

Historical Committee Report ---April 19, 2006

Project Leader: Bill Wray (ww@dolby.com)

Historical Events Committee:

Steve Fields, Jay McKnight, Larry Miller, Gene Radzik, Steve Williams, Bill Wray

Historical Events

1. **NEW** *If These Halls Could Talk: A Historical Tour Through San Francisco Recording Studios*

Status—Suggested by Howard Sherman. Being Discussed.

Book signing/sales/order taking permissible?

Committee member representative — Gene Radzik

Presentation by Heather Johnson journalist, author, and *Mix* contributing editor

Description

Panelists and slide presentation. Johnson will present her new book, which takes an in-depth look at San Francisco's colorful and diverse music and music recording history. Bay Area artists, producers, engineers, and studio owners take a guided tour through some of San Francisco's top recording studios, giving us a behind-the-scenes look at some of popular music's hottest albums. Audience will learn about the recording process, as well as the often oddball experiences, that went into a wide range of recordings, including works by everyone from Jefferson Airplane, the Grateful Dead and Santana to the Pointer Sisters and Herbie Hancock, to Journey, Huey Lewis and the News, Chris Isaak and Faith No More. In addition, she uncovers the historical developments of the *Halls* themselves, discussing the myriad advancements in technology and acoustical design, and how the San Francisco Bay Area's recording facilities have endured through economic ups and downs, increased competition, decreased demand, a “dotcom” boom and bust, and our ever-changing, unpredictable music industry.

2. **NEW** *Documentary film—“Sound Man, From WWII to MP3”*

Status—Confirmed

Committee member representative —To be determined

Presentation by the film's creator, Scott Budman, KNTV television reporter

Description

Sound Man, is a fifty eight minute documentary film about the early days of tape recording in America, and the origin of the Silicon Valley company, Ampex. The friends and family of Jack Mullin discuss the importance of his contributions. It features performances and interviews by Steven Stills, Greg Kihn, Chuck D. and Les Paul. Director Don Hardy has assembled a vast array of interviews (including musicians Les Paul, Greg Kihn, Chuck D., and Stephen Stills, and Bing Crosby's widow Kathryn. Jack Mullin was an essential player in the audio industry, a true “sound man”, who is finally given deserved tribute.

3. *Seventy Years of Stereo Optical Movie Film Soundtracks*

Status—Confirmed, being planned

Committee member representative —Bill Wray

Presentation by Ioan Allen

Off-Site – Short walk to Metreon Theatre. 2 hour setup, 2 hour presentation.

Must be held on Oct 6, morning.

Description

Summarizes the evolution of 35mm stereo optical film sound-tracks, from the first experimental recordings made by Alan Blumlein in 1934 through to today's digital soundtracks. The steady progress in technical performance is described, and many sound formats are demonstrated. The improvements in film sound-track formats have been

paralleled by power amp, EQ, and speaker development, which is also described. Now is your chance to hear about ground noise-reduction, pre-sense, cross-modulation testing and the Eberhard effect.

4. *Recalling Henry Kloss: Audio Iconoclast, Visionary, and Entrepreneur*

Status—Confirmed, being planned

Committee member representative —Bill Wray

Presentation by Joe Hull, audio writer

Description

From 1954's AR-1W, the first production acoustic suspension speaker, to today's diminutive Tivoli FM radio, Henry Kloss was responsible for a parade of audio products that broke new ground and proved immensely popular with consumers. Joseph Hull, who for many years worked with Kloss to explain his ideas and products in written materials, recalls how Kloss conceived and manufactured new kinds of products inspired by an intuitive grasp of the implications of new technologies. Reminiscences of other colleagues will also be presented.

5. *The Evolution of The Broadcast Audio Chain -- Confirmed*

Status—Being planned. A similar event was held in N. Y. a while back. David Bialik would like to help with ideas. Mike Adams to contact him. Mike should also contact Barry Brose (see item 8) and discuss.

Committee member representative—Bill Wray

Presentation by Mike Adams, Chairman, Department of Television, Radio, Film and Theatre, San Jose State University.

Description

Lee deForest, Charles Herrold, and others used a carbon mic for voice and acoustic-coupled playback of Berliner-format discs. Then came tube amplification in the early 1920s, early Western Electric mixing boards, dynamic and condenser mics, and electronic recording and playback of discs. Next came mature audio technology of in the 1930s and 1940s, adding magnetic recording, cart machines and magnetic belt playback. I would trace this with plenty of illustrations as I learn more. I would add from my own 1960-1975 radio experience, the addition of companding devices, reverb, etc.

6. *From Quarks to the Blues—Digital restoration of audio from mechanical recordings -- Confirmed*

Status—Confirmed

Committee member representative—Gene Radzik

Presentation by Dr. Carl Haber,
Senior Scientist, Lawrence Berkeley National Laboratory, Physics Division.

