

# Recorded Sound Round Table Society of American Archivists Newsletter, September 2003

## Introduction to the Recorded Sound Roundtable Newsletter

Welcome to the first issue of the newsletter of the Recorded Sound Roundtable! The newsletter will be issued regularly to roundtable members and made available on the roundtable Web site, which is currently under construction. The purpose of the newsletter is to communicate the activities of the roundtable and to present information on subjects of interest to roundtable members. The newsletter will feature topical articles by archivists and audio engineers, news and announcements concerning events in the field, minutes of roundtable meetings, and assorted tidbits aimed to inform and inspire.

We invite your input and suggestions for this newsletter. Feedback and requests help this newsletter serve your needs. Articles do not need to be technical. If your collection has received important new material, been used in an exhibition, been useful to a researcher, let us, your fellow Recorded Sound Roundtable members, know.

In each issue will include a section "Geek Speak", with brief definitions of recorded sound technical terms. If there's a term you need defined let us know.

The RSRT leaders have a lot of experience, from different perspectives, on recorded sound. Feel free to contact any of us on any issues you face. Topics of general interest may appear in this newsletter.

### Chair:

Nathan Georgitis <nathan\_georgitis@hotmail.com>

### Vice Chair:

Julie Graham <jgraham@library.ucla.edu>

### Editor:

George Blood <georgeblood@safesoundarchive.com>

### Council Liaison:

Chris Paton <cpaton@sos.state.ga.us>

Finally, if anyone would care to be added to the RSRT newsletter e-mailing list, just e-mail the editor. Back issues will remain available, and ultimately be posted to the RSRT website ("under construction").

## Message from the Chair

Over 125 years ago, Thomas Edison fixed a sheet of tinfoil to the cylinder of the first phonograph and recited a nursery rhyme into the diaphragm as he rotated the cylinder with a hand crank. Moments later, he positioned a second diaphragm over the cylinder and worked the crank again. The phonograph repeated "Mary Had a Little Lamb" word for word. Edison was astonished and the sound recording was born.

A century and a quarter after its arrival, Edison's "baby" has long outlived the future Edison envisioned for it in 1878. Today, the sound recording plays a role in nearly every arena of human endeavor, from art and science to religion and war. Its cultural significance is reflected in newspaper headlines, court cases, and political debate. First and foremost however, the significance of the sound recording is reflected in the rich and varied collections in our cultural heritage institutions.

As caretakers of those collections, we know that Edison's baby has in many instances grown old and infirm, but we also know that its capacity to astonish, entertain, and enlighten endures. That is why we are still dedicated to achieving the twin goals of preservation and access that Edison described in his laboratory notebook so long ago, specifically the ability "to store up and reproduce automatically at any future time the human voice perfectly."

As chair of the Recorded Sound Roundtable, I hope this body can help us advance toward those goals in the coming year by,

- facilitating communication among us concerning our professional activities, interests, and needs
- developing annual meeting sessions and workshops that address those activities, interests and needs
- evolving into a significant professional resource for those engaged in the management of sound recordings

I welcome your participation in the Roundtable and I look forward to working with all of you to achieve these goals!

RSRT Meeting, August 21, 2003  
Meeting Minutes

The Recorded Sound Roundtable (RSRT) met on the afternoon of Thursday, August 21 at the 67th Annual Meeting of the Society of American Archivists in Los Angeles. Forty archivists, librarians and vendors with personal and professional interests in recorded sound collections attended the meeting, which was chaired by Nathan Georgitis, 2002 RSRT Co-chair.

The meeting began with a greeting from the co-chair and an introduction to the role of the roundtable as a forum for discussing the care of recorded sound collections and the professional needs of collection caretakers. The members of the roundtable then introduced themselves and shared a few words concerning their personal and professional interests in recorded sound.

The roundtable introduction was followed by a message from Donna McCrea, a member of the Program Committee for the 68th Annual Meeting of the Society of American Archivists, which will be held in Boston, August 2-8, 2004. Donna informed the roundtable of changes in the procedure for proposing and endorsing annual meeting sessions, including the fact that session endorsements will be submitted directly to the Program Committee rather than through session chairs. She advised the roundtable that session proposals are due on October 7th, 2003 and session endorsements are due on November 7th, 2003. Finally, Donna encouraged the roundtable to develop session proposals to meet the needs and interests of roundtable members and the society at large.

Donna's remarks were followed by a message of support and a pledge of service from Chris Paton, the SAA Council's liaison to the roundtable. Chris encouraged the roundtable and its leadership to ask for her help as necessary over the course of the coming year.

The roundtable then discussed the idea of a roundtable newsletter to facilitate communication within the roundtable and serve as a forum for news and announcements and possibly longer articles of interest to roundtable members. The roundtable agreed the newsletter should be

electronic.

