

# Section Meetings

**Atlanta, February 13, 1990** — Routing switcher technology was the focus of the Atlanta Section's February meeting. Bill Powers, Grass Valley Group, explained where the technology is and how it got there. He then covered the projected future requirements for this equipment. An interesting discussion followed concerning what would be required in performance if digital video is to be handled in a serial fashion. Approximately 21 members attended the event, which was held at the Georgia Power Co. in Atlanta. — David E. Priester (Secretary/Treasurer), Georgia Power Co.

**Hollywood, January 16, 1990** — Over 150 people attended the January meeting at TransAmerican Video to hear three experts talk about the politics, economics, and future of HDTV. Dick Wolfe, Hi-Vision, traced the technical aspects of HDTV; Dick Stumpf, Universal City Studios, explained the procedure for arriving at SMPTE 240M and the recommendation for ANSI; and Dale Cripps, HDTV Newsletter, looked into the economic future and shared his predictions. A lively question-and-answer period followed the presentations. Prior to the meeting, approximately half of the participants attended a dinner at the Spaghetti Factory. — Milton R. Shefter (Secretary/Treasurer), Paramount Pictures.

**Houston, January 17, 1990** — An invention that alleviates the problem of changing 35mm projectors from four-sprocket pull-down configuration to three-sprocket pull-down was discussed by Patrick Coakley, one of the product's inventors and the former chairman of the Houston Section. Coakley reviewed the history of the 35mm film projector, detailing its mechanical development. He then described the mechanical adapter he and his group invented and patented, which enables an operator to quickly and easily switch any 35mm film projector from the standard film four-perf pull down to three-perf. This will allow all theaters to project either the older standard four-perf format or the newer three-perf which saves 25% of the cost of camera film, print costs, and shipping costs.

The 55 attendees also enjoyed a viewing of 1988 Clio awards, especially those imported from countries where commercial standards differ from the U.S. Following the formal presentation, attendees toured the University of Houston School of Communication Video and Film facilities. The new six-channel 16mm film dubbing facility that was recently installed from equipment donated by Pearlman Studios on the

Lake and KUHT-Channel 8 was of particular interest to the group. — Robert Musburger (Secretary/Treasurer), University of Houston.

**New York, January 17, 1990** — An update of Eastman Kodak Co.'s Keycode™ technology was provided by Michael E. Johnson of Kodak's motion-picture and television products division. He began by giving an overview of the technology as it relates to improvements in the traditional human-readable key number as well as the addition of a machine-readable barcode form of the key number. He then described further refinements in the format, shaped by customer suggestions and technical discussions. Johnson said that in addition to 35mm Eastman film, 16mm Eastman motion-picture film will also share in the Keycode technology with its own format. A discussion followed on hardware-manufacture testing, applications study, and new edge-print formats in the trade. More than 50 people participated in the session, which was held at Kodak's Marketing Center in midtown Manhattan. — Roger Salles (Section Chairman), Geocam Corp.

**Ottawa, November 22, 1990** — A brief history of the development of CCD chip technology was given by Fred Nanos, Panasonic. He also compared the development of CCD technology with present tube cameras and discussed where the technology is headed. With the use of charts, he illustrated the future of digital signals and the difficulties in setting standards. Harris Kirshenbaum, Panasonic, demonstrated the company's new AQ-20 camera and answered questions on future product development as well as where he thinks digital recording and editing are heading. The meeting was held at the



*Michael Johnson, Eastman Kodak Co., at the New York Section's January meeting.*

House of Commons Broadcast Studios, Ottawa, and was attended by 65 people. — Bill Graham (Secretary/Treasurer), Carleton Productions.

**Pacific Northwest, December 15, 1989** — The operations of the Northwest Regional Air Route Traffic Control Center were highlighted at a meeting held at the Air Traffic Control Center, Auburn, Wash. The facility houses the control and monitoring equipment for the orderly command of all commercial and noncommercial aircraft traveling in the region from Northern California to Canada and from the Pacific Ocean to portions of Idaho, including Oregon and Washington.

The air traffic system still employs old green screen radar equipment, including both microwave and land-line interconnects from various monitoring points throughout the area. However, this year the Center will be the first in the nation to receive a new, multicolored, automated radar control system. The new equipment will allow users to select personal setups that can be customized to individual needs.

The tour group, which was limited to 20 people due to the size of the facility, also learned that before an air traffic controller is given command of an active aircraft, he is required to take a minimum two-year classroom program, followed by one year of on-the-job-training experience. The average controller handles up to 15 simultaneous flights, from departure to landing. — Karl Paulsen (Secretary/Treasurer), KTZZ-TV/USTV Seattle.

**Philadelphia, November 14, 1989** — High-performance workstations were the subject of the November meeting of the Philadelphia Section. Peter Porter and Seth Braverman of Tektronix discussed their company's XD-88 workstation, which runs on Wavefront Technologies software. Approximately 40 members attended the meeting, which was held at the Tektronix field office. Topics covered included interactive visualization, graphic-image creation, rendering, motion, and surface creation for the broadcasting and entertainment industries. Tom Jordan of Tektronix followed up the presentation with a brief discussion on the monitoring of various video outputs. — Jim Izydorczyk (Chairman), Sigma Electronics.

