

Section Meetings

Atlanta

January 12, 1998

The January meeting was held at Video Tape Associates and hosted by Geoffrey King. Section Chair Paul Hogan opened the meeting and spoke about the conference on HDTV and digital television taking place in March. Guest speaker Ray Ostrum, Accom, spoke about the technology involved in the company's attach'e digital disk recorder. Gary Lieberman, also a guest speaker from Accom, discussed the Axial 3000 editor.—J. Rhett Mappin, Secretary/Treasurer, Pinnacle Systems

Detroit

December 16, 1997

Mike Christmann, Philips, presented a technical discussion on high-resolution film scanning at high speed as implemented in the Philips Spirit DataCine, one of which is installed at GTN, a large production facility in Oak Park. Christmann began with an overview of terms and parameters important in film transfers, including adapting the color gamut of film to electronic formats and the derivation of the number of pixels needed to scan a single frame of 35mm film.

He explained the operation of the Spirit to the 45-member audience with the help of a block diagram. The Spirit is format-independent in that scanned images are stored as raw data with each frame consisting of up to 2000 x 2000 pixels. This allows the system to provide output either as video (RGB, NTSC, PAL, and multiple DTV) or data (as a HIPPI stream). The optical path uses diffused light from a broad-spectrum xenon lamp to minimize the appearance of scratches on the film. The image passes through a beam splitter



Frank Smith, GTN, occupies the control room for the Spirit DataCine at the Detroit Section meeting.

to different sensors for detail and RGB information. The sensors are physically fixed together so there are no registration problems. Detail is scanned at twice the resolution of color, taking advantage of the eye's characteristics.

Sampling for analog-to-digital conversion takes place at 14 bits to minimize errors rounding to 12 bits. Spatial processing takes place at a throughput of 6.2 Gbits/sec resulting in realtime scanning at standard or high definition and 6 frames/sec at 2K x 2K resolution.

The technical talk concluded with some discussion of audio issues and the applications of the system. These applications include long-form transfers of theatrical features for HDTV, and the ease of editing productions by making low-resolution scans, generating a pull list, and scanning at high resolution only those scenes needed in the final product.

A high-definition tape of some scanned material was shown on a 16 x 9 high-resolution monitor while GTN staff took small groups on a tour of the scanning facility.

Prior to the program, SMPTE Central Region Governor Harold Miller gave the members an update on Society news from the Governor's meeting at the November conference.—Frank Maynard, Secretary/Treasurer, WKBD-TV

Nashville

December 18, 1997

Panasonic representatives William Sturcke and Jay Gonzales conducted a presentation on Advanced Digital Television at United Methodist Communication. The discussion, attended by 21 people, included an overview of DTV and its implementation, as well as a demonstration of the D-5/HDTV digital recorder with an HDTV monitor.

The D-5 unit shipped in for the meeting had received a severe blow to the front control panel during delivery and still was able to operate normally. Functioning with that kind of damage was an ideal endorsement of the product.

The speakers gave an excellent presentation using a PowerPoint program and a very impressive projection system.

SMPTE SECTION CALENDAR

New England

For further information contact Section Chair John C. Gates, Gates Service Group Inc., tel: (508) 651-7886, fax: (508) 651-7889

Dates for future meetings

March 18: DVD and AC-3 Audio Technologies

April 15: NAB Wrap-up

May 20: Moving WLVI-TV: Tour and Presentation (Tentative)

June 19: High-Speed Duplication/Annual Retrospective and Barbecue at Video Transfer in Southboro

Rocky Mountain

For further information contact Section Chair Fred Baumgartner, TCI, tel: (303) 486-3946, fax: (303) 486-3891

Dates for future meetings

March 18: Continental Transmitters (Tentative)

May 20: Tour of assembly and test area for high-power digital transmitters

June 17: AES/EBU AC-3 5.1 Blow Out

July 22: Lookout Mountain Picnic

August 19: Presentation of encoder for ATSC DTV application

September 16: TBA

October 16: TBA

November 18: SBE Elections

Toronto

For further information contact Promotions Adviser Brad Fortner, Rogers Communications Center, Ryerson Polytechnic University, tel: (416) 237-0625, fax: (416) 979-5203, e-mail: bfortner@acs.ryerson.ca

Dates for future meetings

March 10, 1998

April (TBA), 1998

May 12, 1998

June 8, 1998



The New York Section discussed the preparation for and implementation of DTV. From left to right: Michel Strein, Robert Seidel, Frank Geraty, Robert Ross, Michael Isnardi, Gary Poon, Tom Hankinson, and Charles Jablonski.

