

Section Meetings

Chicago, September 18, 1990 — Ed Fraction, Optimus, Inc., gave a presentation entitled, "Audio Formats on Videotape; A Summary of the State of the Art." Using a historical perspective, he began with technical descriptions comparing optical and magnetic audio use with kinescopes and early 16mm double system sound applications. He then discussed tape use and the anatomy of the 2-in. quadrature format.

He divided the videotape portion of the program into analog and digital, noting that the developments in FM frequency carriers for longitudinal audio tracks and some of the azimuth designs brought additional retrieval challenges such as interchange and crosstalk. Time compression has allowed improvements in sound quality to be applied to smaller tape formats.

To supplement his explanations of head and track placements, Fraction used many projected transparencies. He described 16mm PCM processing with notes on some of the trade-offs with bandwidths and sampling rates. He also discussed audio differences between D-1 and D-2 formats and the limitations of HI-8 and S-VHS audio designs, and touched on HDTV and R-DAT issues.

Following the presentation, the 40 attendees participated in a lively question-and-answer session that included many eyewitness anecdotes about audio quality over the decades. In addition, tribute was paid to Marvin Camras, Illinois Institute of Technology, for his pre-World War II wire recordings. — Scott Kiefer (Secretary/Treasurer), Midwest Communications.

Houston, September 12, 1990 — Library management systems (LMS) based around a digital format were the topic of a meeting held at KTXH-TV. Rick Swiers, Sony Corp., Multicassette Systems Division, gave a presentation on and a demonstration of the company's D-2 LMS equipment, which is installed at KTXH.

The system's ease of operation and rapid handling is based on a Unix computer control system that is capable of operating on an ethernet link. Up to 1000 cassettes with multiple spots and/or programs may be loaded into the machine. The capability of intermixing programs and spots with the 1000 bins permits great flexibility while providing maximum reliability. The dubbing station is completely automated and can be interfaced with all of the existing major traffic computer systems. Following the presentation, the 50 guests and members of the Houston Section toured the station's newly remodeled studios and control facilities. — Robert Musburger (Secretary/Treasurer), University of Houston.

New England, September 12, 1990 — A view into the future of robotics for television was presented by the staff of WHDH-TV Boston during a joint meeting of the New England Section, the New England Producers Association, the Society of Broadcast Engineers, and the International Television Association.

Karl Renwanz, vice-president of engineering, opened the meeting with an outline of the station's philosophy on changing to robotic camera pedestals in the news studio. He was followed by R. D. Sahl, anchorman for the news broadcasts, who gave an insightful perspective of the talents' point of view in working with robots. He noted that they missed seeing people in the studio and that the noise of the TSM SP-200XY nitrogen-charged pedestals was distracting at first. Margie Reedy, co-host for the news broadcasts, pointed out that talents must now adjust their sitting positions to match the preprogrammed camera angles instead of vice versa.

A demonstration of various camera configurations used during a news broadcast illustrated the need for serious safety consciousness in the studio as well as the importance of cleanliness on the studio floor. A tour of the automated tape room, which features the Ampex ACR-225 tape transports with a robotic cassette loading system, closed the program. Of note, as a result of using robotics, WHDH has reduced their tape room personnel from six to zero. — Ed Dextraze (Secretary/Treasurer), Raytheon Corp.

New York, September 12, 1990 — The meeting, held at Eastman Kodak Co., opened with the showing of *Pieces of Silver*, a centennial extravaganza 35mm film celebrating the 100th anniversary of the moving image. After the film, Michael E. Johnson, Eastman Kodak Co., introduced the two latest members of the Eastman EXR camera negative film family, EXR 7296 and EXR 5248. The 35 members and guests were then shown demonstration films that highlighted each product's individual performance characteristics and sparked a question-and-answer session.

The program concluded with the introduction of the 1990 New York SMPTE Section Board as well as members of the Local Arrangements Committee for the 132nd SMPTE Technical Conference held in October at the Jacob K. Javits Convention Center in New York City. An Open Forum followed, and attendees were given the opportunity to voice their opinions regarding current and future programs. Response cards handed in at the conclusion of the meeting were very positive and gave valuable insight into future needs of the section. — Michael E. Johnson (Secretary/Treasurer), Eastman Kodak Co.

Pacific Northwest, September 14, 1990 — Over 47 people attended the first 1990-1991 section meeting, held at Gastown Post & Transfer in Vancouver, B.C. Rick Ballabuck, Softimage, spoke on new directions in the computer graphics industry. Compared to six years ago, graphics software has become easier to use, more designer oriented, and highly interactive with a greater level of flexibility and fewer restrictions. Current systems offer better technical integration with film and video,



SMPTE New England Section members viewing robotic systems at a meeting held at WHDH-TV Boston.