**Philadelphia, January 9, 1990** — Approximately 45 people attended a two-part discussion on HDTV and its equipment, presented by Hugo Gaggioni, Sony Corp. The first part of the presentation dealt with the global activity in research and development, the work of standardization committees, and some of the political issues involved in the area of HDTV. The second part of the meeting touched on the current state of HDTV technology and



*Tom Jordan, Tektronix, discusses the monitoring of various video outputs at the Philadelphia Section's November meeting.*

the availability of HDTV equipment. The meeting was held at the Adams Mark Hotel. — Jim Izydorczyk (Chairman), Sigma Electronics.

**Rochester, January 16, 1990** — The particle transfer roller, a new development that effectively removes dirt particles from film with no adverse affects, was the subject of a presentation given by John Pytlak and Fernando Ramos of Eastman Kodak Co. This technology was first trade-tested at the Cine 8 Theater, where the meeting was held. After the presentation the audience was invited to view the installation of the cleaning device. Much interest was shown by the attendees, and the product was endorsed by projection booth personnel. Following the Section meeting, discount movie tickets were made available to attendees. — Richard Bauer (Secretary/Treasurer), Eastman Kodak Co.

**San Francisco, January 17, 1990** — "Colorimetry and Color and Depth Perception: Seeing the Light," presented by Bill Dinehart, Eastman Kodak Co., was the topic of the San Francisco Section's January meeting. Dinehart provided a slide program to illustrate color saturation, hue, contrast, and luminosity. He also demonstrated control-over-color perception via "surround," the use of mats or frames on a colored object. The surrounds that were demonstrated varied from white to shades of gray and black, and significantly altered the subjective perception of the objects' colors, even though the actual colors remained constant. He also provided an update on the status of the Keycode system developed by Eastman Kodak Co.

Other topics covered included High Resolution Electronic Intermediate System for Motion Pictures. A prototype is being used at Industrial Light & Magic to electronically produce special effects. The

digitized image can be transferred onto film and produces a high-quality motion-picture image.

The meeting, attended by 43 people, was held at Studio A, KQED-TV. It was the second San Francisco meeting to be telecast on C-band satellite through GTE Spacenet. Because the satellite coverage includes the entire continental U.S., other members can also participate. A videotape library of the meeting is being accumulated. — Vernon L. Kipping (Secretary/Treasurer), consultant.

**Toronto, January 9, 1990** — The Toronto Section held its fourth consecutive January satellite meeting at the Global Television Network. Hosted by Past Section Chairman David George, the meeting explored the field of computer graphics and how it relates to television. Four speakers participated in the event: Jim Morrison,

Imagineering Limited, defined electronic/computer graphics and how television graphics systems fit into this field; James Snelling, Video System Development, gave a systems perspective on the tools available to the electronic artist now and in the immediate future; Tom Burns, Alias Research Co., discussed the challenge of utilizing new hardware to develop software that makes high-quality videographics possible for any computer user; and Daniel Krech, Daniel Krech Productions, provided an end-user's perspective on CGI technology, emphasizing the creative possibilities offered by new technology, digital post-production processes, and integration of computer graphics with motion control, live action, and cell animation. The broadcast, which was available all over North America, provided a telephone number so that viewers could call in with questions. Members of the Montreal/Quebec and Ottawa Sections also attended the meeting — David George (Past Section Chairman), Imagineering, Ltd.

**Toronto, February 13, 1990** — Approximately 110 people attended the Toronto Section's February meeting which featured a movie and technical presentations. The meeting, hosted by Eastman Kodak Co., Canada, began with a showing of *Pieces of Silver*, which had vignettes of old and new films interspersed in an interesting fashion. Peter Bartlett, Applied Electronics, then gave a brief overview of the SMPTE Television Conference and Tutorial held in Florida in January. Following that, John Howells, Sony, spoke briefly on the SMPTE Toronto Mini-Conference. Membership Chairman Howard Wilkinson, CBC, then introduced six new Section members and proudly announced that the Toronto Chapter membership stands at 480.



*From left: San Francisco Section Chairman Peter Hammar, Former Chairman Joe Semmel-mayer, and Program Speaker Bill Dinehart at the San Francisco Section's January meeting.*

The technical part of the program began with a presentation on "High Resolution Electronic Intermediate System for Motion-Picture Film," by Bradley Hunt, Eastman Kodak Co. The paper had previously been presented at the SMPTE Convention in Los Angeles. He outlined the requirements of such a system and compared the requirements with the constraints of current HDTV systems such as 8-bit sampling and real time operation. He indicated that a standard needs to be developed that would be compatible with current film or photo and print. He stated that Kodak is in the process of developing such a high-resolution system, consisting of a scanner, a workstation, and a high-resolution recorder. The standard that is being targeted would accommodate four

top film formats, Academy, Super 35, Cinemascope, and 35mm.