George Chandler, Panasonic, was on hand to introduce the speakers and help answer questions. SMPTE Southern Region Governor Clyde Smith was also in attendance and made mention of several existing and proposed SMPTE standards relevant to this area.—Tom Hoffman, Secretary/Treasurer, The FilmWorkers Club

New York

December 16, 1997

Forget the FCC and equipment manufacturers. What's really happening in digital television? Bob Seidel, CBS Network, Bob Ross, CBS Stations Group, Gary Poon, PBS, Charlie Jablonski, NBC Network, Frank Geraty, WPIX, and Tom Hankinson, ABC Stations Group, spoke on their actual plans for implementing DTV, from transmission-tower problems to network-distribution plans.

Michael Isnardi, David Sarnoff Research Center, opened the meeting by presenting an overview of DTV. He touched on issues ranging from DTV image and sound formats to how consumers will navigate their way through multiprogram transmissions with channel-up and channel-down buttons (four cursor-like keys might be used instead).

The panel was then moderated by consultant Mark Schubin who also stepped in to represent those networks not present. Among the information that emerged was the fact that New York stations, excluding CBS, have no timetable yet for when their DTV antenna-mast problems might be resolved. CBS's local station, on the other hand, had its license application delayed by frequency-allocation issues involving Canada. CBS does not plan to carry live HDTV coverage of the 1998 Winter Olympics in Nagano, nor will NBC carry the Sydney Olympics in 2000 in HDTV.

All of those present said their equipment choices have been dictated by what's available on the market, and all were reticent to discuss plans for multicasting or DTV formats. Questions from the audience raised such issues as cable TV carriage,

but the panel couldn't offer hopeful answers. In the trenches, it seems, DTV implementation is no simple matter.—Mark Schubin, Manager, Consultant

Philadelphia

January 13, 1998

The January meeting was held at the Lerro Corp., in Valley Forge, Pa., and was attended by 25 people. Guest speaker Jay Yogeshwar, Front Porch Video, covered the various features of digital videodisk (DVD) and the market overview which included business opportunities.

DVD is the result of cooperation between Japanese consumer electronics manufacturers such as Toshiba and Pioneer, and the U.S. motion picture industry. Many DVD features such as 133 min of playback at over 3.5 Mbits/sec per side, multiple audio, and subtitle tracks met and exceeded Hollywood studio requirements. Yogeshwar said he sees business opportunities in many areas such as mastering and replication, compression, title design, authoring, graphic design, DVD-ROM design with links to the Internet, interactive content development, and bit-stream bureaus (service).

Yogeshwar outlined the various components of a DVD production studio which included audio, video, subpicture encoding, menu and navigation, and how the U.S. closed captioning system may be included. In their interconnections, he stressed the need for planning online and offline storage requirements, and the necessity and availability of high-speed networking of these requirements. He then discussed quality control and pre-mastering flow and suggested a master plan and storyboard concept. Other topics of discussion included the authoring process of collecting assets, laying out the tracks (video objects), creating the navigation via program chains, and the final step of disc image layout.

Yogeshwar also summarized the physical and logical syntax of DVD. He then covered personal requirements and financial outlays for the equipment and said

DVD offers cheap random access mass storage and is a format that lends itself to interactivity. Yogeshwar reiterated that good planning is critical and DVD has an enormous amount of potential. Several DVD productions were demonstrated including titles from Rainmaker of Vancouver, B.C., and Pacific Ocean Post, Los Angeles.—James Landy, Secretary/Treasurer, Landy Electronic Reps

Rocky Mountain

December 17, 1997

Sixteen SMPTE/SBE members attended the December meeting at the National Digital Television Center's Studio E-2. Guest speaker Robert Chichester, a professional surveyor who often deals with broadcast and other antenna location issues, gave a presentation on GPS. His experience with the equipment and the technology of satellite location goes back to the beginning, and the stories of why things are as they are kept the audience's attention even after his formal presentation was over.—Fred Baumgartner, Section Chair, TCI

San Francisco

December 25, 1997

At a joint meeting with the San Francisco Chapter of the Society of Broadcast Engineers, over 70 members and guests gathered to tour the new KDTV studio.

Guest speakers Bob Wyatt, KDTV, Stephen Lampen, Belden Wire, and Jack Andresen, Energy Transformation Systems, explained how this new analog and digital plant pioneered the use of Belden "Media-Twist" cable to run analog audio, video, and reference as well as the various digital backbones.

The older 3/4 in. format news plane has been expanded to DVCPRO in an analog configuration that will soon be updated to the SMPTE Serial Data standard. News scripting is now done on a networked desktop system with a growth path to desktop news editing.

The tour of the broadcast facility included the rebuilt 41st floor of 50 Fremont St. and a description of the building from the ground up.

An impromptu discussion of the use of unshielded twisted-pair (UTP) for analog video in the studio broke out in the conference room. Most of KDTV's facility has been wired for video using CAT 5 with a balun from the 8-pin RJ-45 modular connector to the video equipment's BNC. Lively discussions were presented by Lampen and Andresen, who is the inventor and manufacturer of the special baluns used in the plant. Many questions were discussed concerning the use of UTP and the experiences of handling video without coaxial cable.—Rick LeForge, Membership Chair