Mike Liebhold (left) and Steven Mayer (right) addressing the audience at the San Francisco Section's all-day seminar.

such as variable image aspect ratio, adjustable pixel aspect ratio, and cleaner interfaces between different systems. At the conclusion of the presentation there was a tour of Gastown Post & Transfer's facilities. Barry Chambers, David Harrison, Karen Hewko, and Bill Hammond guided the group through the operation and gave demonstrations of nonlinear editing equipment. — Clifford Anderson (Secretary/Treasurer), KCTS-TV.

Rochester, September 18, 1990 — The SMPTE Rochester Section, in conjunction with the Rochester Audiovisual Association (RAVA), held its 12th Annual Student Film/Video Festival Awards at the Rochester Institute of Technology. The festival is designed to encourage, recognize, and promote the creative and technical work of student filmmakers and videographers.

The categories for this year's competition were experimental — advanced and novice, and animation — advanced and novice. There were 12 winners out of the 32 entries. Each winning entry was transferred to videotape and shown to the audience of over 50 people. SMPTE Festival Co-Chairman Vincent T. Slavin, Vincent T. Slavin Productions, awarded First Prize and Honorable Mention certificates throughout the presentation of the students' works. — Paul G. Kanerva (Secretary/Treasurer), Eastman Kodak Co.

San Francisco, August 18, 1990 — An audience of 150 people attended "Demystifying Multimedia: The Microprocessor in Video Production," a day-long seminar held at Apple TV, Apple Computer's television facility. Michael Bobrovich, Apple Computer, served as host and master of ceremonies.

Mike Liebhold, Apple Computer's Advanced Technology Group, opened the seminar with a discussion on "Personal Media Network for the 1990s." He said that the company is operating on the assumption that, by the mid 1990s, personal computers will have the power of present-day super computers, such as the Cray. He predicted that these personal computers will be interactive and capable of stopping and rotating 3-D objects and that a second or third video monitor can be connected enabling a cursor to be moved from one monitor to the next.

He also discussed hypermedia, a form of software that allows pieces of information to be connected and represented in a more graphic, nonlinear way. It provides an ability to connect pieces of knowledge in new ways through association. It offers an infinity of information and comprises a powerful new tool of inquiry. An example of hypermedia's benefits can be realized at the end of a technical paper where reference sources are listed. With this new tool, the entire document becomes available together with its references. He described areas where hypermedia is being used, such as the educational, aerospace, and architectural industries.

Fabrice Florin, Apple Multimedia Group, provided two films as examples of interactive motion picture/video. The first film, *Life Story*, was a BBC television production of the story of the DNA discovery by James Watson and Francis Crick. The production allowed viewers to branch off from the main story in order to learn the background of the principals of the DNA discovery. By using hypertext, viewers can take a participatory role, which serves as an effective teaching technique.

The second film was recorded at the

coastal community of Moss Landing, Calif. A 60-person staff recorded 150 hours of material in the area. The story began with a postcard view and then jumped aboard a fishing boat that was shown in the postcard setting. There were scenes of a fishing dock, a fisherman's life at sea, and a fish market's operation. There was a story of oysters from the point of origin to the point of consumption. Florin said that this type of project requires a multimedia VCR, mass storage, large-screen projection, digital video, field roles, nonlinear editing, and indexing standards.

Rod Soderberry, C-Cube Microsystems, spoke on "Video Compression." He said that image compression has existed for 20 years. To achieve low-cost usage, a compression ratio of 10 to 20X is needed. To get down to CDs, another 5X is required. The technology for this is available now and standards are coming into play. A group called Joint Photographic Engineering Group (JPEG) has been formed and international standards exist in the U.S., Japan, and Europe. He said that for a still image, 20:1 compression yields no loss in quality. Compression is possible because of a high rate of redundancy. Spatial information represents video information. With compression you can work in real time video encoding and decoding. He showed videos that demonstrated the effects of compression, and no difference could be observed in the imagery.

During the afternoon, attendees heard presentations on "Nonlinear Editing of Media Composer," from Eric Peters, Avid Technology Inc.; "Q-Sheet A/V 2.0 Audio Post-Production Software," from Robert Currie and Peter Gotcher, Digidesign; and "Video F/X," by Steven Mayer, Digital F/X. — Vernon L. Kipping (Chairman), Consultant.