

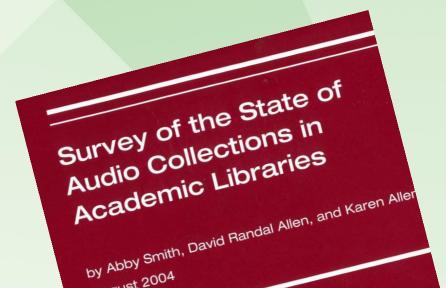
# CONNECTING TO COLLECTIONS

Historical Sound Recordings

## The State of Sound Recordings

Survey of Academic Libraries (2004)

- collections are rich
- barriers to using them are high
- readiness to manage is low





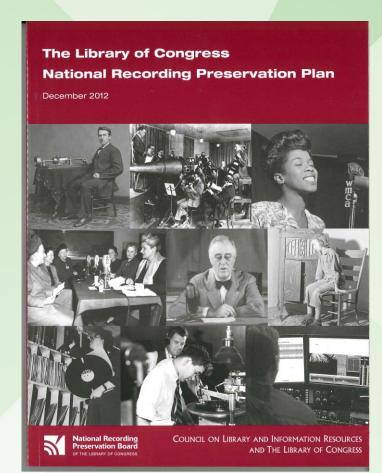
Selected sound recording formats, 1878-2014.

## The State of Sound Recordings

"a national legacy at risk"

National Recording Preservation Plan

- building a national preservation infrastructure
- implementing preservation strategies
- promoting broad public access for education
- long term national strategies



## Challenges

Sound recordings are at risk of loss due to . . .

... chemical and physical instability of materials and composition . .



Modes of degradation: open reel tape

## Challenges

Sound recordings are at risk of loss due to . . .

. . . sensitivity to mishandling and poor storage conditions . . .



Records stored like records.



Open reel tape with mold or mildew.

## Challenges

Sound recordings are at risk of loss due to . . .

obsolescence of technology, tools, expertise

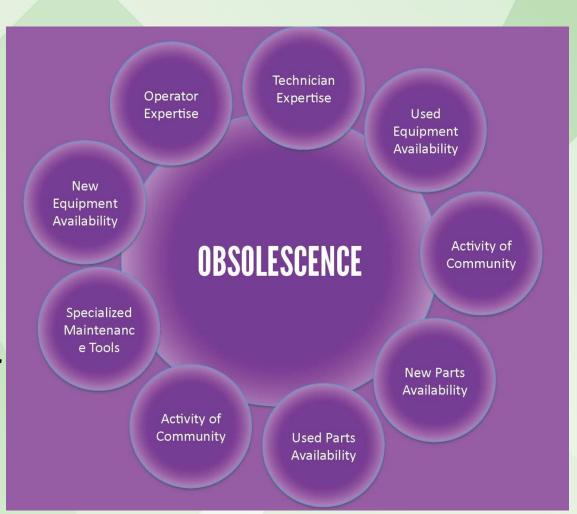


Image courtesy of AudioVisual Preservation Solutions

. . .

## Formats

at

Risk

Format	Major Risk Factors	Risk Level
Lacquer/ Aluminum Discs	Catastrophic chemical deterioration	Very High
Digital Audio Tape	Obsolescence factors, mechanical misalignment	Very High
Cylinders	Fungus/efflorescence, obsolescence factors	High
Recordable CD	Degradation, compatibility issues	High
Open reel tape	Cellulose acetate base, Sticky Shed Syndrome, fungus, urgent obsolescence factors, others	Medium to High
Audio Cassette	Tape type, off-brands, obsolescence factors	Medium

# the inventor's promise . . . and the archivist's responsibility



"... to store up and reproduce automatically at any future time the human voice perfectly."

- Thomas Edison, 1877

## Digitization for Preservation and Access

. . . the creation of copies in the form of digital audio files in order to conserve sound recording carriers and preserve and provide access to contents

### Including . . .

- prep of recordings and equipment
- optimized playback of recordings
- quality analog to digital conversion
- creation of multiple files for preservation and access



Hear today and here tomorrow.

## Digital Audio Files

### preservation master

- Waveform audio file (.wav)
- 16 bit/44.1 kHz (minimum); 24 bit/96 kHz (optimal)
- flat transfer; no editing; no processing; with checksum

### duplication master

- Waveform audio file (.wav)
- 16 bit/44.1 kHz (minimum); 24 bit/96 kHz (optimal)
- edited at head and tail, normalized for loudness

### access copies

- High res: Waveform audio file (.wav) (16 bit/44.1 kHz) for research, broadcast, etc.
- Low res: MPEG Audio Layer 3 file (.mp3) for web, email

## File Management







## Management Activities

Inventory

Risk Assessment

**Prioritization for Preservation** 

Working with Service Providers



## Inventory

- gather core data describing:

   carriers
   contents
   recording characteristics
- establish physical, intellectual control
- note equipment, human resources
- prepare for preservation and access



