

# Section Meetings

**Atlanta, January 10, 1994** — Over 60 members and guests were on hand for the January meeting, which took place at The Network Connection in Alpharetta, Ga. Jim Reiner, TNC, spoke about the merits of his company's Triumph Server.

The system offers real-time coding from live video, S-VHS, or CCIR 601 and "on-demand" decoding to 120 workstations. Video data is stored onto a maximum of 36 hard drives using MPEG-I audio and video compression techniques which allow a good balance of resolution. Each workstation receives the video data packets through a 10-base-T network into a decompression board within the workstation. The user may review the video stored from single frames to faster than normal speeds; there is also an option to review just a portion of the video file. The heart of the server utilizes six RISC co-processors using Windows NT and Advanced Server software to oversee the operation. The recorded compression ratio uses 1 Gbyte of storage for each hour of video. Mr. Reiner added that this system is not just dedicated to video but would process normal data file packets as well.

Attendees were able to see this technology at work by viewing video programming played from a computer network server. — James McKechnie, (Secretary/Treasurer), CNN/Headline News.

**Atlanta, February 9, 1994** — The February meeting, held at Technical Industries, Inc., hosted over 30 members, guests, and TI staff. Farley Barge, Technical Industries, presented a white paper on the current status and implementation of today's compression technology. He described the foundations of Discrete Cosine Transform (DCT), which has evolved into JPEG, MPEG, Digital Video Interactive (DVI), and improved WAVELET. Many problems which face the industry were discussed, among them the idea that JPEG has reached its pinnacle in video, that large blocks of errors occur when compression is used after coding and decoding compression has occurred, and that the implementation of compression schemes is very different between systems even though several manufacturers are using similar compression techniques. Then Jeff Ruger, Technical Industries, discussed the current status of audio compression and its acceptance into editing suites. The evening concluded with live demonstrations using different compression ratios with several on-the-market A&V editing systems. — James McKechnie, (Secretary/Treasurer), CNN/Headline News.

**Detroit, January 11, 1994** — The WJBK-TV studio was the site of the January meeting, attended by approximately 40 members and guests. Wallace Murray, Ameritech, discussed some of the digital services available from the local phone company, including the Switched 56-kbit dialup digital network service used in audio and teleconference video. Two videotape demonstrations were presented, featuring current video digital compression formats used on the Telco networks.

Another tape demonstration illustrated "Think Link," an experimental home-study interactive fiber network in use in the Warren Consolidated Schools. One hundred and fifty homes are wired with fiber cable that supplies analog video service to the students. Each user has access to the control of CDI and VTR machines. A question-and-answer session followed the discussion. — Gene Wilczak, (Secretary/Treasurer), WJBK-TV.

**Hollywood, January 19, 1994** — Approximately 80 hearty souls braved the earthquake aftershocks to attend the January meeting at the Gene Autry Western Heritage Museum. Edward S. Szurkowski, AT&T Bell Labs, detailed AT&T's ongoing research into interactive television, including the upcoming trial in Castro Valley with Viacom. He also discussed how telecommunications companies are likely to get programs to viewers in the future — over both cable and telephone company facilities, as in President Clinton's National Information Infrastructure Proposal.

The meeting itself was interactive in nature because Szurkowski encouraged questions during his presentation. Many lively discussions occurred and the meeting was enjoyed by all. — Gail K. Ringer, (Secretary/Treasurer), Ringer Video Services, Inc.

**Houston, December 15, 1993** — The December meeting took place at MZB/Gray, Inc., and provided an opportunity for Art Shifrin, Alpha Image, to present some of the problems of digital production. He told the approximately 20 attendees that early results sometimes had to be made "less perfect," and introduced dithering to eliminate the hard errors visible on a background wash. By presenting the Alpha Image as a production switcher rather than an on-air design, Shifrin described a device capable of instant flexibility to place background and foreground layers. He explained that there is no need to cascade effects banks in video production, unlike multiple reentry devices descended from early production switchers. — Andy Anderson, (Secretary/Treasurer), KHUT-TV.

**Houston, January 19, 1994** — The January meeting, held at Industrial Audio Video, Inc., examined the practical side of component video. Tony Guess, Tektronix, described the difficulties of monitoring video quality from a serial digital bit stream. He began with the premise that we have been making compressed video from the beginning because NTSC encoding contains less information than the video emerging from a color camera's pickup device. Digital video compression is thus an outgrowth of what the broadcaster has always used to provide video to the consumer. Guess then demonstrated test equipment which Tektronix had recently introduced to simplify the task of analyzing serial digital components.

Mike Ellis, Sony, described digital compression as a tool which must be suited to the application. Because all compression schemes are based on removal of redundant data, a decision must first be reached whether redundant data occurring outside an individual field or frame can be discard-



*Mike Ellis discusses video compression at the January meeting in Houston.*



The January section meeting in Nashville featured several speakers from The Nashville Network.



Speakers Willins and Starkey (L) with Section Chairman Edward Dextraze at the New England Section's January meeting.

ed. Consequently several different compression schemes have emerged because of different video applications. — Andy Anderson, (Secretary/Treasurer), KHUT-TV.

