How’s that Sound?

Quality control for Preservation of Archival Sound Recordings

Presented at 2017 Society of California Archivists Annual General Meeting

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April 29, 2017
Organizational requirements for quality assurance

Is the transfer work carried out inhouse or outsourced?
Whether In-sourced or Outsourced

• Establish internal process, policy, and standard practice
• Quality control carried out by a trained professional
  • Benefits:
    • Raises the level of quality assurance by having skills that can match the quality to the organizational needs
  • Ideal Requirements:
    • Technical prowess
      • Knowledge of analog and digital media capture processes
    • Musical/aural training
    • Ability to interpret organizational QC standards
    • Ability to operate capture equipment for auditioning
    • Without this, do QC anyway, to the best you can in your context
      • Can lead to higher quality output inhouse and outsourced
What can cause problems in capture and transmission?
Physical Condition

- Vinegar syndrome
- Soft binder syndrome
- Bad splices
- Palmitic acid
- Mold...
- You get the picture

Resources
- ViPIRS, NYU Libraries
- Richard Hess’s Webpage
- FACET, Indiana University
Points of Failure in the Capture Process
- Playback
- Capture / Signal Chain
- Digital File integrity
- Post Transfer Quality Control
Tracking of signal flow for transfers can be useful
Thoughts on Quality Control Criteria

• Content type, where does the value reside?
  • Spoken Word
  • Music
  • Other
• Capture machine availability/challenges
• Possible commercial re-use
• Workflow of capture
  • 1 to 1
  • 1 to many
• New vendor or established relationship?
• Listening to 3rds? 10% of completed transfers? 3-4 minutes?
• Use a visual and aural hybrid approach
• Have a back up (with checksums) if opening files in an editor
Quality Control Equipment and Problems

Digital Clipping
Equipment Needs For Quality Control

- Hardware
  - A Workstation
  - High Quality Headphones and Headphone Amplifier
  - High Quality Digital to Analog Convertor
  - Magnetic Viewer
  - Possibly machines
    - If well maintained
    - If skilled operator of given format/machine
- Software
  - DAW
  - Metering software
Tools for interacting with Possible Problems

- Trained ears
- A/V Artifact Atlas, BAVC
- Machines on hand
- Comparing different transfers from the same signal chain
- Physical examination
- Comparing the image of the media with the recording
- Comparing files to the RFP/statement of work
Examples of Problems
Soft Binder Syndrome

- Cassettes and Open reel tape
Incorrect EQ Selection

- Mostly pre-1955 (ish) discs and magnetic tape (to some extent)
Bad Splices

- Open reel tape (mostly)
Azimuth Alignment

- Magnetic tape (Default alignment from tape then by ear/scope)
- Left (high mono compatibility recording) - not correct
- Right (high mono compatibility recording) - correct
Digital Clipping

- Affects all formats. Pretty easy to tell visually, sometimes aurally, with meters, and automated process in many DAW (i.e. Wavelab global analysis). DATS can’t generally be helped ...
Thank You

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