The roundtable then brainstormed ideas for pre-conference workshops and sessions for the coming annual meeting in Boston. The discussion began with a consideration of recorded sound workshops that have been offered at previous SAA annual meetings and through other professional organizations, such as the Association for Recorded Sound Collections. The roundtable agreed that there is a need and a want for an advanced workshop centered on the management of recorded sound collections. Members of the roundtable suggested that such a workshop should include hands-on training in the maintenance of playback equipment and the preparation of recordings for playback, among other topics. In the end, the roundtable agreed that the development of such a workshop was beyond the capacity of the roundtable and its members at the present time and decided to table the discussion.

The roundtable then paused for a brief announcement from Steve Gilheany concerning the organizing meeting for a Permanent Digital Archive Liaison Roundtable (PDALR). Questions concerning PDALR may be directed to [SteveGilheany@ArchiveBuilders.com](mailto:SteveGilheany@ArchiveBuilders.com).

The roundtable then considered ideas for sessions. Many members of the roundtable expressed a desire for a session concerning different strategies for recorded sound preservation. The roundtable agreed that the session should present a variety of strategies, including those pursued by smaller institutions with limited funding and technical expertise. The roundtable also agreed that the session should present as much practical information as possible, including project descriptions, grant proposals, equipment lists, staffing requirements, and budgets. Chuck Piotrowski, University Archivist at the University of California at Santa Cruz, volunteered to assist Nathan Georgitis in the development of a session to address these topics.

The roundtable also expressed a desire for a session concerning the relationship between caretakers of recorded sound collections and vendors of products and services for recorded sound preservation. The roundtable expressed

particular interest in learning more about what makes collaboration between caretakers and vendors successful. Roundtable members suggested the session address the following questions: What does the caretaker need to know about developing Requests for Proposals (RfPs) for recorded sound preservation projects? What questions should caretakers pose to vendors in order to evaluate their products and services? What are the pitfalls and potential stumbling blocks in collaborations between caretakers and vendors? What forms might collaborations between caretakers and vendors take? The roundtable discussed the idea of assembling a panel of vendors, or a panel of vendors and caretakers, to discuss these topics. Members of the roundtable cautioned the group that the session would have to be structured appropriately in order to avoid undue salesmanship from vendors. Bridget Carr, Boston Symphony Orchestra Archivist, and George Blood of Safe Sound Archive volunteered to develop a session to address this topic. Chris Paton, the SAA Council's liaison to the roundtable, offered her guidance concerning an appropriate structure for the session.

The final order of business for the roundtable was the election of roundtable leadership for the coming year. George Blood of Safe Sound Archive was re-elected Newsletter Editor. Julie Graham of the University of California at Los Angeles was elected Vice-chair. Nathan Georgitis of the University of Oregon was elected Chair. The Chair thanked everyone for their enthusiastic participation and the meeting was adjourned.

### Geek Speak

“Frequency Response”:

Frequency Response is the range of sound (in Hertz, or cycles per second) that a system can reproduce. Human hearing is usually defined as 20Hz to 20kHz (“20 to 20k”). As we age, and abuse our hearing (through the daily onslaught of fire engines, slamming doors, and self-inflicted abuse like loud music), our sensitivity diminishes, especially in high frequencies. Few adults can hear past 16kHz, and even that may be attenuated.

All purely electrical professional system

components will reproduce 20-20k reliably. All frequencies will be at the same level as all other frequencies (this is called “flat frequency response”), and vary in volume proportionally at different playback levels.

Storage systems (analog or digital tape, for instance), are more complex. For instance, a professional analog tape recorder may reproduce flat frequency response only at certain speeds, say 15ips. (inches per second), but not at others, like 3 3/4ips. And the frequency response may vary with level: program recorded at a low level may have “flat frequency response”, but some frequencies will be attenuated at high level. At the molecular level, analog tape is billions of iron oxide particles which record either positive or negative voltage (up or down) information. Simply put, recording loud sound uses a lot of iron oxide particles. At slow speeds there just aren't enough iron oxide particles to represent both the high volume and high frequencies.

Digital systems exhibit flat frequency response at all levels. Their frequency response is a function of their sampling rate (to be discussed later), which may be greater or lesser than the range of human hearing.

Unfortunately there is no free lunch. Digital systems look at sound at a given moment in time, and place a value on the sound at that moment. They do this very fast (typically 44,100 times per second). This is fast enough to catch the top and bottom of a sound wave at 22,050Hz. But to eliminate the phenomenon of “aliasing” (another topic for another day), very sharp filters eliminate all frequencies higher than 22,050Hz. These filters alter the sound recording (especially high frequencies). While there is flat frequency response, there is not flat phase response. In the case of phase response, the lower frequencies arrive earlier than high frequencies, which are delayed by the “anti-aliasing” filters.

More on the limits of analog and digital recording systems, and how designers solve these problems in our next issue.