cassette/cartridge for particulate contamination and for signs of staining that may indicate liquid contamination.
5. Check the tape edge for white powder or crystalline residue and check the interior of the container for black/brown flakes of oxide.
6. With light source above and slightly behind, tilt tape edge-on at approximately 45° away from light source and inspect tape pack. Check for spoking, rippling popped strands, stepped pack, flange pack, edge damage, “shiners” and windows.
7. If the tape is reel to reel, allow a few outer wraps to hang loose and examine for physical distortion and binder-base adhesion failure. With a few wraps hanging loose, turn the reel slowly to determine if tape falls free or sticks to the pack. [Note: must use special adhesive tape to bind end of reel to tape pack, designed for the purpose. In a pinch can use artist’s tape.]

Session strengths:

Going through step by step and having examples of different types of deterioration or problems was good. His simple presentation reflected the simplicity of the test.

Excellent step-by-step explanation of 6 pre-inspection and 7 inspection steps to determine condition and types of deterioration. Digital photographs illustrating physical signs of damaged or deteriorating tape visible to the naked eye, with clear explanations of these signs. Clarity of presentation, orally and in hand-out form. Clear hand-outs repeat text information for later reference.

Often speakers tell you what to look for, but don't show actual pictures of the damage. This presentation did. He was straightforward and calm in his delivery, but really didn't veer much from what was on the slide and handout until some questions came at the end.

How effectively did the session address the topic as proposed in the program?

Very effective, especially for the novice but good information for those with some preservation training with magnetic media. The hand-out (not enough copies but should be posted on SAA website) could have been enhanced by including copies of the slide examples.

Excellent. Effectively explained how to survey a collection of tapes for deterioration and determine which tapes 1) might be damaged if they are run through a machine, and 2) require conservation treatment by a professional. This session enabled me to conduct a survey of a tape collection; to know what deterioration signs signal; to spot signs of fungus which indicate that a tape or set of tapes must be isolated and removed from the collection area; to distinguish playable and non-playable tapes; and to prioritize damaged or deteriorating tape for conservation treatment. Good, clear teaching. No pitch for the company.

Toward what experience-level was session geared?

Basic to moderate

All archivists without training in types of tape media, their particular deterioration manifestations, and the implications.

What topics (broached or implied) merit further development in future sessions or articles?

A hands-on workshop using new seven-step inspection process would be nice.

Explanation of the conservation treatment options and the probability of success in restoring tapes to playback condition for each type of deterioration. That would require a longer or separate session, however.