**Montreal/Quebec, February 23, 1994** — The National Film Board of Canada was the site of the February meeting, attended by over 75 members and guests.

The first speaker was Andre Vincent, CRC Ottawa, who discussed the principles behind the compression techniques used in the MPEG-2 standard. The presentation was highlighted with illustrations and examples of video compression.

Dany Harrison, technical engineer at Television Quatre-Saisons and member of the National Data Broadcasting Committee, followed with a review of the committee's current activities. The aim of the NDBC is to establish a high-speed data transmission within a standard 6-MHz NTSC signal. — Jaques Lachapelle, (Chairman), Centre de Montage Electronique.

**Nashville, January 27, 1994** — Approximately 50 members and guests braved a cold rainy night to attend the January meeting at The Nashville Network. The event was hosted by Tom Edwards and Butch Smith, TNN. The program, "Designing and Implementing On-Air Graphics for TNN and CMT," was presented by Biz Woodie, Scott Neumann, Ben Naff, and others representing TNN and Country Music Television (CMT).

After an introduction by Section Manager Jim Edwards, Biz Woodie discussed the development of the on-air graphics look for TNN, CMT, and CMT-Europe. Scott Neumann then described how graphics are developed utilizing PC-based paint systems for initial design and completed using the Colorgraphics paint system. Ben Naff concluded by informing the attendees how digital compositing is used to finish the projects. Video demonstrations enhanced the speakers' presentations.

After the program and refreshments, everyone was treated to a tour of TNN's production and distribution facilities. — David Bower, (Manager), Univ. of Tenn.

**New England, December 11, 1993** — The December meeting, a joint effort with the Boston Audio Society and the Boston Chapter of the Audio Engineering Society (AES), took place at the General Cinema Complex in Framingham, Mass.

The first presentation was given by John F. Allen, High Performance Stereo, who described HPS-4000, the in-house system used for the live demonstrations. This sound system, which included a complete Allen Surround Array house speaker system, was capable of delivering 103 to 105 dB SPL in the center of the main room, with a goal of being able to deliver 111 dB SPL without distortion, and without complex bi-amplification systems.

Dan Taylor, Sony, discussed the new Sony Dynamic Digital Sound (SDDS) system, which employs the Sony ATRAC compression scheme and encodes digital data as an optically-read signal onto the film. The system, capable of eight discrete channels, is entirely self-contained and coexists on the film release print with the normal analog optical track.

Terry Beard, Digital Theater Systems, then gave a detailed explanation of the DTS system, currently used in over 1300 motion-picture theaters nationally. Beard used several reels from the box-office success *Jurassic Park* as a demonstration and described how the DTS system functions as a "double-system" concept. The film print has a relatively low bit-rate time code which is used to synchronize an external CD-ROM processor. The DTS system can provide six channels of sound and is fully backwards-compatible with earlier releases which have the DTS data embedded on the print.

Allen then discussed the Dolby SR-D system, which is currently installed in 150 theaters nationally and supported by over

40 film releases. Like the Sony system, the SR-D system writes all the digital data onto the film print to simplify distribution and use. It is encoded in the Dolby AC3 compression scheme and provides six channels of audio. Mr. Allen also provided an unusual treat with the screening of a special "pristine reel" from the studio which produced *Apocalypse Now*.

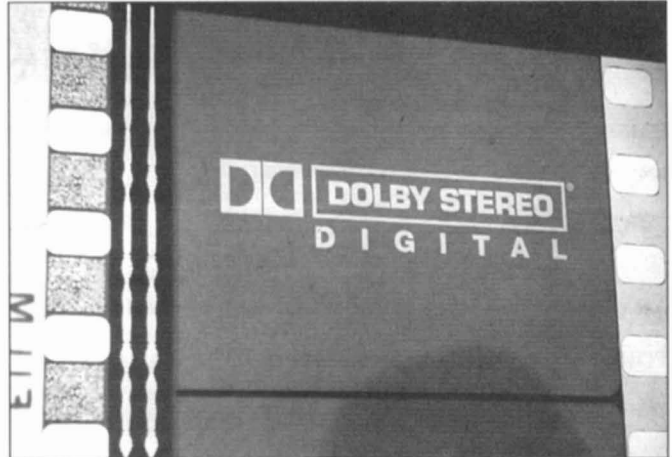
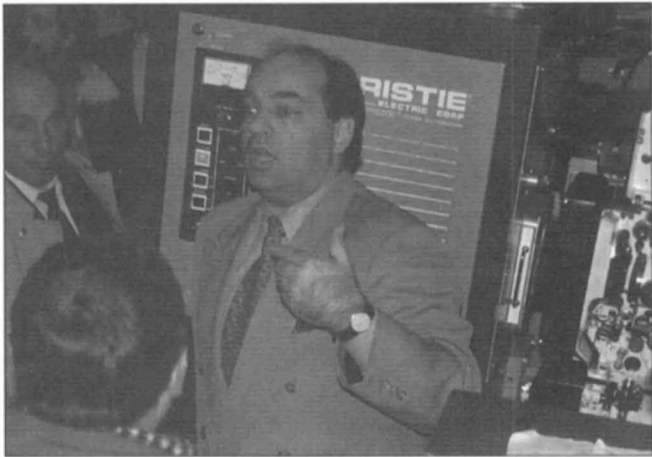
This was the New England Section's best-attended meeting in recent memory, with over 400 members and guests present. — Paul R. Beck, (Secretary/Treasurer), Emerson College.

