## Karen F. Gracy answers some questions we were unable to get to from her webinar, Basic Concepts and Principles of Audiovisual Preservation, on Wednesday, October 16, 2013.

**Q:** Merle (Illinoise): Can you damage the recording by trying to determine what speed a reel was recorded on different decks?

**A:** I assume that Merle is referring to audiotape here. As long as the tape is in good condition, I don't think you can really damage the tape by changing the speed while it's playing. Hopefully, the speed is marked on the container for the tape (or any leader or labeling)—look for a number followed by the acronym "ips" which stands for inches per second. Common tape speeds include: 1 7/8 ips, 3 3/4 ips, 7 1/2 ips, 15 ips, and 30 ips. The higher the number, the quicker the speed of the time. Consumer quality recordings tend to be slower than professional quality recordings.

**Q:** Gerhild (Germany): Lubricants - which types are the most common, and is there any way to keep up lubricant reservoir?

**A:** The lubricant is already in the tape as part of the manufacturing process, so there is no way to replenish the lubricant as it diminishes over time. You may find the following resource from Sony to be of interest if you wish to learn more about lubricants in the manufacturing process:

http://pro.sony.com/bbsccms/assets/files/mkt/recmedia/solutions/hdvtapelube.pdf

Q: Lee (Australia): Are there particular brands more susceptible to sticky shed syndrome?

**A:** For consumer formats such as VHS, conventional wisdom on this question is that the "name-brand" tapes (such as Ampex, Sony, and 3M) often fare better over the long-term than generic brands (such as those you might buy in the drugstore or grocery store. For professional formats, I recommend taking a look at Richard Hess's website—he has been maintaining data on particular brands and formats and manufacturing runs for those formats to keep track of those that appear more likely to develop sticky shed: <a href="http://richardhess.com/notes/formats/magnetic-media/magnetic-tapes/analog-audio/degrading-tapes/">http://richardhess.com/notes/formats/magnetic-media/magnetic-tapes/analog-audio/degrading-tapes/</a>

Hope this is helpful!

**Q:** Jean (Vermont): What is oxide peeling?

**A:** The oxide layer of a magnetic recording will begin to separate from the tape base as the binder keeping the two layers together begins to degrade.

Q: Sarah (United Kingdom): How about LTO tapes for long-term storage?

**A:** These can still be a very good option for long-term storage of large audio and video files. LTO tapes are a major exception to the mass exodus from the magnetic media products. The one caveat is that LTO tapes are really only for long-term storage (it's not a quick-access option, given the read-write times for these media).

**Q:** Elizabeth (Minnesota): Would high-bias audiotapes be any better or worse than normal bias tapes for preservation?

A: Quite frankly, I'm not sure it makes much sense to continue to reformat audio material onto tape media. You risk having your material stranded on media for which players are no longer manufactured or easily obtained and maintained. It's better to think towards high-density disk storage or cloud storage, from which you could more easily migrate to newer formats as they become the standard.

**Q:** Mary (North Carolina): Are people keeping audiovisual tapes once they are digitized or throwing them away?

**A:** I think this is going to depend upon your institution. The long-held wisdom was to hold onto your originals as long as possible, in case reformatting to a better quality format might be considered in the future. As your magnetic media continues to deteriorate, these tapes may be unplayable in a fairly short period of time, however, I would suggest keeping them until it becomes evident that that moment has come.

Q: Mary (Ontario): I am wondering if there are ISO standards for reformatting?

**A:** Unfortunately, we're not there yet with AV reformatting. It's really a wild West out there, given how quickly formats change. The International Association of Sound and Audiovisual Archives has published a paper from its Technical Committee on digital reformatting and preservation that may be worth examining: http://www.iasa-web.org/tc04/audio-preservation

For film and video reformatting, the Association of Moving Image Archivists is an excellent source of information on current trends and developing standards in this area, via their AMIA Tech Review online publication: <u>http://www.amiatechreview.com</u>

As well as their annual conference (meeting next month in Richmond, Virginia). Also, for technical information, the Society of Motion Picture and Television Engineers have shown interest in developing standards in this area (their publications are usually not free, however).

Q: Cynthia (New Jersey): How would we know if metal cans are non-reactive metal?

**A:** If your film is already in metal cans, remove the film from the can and look at the bottom. If you see rust rings or other signs of chemical reaction, it's probably what we call a "bad can" (a technical term :-). If you are buying new from a supplier, you'll want to ensure that metal in non-reactive (call the manufacturer if possible, if the description in the catalog or online does not specify).

**Q:** Randye (Iowa): We are dealing with digital audio tapes, any thoughts on degradation and care?

A: The recommendations made for analog magnetic media care will still apply here. For DAT tapes, you may want to consider reformatting sooner rather than later, as DAT players are not plentiful at this point. There are still plenty of vendors that will do it for me, and on the bright side—they are already in digital form, so you are essentially transferring the digital object to a new storage device rather than having to translate an analog object into digital form.