Boxes of reels staged for inventor

## Inventory

### content:

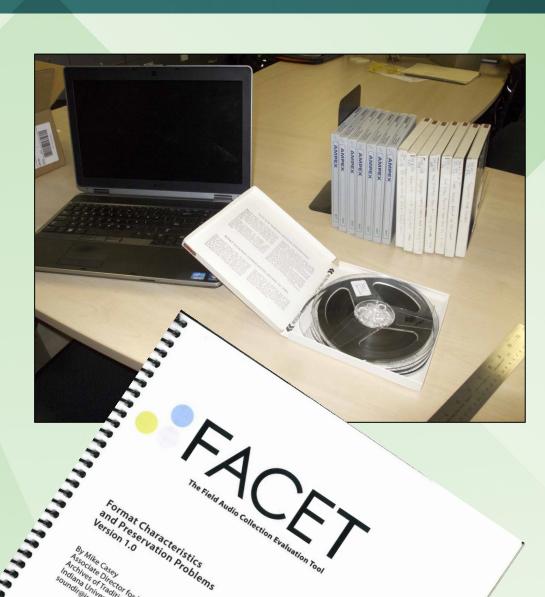
repository, identifier, title, creator, date extent, summary, access restrictions, language

#### carrier:

format, dimensions brand and product note housing condition

### recording:

recording characteristics



### Identifiers

### purpose

control numbers for sound recordings support basic management activities including security, access

in preservation projects, identifiers help:
shipping and accounting with vendors
connect digital copies to originals
when used in file names



Identifiers facilitate preservation and access work, shipping and

### Preservation Assessment

physical inspection
and condition assessment
estimation of risk
to degradation, obsolescence

#### data:

format of materials brand and product condition housing condition storage history Lacquer disc on aluminum base. Do not clean until transfer.



# Prioritization Inventory Assessment Risk Value **Priority**



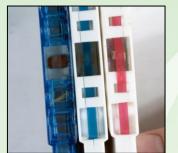
#### **Lacquer discs**

Risk: 4.25 Value: High Priority: High



#### Wire recordings

Risk: 2.75 Value: High Priority: Medium



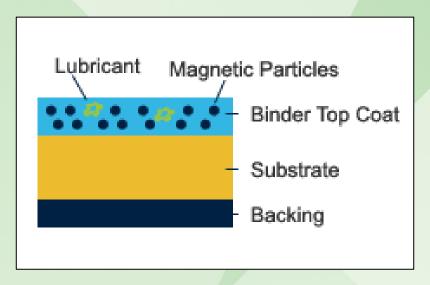
#### **Cassettes**

Risk: 2.75 Value: Low Priority: Low

## Magnetic Tape

### Formats at Risk

- acetate base tapes
  - 1950s-1960s
  - vinegar syndrome
- polyester base tapes
  - 1960s-1980s
  - soft binder syndrome
- digital audio tapes (DAT)
  - mechanical alignment



Anatomy of magnetic tape.

## Inspection of Magnetic Tape



Off brand tape, thin tape.



- 1. note brand and product
  - off brands
  - thin tapes: "double play"
  - tape base

- 2. inspect box and item
  - physical damage
  - fungus
  - clues of storage history

No sign of mold or oxide flaking.

## Inspection of Magnetic Tape



Tape is deformed.



Spoking in tape pack.

### 3. smell the tape

- vinegar odor
- pungent odor

### 4. note tape pack problems

- spoking, stepped pack
- powder or crystal on hubs and tape edges

### 5. identify tape base

- clear = acetate
- opaque = poly
- 6. inspect the tape

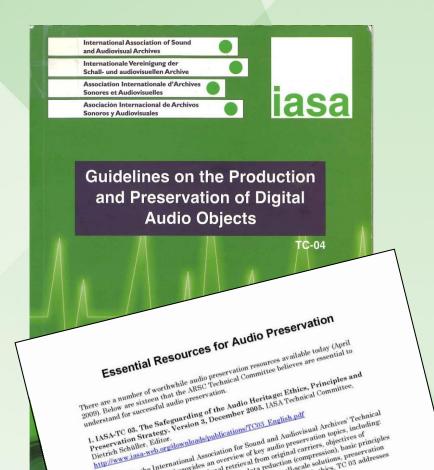


Check for acetate base.



Residue of degradation.

## Preservation Projects





Audio workstation in use in tribal archives.

One year of planning and \$5,000.

