

# Section Meetings

**Houston, February 21, 1990** — The differences between lenses designed for CCD chip cameras and lenses designed for tube cameras were illustrated in a discussion on Medical Media and Optics, presented by Dave Waddell, Fujinon, Inc. He noted that lenses for chip cameras have to be linear all the way to the corners of the frames while tube lenses do not. He added that ghosting may be a problem with lenses for chip cameras because videographers do not have to avoid shooting into direct light as they did with tube cameras. However, this requires that lenses for chips be coated both front and back, not just on the front surface. The 25 attendees also learned that the future of lenses is tied to mechanical rather than optical problems. The newer chips require greater tolerances than tubes, making it nearly impossible to design and manufacture long zoom ratio lenses. Therefore, there may be a return to prime lenses, or at least much shorter zoom ratios such as 4 or 6X rather than 10 or 14X.

Following the technical presentation, attendees toured the Media Production Services facilities at the M.D. Anderson Cancer Center, where the meeting was held. They viewed the control center for Betacam to 1-in. Type-C format editing equipment with Dubner Turbo Graphic Generator and Ampex ADO equipment and the Interactive Laserdisk Production unit. —Robert Musburger (Secretary/Treasurer), University of Houston.

**Montreal/Quebec, January 16, 1990** — The January Section meeting was held at the Integrated Center of Production Services, Sonolab, Inc. During the evening, attendees became familiar with the Touchvision editing system and were introduced to new titling equipment from

Teknik, a Swedish manufacturer. Demonstrations of the Neeve Audio Console and Electronic Pin Register were also offered. —Rene Villeneuve (Section Chairman), National Film Board.

**Ottawa, December 14, 1989** — A "Video Graphics Recipe" covered several aspects of computer-originated graphics and animation and their roles in video production. Robin Allardyce, Carleton University, posed a number of questions from the viewpoint of the consumer (the producer) about the needs and proper evaluation process in choosing the right package for a particular job. She was followed by Dan Fogues, Adcom Electronics Ltd., who expanded on the evaluation process. He stressed the importance of the processing speed, bit-level, anti-aliasing features, and memory systems. He also pointed out the most desirable features in 2-D and 3-D graphic systems. Ken Billings, Canvas Digital Art, concluded the meeting by taking the audience through the evaluation process that he used in creating a system for his company. He also gave a slide/video presentation demonstrating the capabilities of his Aurora system in producing 2-D and 3-D images. The meeting was held at Adcom Electronics, and was attended by 37 people. —John A. Howard (Section Chairman), Broadcast Service, House of Commons.

**Ottawa, January 17, 1990** — A tutorial on laser technology was presented by Mario Iacampo and Daniel Angers of Laserlite FX, Inc. The 55 attendees learned that lasers have come a long way from the flashing lights of rock shows to sophisticated, multicolor animated graphics of today.

A laser beam can be projected onto screens or reflecting mirrors and controlled by a computer program to create outdoor graphic displays, corporate logos, or special effects for television and film. Images are created by using a computer program to plot  $x$  and  $y$  coordinates. Projection systems are capable of producing images up to 100X100 ft in an exterior setting, as well as interior effects with both front and rear projection. The beam scan rate can be made variable to eliminate flicker. At present, the spectrum of colors is limited. Through future software development, it is anticipated that as many as 2000 colors can be created to produce images.

The presentation concluded with a demonstration of projected images with retracting mirrors, front projection, fiber optics, and smoke reflections. Several examples of effects for television advertising and music shows were screened. After an extensive question-and-answer session, the audience participated in a demonstration that illustrated the versatility of lasers. The meeting was held at CJOH-TV. —John A. Howard (Section Chairman), Broadcast Service, House of Commons.

**Philadelphia, February 13, 1990** — Three hundred people attended the February Section meeting held at the Adams Mark Hotel. The two-part program was presented by Mike Gittinger, Eastman Kodak Co., who discussed the Keycode™, a new edgecode number system incorporating a machine-readable bar code which can be used on selected intermediate films. He also focused on Kodak's new ultrahigh-resolution electronic intermediate system, which has over twice the resolution of HDTV. The two key components



Attendees watch a demonstration of the Interactive Laserdisk Production unit during the Houston Section's February meeting.



Houston Section Chairman Marty Kirkland, Host Jack McCarty, and Guest Speaker Dave Waddell, at the Houston Section's February meeting.

of the system are a CCD film scanner and an infrared laser film. —Jim Izydorczyk (Chairman), Sigma Electronic, Inc.