Note: JAES, vol. 51, no. 12, pp.1172-1185 (2003 Dec)

Description

Using methods derived from our work on instrumentation for particle physics we have investigated the problem of audio reconstruction from mechanical recordings. The idea was to acquire digital maps of the surface of the media, without contact, and then apply image analysis methods to recover the audio data and reduce noise.

<http://www.lbl.gov/Science-Articles/Archive/Phys-quarks-to-blues.html>

7. *Disk Cutters—Barry Brose Presentation*

Status—Confirmed..

Committee member representative—Larry Miller

Presentation by Barry Brose, Highland Laboratories

Description

1) Western Electric disk recorder head history, from the original D- spec (1926) to the last WE stereo cutter (3-D Idontknowthedata). Examination of guts and operation.

OR

2) Operation of the Scully Disk Cutting Lathe (DVD demo)

OR

3) "Other" disk cutters-- Presto, Fairchild, RCA, Universal, etc. Guts and operation.

OR

4) Transcription turntables??

It will be one or the other of these or a mish-mash of all of it; he is still putting these together, but they are his Summer Project. "count me in", he says. It would be something like the film he did at the 2004 convention on microphones.

Other Ideas for Committee Discussion:

A) ***NEW Documentary Series- Creating the sound track for "Apocalypse Now"***

Status—Idea only

Committee member representative—To be determined

Presentation/panel discussion by Kim Aubry, associate of Francis Ford Coppola, owner, Zoetrope Aubry Productions <http://www.zap-sf.com/>

Description

This September is the 27th anniversary of the opening of the film *Apocalypse Now*. Audio engineers, filmmakers, techies and passionate *Apocalypse Now* fans will enjoy a detailed look at the film's remarkable achievements in sound. This is a series of documentary shorts, with interviews of Francis Ford Coppola, Walter Murch, Richard Beggs, Mickey Hart, Ioan Allen, and others.

From Kim Aubry: "I think we could put together an interesting panel, including Walter Murch, Richard Beggs, Tom Scott, Ioan Allen, maybe one of the synthesists to talk about the film and its impact on the film audio industry in retrospect. We could show excerpts from the documentaries. I would be happy to show you and your committee members these documentaries at some point.

The Films:

-- **The Birth of 5.1 Sound (5:46):** *Apocalypse Now* was the first advertised feature film to use a then new six-channel "Stereo Surround" process. The film won the Oscar® for Best Sound. A brief history of film sound is presented.

-- **"Ghost Helicopter Flyover" (3:50):** An audio demonstration of the three-dimensional "stereo surround" effects used in the film.

-- **"The Post Production of Apocalypse Now"**

Much has been said about Francis Coppola's tortured cinematic undertaking, amidst disasters both natural and personal. But also consider the incredible, less-publicized three-year journey of post production. These four featurettes cover the fascinating stories of editing, music and sound through the eyes and ears of Coppola and his team of artists and technicians; show the collaboration of star Martin Sheen, writers John Milius and Michael Herr, and drummer Mickey Hart of the Grateful Dead chronicled on film by Eleanor Coppola and her team; and culminate in the amazing final sound mix that took over nine months to complete in the tiny basement studio of Coppola's San Francisco HQ.

-- **A Million Feet of Film – The Editing of Apocalypse Now (17:54)**

-- **The Music of Apocalypse Now (14:43)**

- Heard Any Good Movies Lately? The Sound Design of Apocalypse Now (15:19)
- The Final Mix (3:07)

B) Electronic Music

Committee member representative—Gene Radzik

I am not sure if the same participants would be interested in repeating the exact same event as we did before. It would be nice to bring fresh events to this years SF convention and perhaps approach the electronic music contributors from another perspective:

Bay Area related creative use of electronics for audio creation and production:

Skywalker Sound Droid, E-mu systems scalability of digital audio sampling, evolution of digital audio workstation (Digidesign's history), etc.

C) The Evolution of Field Recording?

Status—The Convention Committee says “what focus”?

Committee member representative—Steve Fields investigating ideas.

birds?

Movies?

Sound effects?

Trains?

D)The 1942 Bell Labs “Sigsaly” Project

Committee member representative—Jay McKnight

Status— Move to N.Y. AES convention.

Jay has been communicating with Dr. James L. Flanagan, prominent ex-Bell scientist. This may be an event suggestion for New York convention.

Convention Committee suggests expanding theme to “Audio developments at Bell Labs”. Chris Struck (cjstruck@ix.netcom.com) and John Strawn know an ex-Bell engineer-Jont Allen, Univ. of Illinois Urbana. Visit his web page:

<http://www.ece.uiuc.edu/faculty/faculty.asp?jontalle>

Description

Kees Immink proposes that someone do a review of the "sigsaly" project. He thinks this may be the earliest practical digital system; it was developed by Bell Tel Labs around 1942, and used for secure voice communications during WW2. Perhaps there is still some Bell Tel engineer who worked on or with the project? Perhaps they would more likely be living around NYC, in which case we should suggest this as a project for the NY Convention in two years?