# Working with Service Providers



"Outsourcing Audio Preservation Work"



Clip: Preparing a Project Description



Clip: Comparing Costs and Services

### **ARSC Audio Preservation** and Restoration Directory

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AUDIO PRESERVATION AND RESTORATION DIREC
                                              This directory includes Association for Recorded Sound Collections (ARSC) members and non-mamhare who offer
                                  This directory includes Association for Recorded Sound Collections (ARSC) members audio preservation and restoration as well as ARSC members and non-members who offer and in preservation and restoration Each entry includes headings from the following list
                                audio preservation and restoration, as well as AKSC members and non-members who often and index of all entries by location and goods and services is included at the
                              for audio preservation and restoration. Each entry includes headings from the information for the aditor is posted at the end of the document.
                             Contact information for the editor is posted at the end of the document.
                                Preservation Transfer - migration of audio recordings without improvement to sonic contents
                               Restoration 1 ransier - migration of audio recordings without improvement to soft contents

Disastor Daniel Preservation of damaged or degraded audio recordings
                            Disaster Recovery – preservation of damaged or degraded audio recordings

Continuous & Continuous C
                           Equipment & Supplies – goods related to audio preservation and restoration of cancillating and instructional cancillation to preservation and restoration
                        Equipment & Supplies — goods related to audio preservation and restoration

Consulting & Training — consulting and instructional services relating to preservation and re

Storage Services for sound recording
                      Storage Services - storage services for sound recordings
          Adolph Thal Audio Engineering (ATAE)
         c/o A. F. (Fred) Thal
       Ukiah, CA 95482
     afthal@email.com (Email)
  (Equipment & Supplies: Consulting & Taxis
                                                                                                                                                                                                      institutions and andia and
ATAE is Adolph The
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Restoration C.



# CONNECTING TO COLLECTIONS

Historical Sound Recordings

# Recorded Sound and Moving Images in Special Collections & University Archives



Photos by Lesli Larson, Image Services

### Media Services Audio Production Room



Production suite by Chris Lundberg, Stacy Dehart, Media Services Photo by Stacy DeHart

### Jack Olsen Papers

### Welcome to the Jack Olsen Home Page

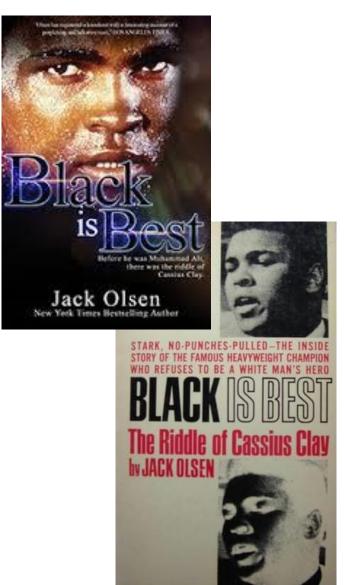


Born June 7, 1925, Jack Olsen was the award-winning author of thirty-three books published in fifteen countries and eleven languages. A former Time bureau chief, Olsen wrote for Vanity Fair, People, Paris Match, Readers Digest, Playboy, Life, Sports Illustrated, Fortune, New York Times Book Review and others. His magazine journalism appeared in thirteen anthologies. His books included The Misbegotten Son, The Bridge at Chappaquiddick,, the eco-thriller Night of the Grizzlies, and his monumental study of a Nazi

massacre in Italy, Silence on Monte Sole. Three of his works were adapted for the screen, including Have You Seen My Son? on ABC.

Olsen's journalism earned the National Headliners Award, Chicago Newspaper Guild's Page One Award, commendations from Columbia and Indiana Universities, the Washington State Governor's Award, the Scripps-Howard Award and other honors. He was listed in *Who's Who in America* since 1968 and in *Who's Who in the World* since 1987. The *Philadelphia Inquirer* described him as "an American treasure."

Olsen was described as "the dean of true crime authors" by the Washington



### Jack Olsen Papers

Clay comes out to meet Terrell and Terrell starts to retreat.

If Terrell goes back an inch farther he'll wind up in a ring-side seat.

Clay swings with a left, Clay swings with a right.

Just look at Cassius carry the fight.

Terrell keeps backing but there's not enough room.

It's a matter of time until Clay lowers the boom.

Then Clay lands with a right—what a beautiful swing.

And the punch raised Terrell clean out of the ring.

Terrell is still risin' and the ref wears a frown.

But he can't start counting until Terrell comes down.

Now Terrell disappears from view; the crowd is getting frantic.

But our radar stations have picked him up, he's somewhere over the Atlantic.

Who on earth thought when they came to the fight That they would witness the launching of a human satellite?

### Selections

Ken Kesey Interview, File 1986\_028B, Archives of Northwest Folklore, University of Oregon





Erb Memorial Union Tree Planting, June 12, 1948, UA 180, Special Collections & University Archives, University of Oregon.



Alice B. Sheldon/James Tiptree, Jr. Papers, Coll 455, Special Collections & University Archives, University of Oregon.





### Selections

Win McCormack Collection on Rashneeshpuram, Coll 406, Special Collections & University Archives, University of Oregon.

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