**Philadelphia, March 13, 1990** — Three representatives from the Jerrold Division of General Instruments talked about their company's current involvement in the cable television industry. Joseph Glabb gave an overview of the company's products, fiber optics, and the work of the Applied Media Lab; John Griffin discussed the company's work in fiber optics and digital video transmission; and Joseph Waltrich explained the work being done in video compression and investigation into certain video degradations. After the formal presentations, the 35 attendees were given a tour of the laboratories at the Jerrold Division, where the meeting was held, and witnessed various demonstrations. —Jim Izydorczyk (Chairman), Sigma Electronics, Inc.

**San Francisco, February 22, 1990** — A comparison of analog and digital audio technologies was provided by several speakers from Dolby Laboratories. Ioan Allen told the audience that both analog and digital technologies exist side-by-side. Bill Mead furthered that statement by comparing analog and digital to gas and electricity. "When electricity was introduced, many predicted the demise of gas. However, today they coexist. Gas is used for cooking and heating while electricity is used for lighting," he said.

Steve Forshay spoke on digital applications used today, noting that the evolution of digital offers an opportunity to expand digital equivalents of analog. "The strength is in the practical approach," he said. "Digital is especially valuable in post-production work where many generations are needed and there is good disc random access. Digital also works well with delta modulation. However, there is a long-term storage problem with digital, but none with analog."

Craig Todd discussed the work being done by the BBC in Scandinavia to add digital stereo sound to television. The BBC is utilizing an 8-MHz spacing between adjacent channels, where each channel is 5 MHz wide. Space was found to insert a data carrier between the analog FM sound signal and the lower sideband of the adjacent channel. Dolby is in the process of creating a comparable system for the U.S.

David Robinson gave an overview on noise reduction in VTRs, keying in on Dolby's development of a special module which replaces the complete audio on a recorder. Noise reduction unit scan can be added, but it is better to integrate it into the circuit. Ioan Allen discussed the demand for sound quality in theaters and described Dolby's stereo movie sound track and matrix which produces four tracks providing left track, right track,



*Ioan Allen discussing analog and digital technologies at the San Francisco Section's February meeting.*

and surround, and is still in use today. *Star Wars* was among the films that used this medium.

Tony Grimani spoke on Dolby surround sound in the home, demonstrating that original motion-picture sound quality can be achieved in a home theater. Ed Schummer discussed the enormous consumer demand for audio cassette recordings and the efforts Dolby has made to provide noise reduction.

More than 100 people attended the meeting, which was hosted by Dolby Laboratories. The meeting was transmitted via satellite using Dolby-encoded surround sound. Those who helped make the telecast possible include Doug Dawson, Ken Manely, Sterling Davis, and George Pick, KTVU; Ken Allen, San Francisco Satellite; Rick Le Forge, Pan Pacific TV; and Adam Wilt, Abekas. —Vernon L. Kipping (Secretary/Treasurer), consultant.

**Toronto, March 13, 1990** — Two presentations were given at the Toronto Section's March meeting. Steve Talley, Magni Systems, spoke about a device called the Signal Creator, which is a revolutionary video test signal generator that accommodates any user-selected combination of composite NTSC, composite PAL, 525 and 625-line component, D-1 or D-2 signals. Talley said that in a sense, the device is a generic test generator whose personality and capability is changed according to data contained on plug-in RAM cards. He then demonstrated the ease with which the signals can be altered. Each RAM card (512K) holds approximately 70 to 80 test signals. The display portion of the device accommodates approximately 40 signals. Control of the signal processing and the test signal selection is via a four-line, back-lit, LCD display. The memory system is resident on the pertinent RAM card used for the generation of the signals. Talley added that data

that can be entered onto a RAM card includes password protection and variable settings, such as blackburst timing, sub-carrier phase, and IDs. In the future, it will be possible to generate specific waveforms on a PC with the proprietary program and, in turn, write these two RAM cards for field use. He indicated that RAM cards were preferred for this particular application over fixed RAM because the cards permit an extremely wide range of test signals to be accommodated by a given display unit, thereby providing some insurance against obsolescence.

The second presentation, entitled Paintbox V-Series, An Integrated Approach to TV Graphics, was given by Mike Paull, Quantel Canada Ltd. In a slide presentation, Paull traced the growth in the applications for TV graphics systems and discussed how this had gone hand-in-hand with the development of further interfaces of other systems in the graphics environment. He described the evolution of the rotoscoping on a videotape recorder and its evolution to a RAM or disc-based recorder, outlining the benefits of the newer systems. However, he stated that the all-in-one systems employing current, costly technology are not the most effective devices for the purpose at hand, as they render other facilities useless until the job is finished. He stated that the end-user would benefit by common bus architecture that allows hardware from different manufacturers to be integrated into one group. He ended his presentation with a demonstration of the new Quantel V Series Paintbox.

In addition to the technical presentations, an outline of the papers to be read at the Toronto Mini-Conference was also given. The meeting, which was attended by 100 people, was hosted by Applied Electronics and held at George Brown College. —Walter Bebenek (Secretary/Treasurer), Ampex Canada.