**New England, January 27, 1994** — The January meeting was held jointly with the International Teleconferencing Association (ITCA) Boston/Hartford Chapter. The site was the corporate headquarters of The Raytheon Co., in Lexington, Mass., and over 85 SMPTE and ITCA members were in attendance.

Section Chairman Edward Dextraze opened the meeting by introducing, via teleconference linkage, ITCA Alaska Chapter President Mike Hidalgo and his associate Bridget Sullivan. The picture quality was superb, and the Alaskan speakers and the Lexington audience were able to see and hear each other clearly throughout the presentation. This event was facilitated by the Sprint Meeting Channel Service, providing 112 kbit/sec data transfer.

Hidalgo discussed how the use of this type of linkage for meetings is growing in popularity. This is because the productivity and effectiveness of such electronic meetings have measurably increased above other forms of business communication, not to mention an enormous savings in travel and other meeting expenses. He went on to explain the problems he and others have in Alaska with such meetings. Because AT&T does not serve all parts of the state, there are limited opportunities for full Switched Digital Services (SDS), or Switched 56 services.

Featured speaker Edward J. Willins,



At the New York Section's January meeting, Michael DiCosimo (L) explained the technical facilities in the Walter Reade Theater; the Dolby digital soundtrack (between film perforations) was displayed (R).

Crimson Tech, president of the Boston/Hartford ITCA chapter, discussed the unusual growth rate of group video display and teleconferencing, citing recent statistics which claim that the rate will be doubling every year until the year 2000. This presentation was enhanced by high-resolution graphics fed from a laptop PC and displayed onto a large rear-screen RGB video display screen.

The meeting concluded with C. J. Neil Starkey, The Data Beam Corp., discussing the many features and business benefits that such technology will harvest, especially with the application of a term called audiographics which can also include shared visual data. He also mentioned some trends in the teleconferencing world, indicating that such technology is now generally accepted as an extension of the normal business telephone call and is not a special event. — Paul R. Beck, (Secretary/Treasurer), Emerson College

**New York, January 11, 1994** — "New Dolby Digital and Analog Technologies" was the subject of the January meeting, held at Lincoln Center. The new Walter Reade Theater, home base for the Film Society of Lincoln Center, provided a state-of-the-art setting for the presentation by Dolby Laboratories. The complex is equipped with the most complete Dolby sound reproduction system in the metropolitan area, and provided impressive picture and sound demonstrations of sections from such recent feature films as *Pure Country*, *Aladdin*, *Shadowlands*, *The Remains of the Day*, and *The Fugitive*.

Michael DiCosimo, Dolby Labs East, spoke about film mixing, film mastering, and Dolby's AC-3 digital bit-rate reduction technology used in Dolby's digital film systems. Ioan Allen, Dolby Laboratories San Francisco, followed with a discussion of Dolby's digital optical recording and reproducing technology. Using feature films, he demonstrated the

digital system under different dynamic situations. He also compared the digital and the analog tracks on the same film. Brad Hohle, Dolby, then described Dolby's digital mastering system and demonstrated the equipment required.

Before the meeting, Chief of Projection Don Schul gave a tour of the theater and provided in-depth descriptions of the technical facilities. New York Section Manager Ed Schuller projected SMPTE's PA35 test film and described some of its many uses. This special meeting, held jointly with the Audio Engineering Society, attracted an audience of 150. — Ed Schuller, (Manager), Entertainment Video Systems

**Rochester, January 11, 1994** — The Rochester Institute of Technology's annual Cinematographers' Evening was the site of the January meeting attended by 26 members and film school students. Judy Irola and Robin Romano, both professors of cinematography, described their approaches to the subject and showed examples of

their work. Irola won the Eastman Award for Cinematography at the 1993 Sundance Film Festival for the feature film *An Ambush of Ghosts*, while Romano has worked as a writer, director, camera person, and editor in features, television, and music videos. — Alan J. Masson, (Secretary/Treasurer), Eastman Kodak Co.

**Rochester, February 8, 1994** — Braving yet another Rochester blizzard, 16 members visited Dajhelon Productions, Inc., for the February meeting. The company's president, David Schumaker, gave attendees a description and tour of this recently expanded audio recording facility. Each of the ten tracking rooms has a different natural ambience, with wall finishes of pine, maple, ceramic, drywall, and stone. A commercial studio is equipped for the production of voice-overs, industrial sound tracks, jingles, and audio post-production for video, as well as digital editing, remixing, and album sequencing. — Alan J. Masson, (Secretary/Treasurer), Eastman Kodak Co.



Rochester Section Chairman John Cerquone presented plaques to cinematographers Robin Romano and Judy Irola after their talk at the January section meeting at the Rochester Institute of Technology.