Diane Cappalietto, Eastman Kodak Co., Canada, gave the second presentation entitled "High Performance CCD Telecine for HDTV." She described a high-performance CCD telecine that was built to translate current film product to the 1125/60 HDTV format. It was stated that the system could easily be reconfigured to accommodate other formats as required. In its present form, it produces 1920 pixels/line on a 16x9 aspect ratio, and 24 to 30 frames/sec. A newly developed, linear sensor array permits scan rates of 120 megapixels/sec. In order to attain the highest possible quality, Cappalietto described the methodology of using a xenon-source lamp, the increase of

color pixels to four times the size of luminance pixels, and the method of employing separate luminance and color sensors. The results of this work increased the sensitivity by six stops. She also showed photographs of the lab prototype as well as a replay of a high-definition tape which contained a number of sample transfers done on the prototype telecine.

The meeting, held at Eastman Kodak Co., Canada, concluded with Section Chairman Fred Lemmin presenting both Cappalietto and Hunt with plaques for their valued participation. He also thanked Telesat Canada and Sony Canada for their support with respect to the high-definition playback equipment. — Walter Bebenek (Secretary Treasurer), Ampex Canada, Inc.

## News

**The SMPTE's 134th Technical Conference and Equipment Exhibit in 1992** will be held in Toronto, Ont., Canada, at the Metro Toronto Convention Centre from November 10-14, it was announced by Conference Vice-President L. John Spring, Jr. The technical sessions, equipment exhibit, Coffee Club, and Honors and Awards Luncheon will be held at the convention center, and the Annual Banquet and Fellows Luncheon will be held in an area hotel.

"The Executive Committee and the Board of Governors look forward to being the hosts to our exhibitors and attendees in Toronto in 1992," Spring said. "The convention center is large, modern, and well-equipped to handle SMPTE's space requirements."

As previously announced, the 132nd SMPTE Technical Conference and Equipment Exhibit will be held October 13-17, 1990, at the Jacob K. Javits Convention Center in New York City. The 133rd conference will be held October 26-30, 1991, at the Los Angeles Convention Center in California.

**John C. Norris**, who was recently appointed to the newly created position of Education Director of the SMPTE, has released a strategy addressing the concerns of SMPTE members and sustaining member companies regarding the future technological needs of the industry.



"I am keenly aware of the great opportunity to set the standard and direction for programs that will meet the educational

needs of our industry," he said. "Two key challenges we are facing are developing the future scientists and engineers who will shape our industry tomorrow and enhancing the knowledge of our members today."

His plan for accomplishing this dual mission includes the expansion of existing SMPTE committees. "I plan to expand the Educational Advisory Committee to include representatives from sustaining member companies and from the creative community. I am pleased to report that two such new members have already joined this committee. They are Robert Paulson of AVP Communications and Jonathan Erland of Apogee. Their expertise and enthusiasm will greatly benefit the efforts of our committee."

Norris added that he plans to build on existing programs that are currently available to SMPTE members including seminars, mini-conferences, tutorials, guest speakers, publications, and satellite-transmitted programs. "Special attention will be directed to programs and materials for the International Sections of Australia, Italy, and Canada. We also encourage the formation of a Scandinavian Section and a Section in the USSR," he said.

Norris also plans to establish liaisons at other organizations to explore ways of fulfilling the educational needs of the industry. "Discussion with these groups should prove mutually beneficial as we all grapple with the challenges of developing tomorrow's technology," he said. "The newly formed Scholarship Task Force is actively evaluating graduate level programs for appropriate schools to administer SMPTE scholarships. In addition, liaisons will be established with several schools to promote the motion-picture and television industry as viable career choices

for today's science and engineering students."

Norris has been active in the industry for more than 25 years. He has worked at Eastman Kodak Co. since 1964, and currently serves as the coordinator of product planning for the motion picture and audio divisions. His career achievements include contributing to the development of several motion-picture film products, including the 7271, 7249, and 7380. He also did extensive work in image-quality evaluation, especially with the printer MTF, film system MTF, motion-picture steadiness, and telecine display. He was later selected as a consultant to NASA for selection of motion-picture films for the space shuttle program. In 1987 he was named an SMPTE Fellow.

**An SMPTE Student Chapter has been created** at Napa Valley College, Napa, Calif., it was announced by Sections Vice-President Irwin W. Young. The Telecommunications Program there has conducted classes in the school's television studio since 1971. The studio is equipped with professional color equipment including component TV. Combining both theory and practical experience, the courses teach students to operate, design, install, and maintain TV equipment. As part of the program, students learn related theories in mathematics, solid state electronics, and science to understand the principles behind color television systems. Also, students are instructed in all aspects of behind-the-scenes TV productions and learn to fine-tune color cameras, video and audio recorders, and video switching equipment, adjusting them to manufacturer's specifications. Gary Vann, professor, telecommunications technology, will serve as student advisor to the newly formed Section.