

Section Meetings

Australia North, March 10, 1992 — The theme of the March meeting was "Controlling the Camera — Man or Machine." The first presentation was by Matt Butler of The Butler Did It, a company specializing in real-time motion control and time-lapse cinematography. He set up a portable motion-control rig, which included an 18-ft track and 7-ft crane mounted with an Arriflex BL camera with video assist. The computer control permits precisely repeatable moves on any number of motorized axes, including pan, tilt, track, rotate, and boom, together with camera adjustments such as focus and zoom. The movements can be repeated for a number of passes, allowing composite shots to be filmed as separate elements or built up as in-camera effects.

Butler demonstrated the technique used in setting up a movement on the computer. One particular shot he described was the "Hitchcock style" of zoom-out combined with track forward, so that the foreground subject remains the same size while the background perspective widens. He also explained that any movement can be carried out at any speed — slower or faster than a human operator can achieve. The advantages of this system include its portability: the entire crane and track can be assembled in a few hours and can be transported in a one-ton van.

Ben Vanderlinde, John Barry's Camera Equipment, then discussed the latest Steadicam EFP system. This lightweight system will support cameras up to 12 kg. Vanderlinde explained that the Steadicam works on the principle of separating the camera from the operator while supporting the camera's weight via a harness on

the operator's back and hips. Camera movement in any direction is allowed, but the camera rig is supported by a gimbal at its center of gravity, isolating it from any unwanted movement by the operator. He demonstrated the system's ability to produce steady pictures even when the operator was running on the spot. Following this, several members of the 24-person audience tried their hands with the equipment. — Dominic Case (Manager), Consultant.

Detroit, March 19, 1992 — Forty-seven members and guests attended the March meeting, which was held at the University of Windsor. The first part of the meeting was designed to be of particular interest to university students and faculty in engineering and communications study. Tom Fuerth described the planning, research, design, and construction of the university's new electronic classrooms. A demonstration of the enhanced teaching capabilities of one of these new classrooms included samples of computer-generated drawings for solving geometric and electrical network problems. John Rusche, Sandy Corp., provided an overview of the role of professional societies and their importance to students as well as experts in the broadcast industry. He gave a special presentation about the SMPTE and described the benefits of membership.

The second part of the program covered advanced television systems. Fred Remy, University of Michigan Research Systems and Chairman of the SMPTE Working Group on Advanced Television Production, discussed the work that is currently under way in the group and in the

overall SMPTE engineering study of advanced television systems. The meeting concluded with a question-and-answer session covering both parts of the program. The audience also was given the opportunity to get a close-up view of the equipment in the classroom where the meeting was held. — Helge Blucher (Secretary/Treasurer), Pro-Vision, Inc.

Houston, February 26, 1992 — Paul Depperschmidt and Lou Keston, Panasonic Systems, demonstrated the new digital processing camera that will be used for the Summer Olympics in Barcelona. The analog signal from the CCD chips and pre-amp are converted to a digital signal that then enables the operator to manipulate the signal within the camera in the digital domain. The output is both analog component and composite. The camera that was demonstrated was an AQ-20 front-end with a built-in D-3 recorder, but the camera can be mated to MII, S-VHS, or Beta-cam. The remote-control box and remote-control unit are available, as well as a AJ-D310 one-piece camcorder. Comparison tapes were run to show the differences between three 1/2-in. formats: S-VHS, MII, and D-3. A brief history of the development of 1/2-in. formats was presented with an explanation of how the D-3 signal was finally developed by NHK to parallel D-2. — Robert Musburger (Secretary/Treasurer), University of Houston.

Houston, March 20, 1992 — Higher Education Programs in Media Production was the topic of the March meeting, which took place during the fourth annual showcase for the colleges and universities located in the Houston Section's area. The event featured samples of work from 5 of the 19 programs eligible for the exposition. Funding cutbacks and the recession accounted for the reduced response.

The speakers provided information concerning undergraduate and graduate programs and descriptions of courses, equipment, and facilities from Texas Southern University, Del Mar College of Corpus Christi, Houston Art Institute, Trinity University of San Antonio, and the University of Houston's School of Communication, which is where the meeting was held. An interesting mix of music videos, interviews, documentaries, dramas, public relations materials, and creative dance videos were shown. Topics ranged from African-American dance styles and the conservation and reproduction cycles of the oyster to information on AIDS awareness. — Robert Musburger (Secretary/Treasurer), University of Houston.



Lou Keston and Paul Depperschmidt, Panasonic, demonstrating a digital camera and D-3 videotape format at the Houston Section's February meeting.

Italy, March 12, 1992 – Guido Cartoni, who recently won an Academy Award for Science and Technology, spoke before an audience of 50 people. He described his company and its work and gave a presentation entitled, "New Tripods and Support for Cinema and Television." He also gave demonstrations of several products, particularly the Dolly C 40. During the evening, all attendees were given an opportunity to have hands-on training of Cartoni products. – Angelo D'Alessio (Secretary/Treasurer), BTS Broadcast Television Systems.

New England, February 24, 1992 – Alan Keil, Ikegami Electronics, presented a paper entitled, "New Camera Technologies, Both Analog and Digital." He gave a detailed discussion on CCD imaging schemes currently being manufactured and described image enhancement configurations used with modern CCD imaging. He also talked about signal processing techniques, including auto-knee, super color, skin detail, and super highband aperture. He closed the meeting with a discussion on an all-digital NTSC encoding technique. The local chapter of the Society of Broadcast Engineers (SBE) was invited to attend the meeting, which was held at Landy Associates. – Paul R. Beck (Secretary/Treasurer), Emerson College.

New England, March 25, 1992 – The meeting, which was held jointly with the Boston chapter of the SBE, took place at Multivision. Peter Dare, Sony Corp. of America, gave a broad and candid analysis of his company's views, as well as his own, regarding the emerging 16 × 9 television aspect ratio for virtually any proposed TV scanning system.

Dare also gave a frank evaluation, from a business and economic standpoint, of the evolutionary video technology being developed to meet the needs of the coming decade, particularly as the industry evolves toward a true high-definition television system. He made several key points regarding how "good enough" has traditionally been a watchword to some experts who have been satisfied with the status-quo technical standards, and offered the use of VHS/S-VHS and Hi8 video technical standards as acquisition formats for nationally popular news, such as the Gulf War events, and entertainment programming, such as "America's Funniest Home Videos."

He discussed the recent FCC policy issues regarding additional broadcast spectra, which is intended to be used for augmenting the widescreen terrestrial broadcast services that will be licensed in the next few years. He favored Sony's viewpoint that a widescreen 525/60 NTSC-compatible system will be the first real major step taken by the broadcast industry on the path to implementing a true HDTV system for North America.

The entire presentation was videotaped via a single-camera technique, and is available from the New England Secretary/Treasurer Paul R. Beck (508-543-2367) and SMPTE Headquarters (914-761-1100). – Paul R. Beck (Secretary/Treasurer), Emerson College.

Rocky Mountain, March 19, 1992 – The meeting was held at Crosspoint Productions, a video post-production house. The company recently completed a major expansion and remodeling project, which gave the 37 members and guests a perfect setting to discuss and view current uses of the latest technology. Wendell Williams, an award-winning colorist, walked the group through the process of color correction for film-to-tape transfers. Williams discussed a recently completed project in which he used edge code and on-site off-line editing to fast track the production from shooting stage to release. Other members of the Crosspoint staff gave demonstrations of the company's production rooms. The tour included a new D/FX compositing/D-1 suite and an Avid off-line suite. The renewed facility is furnished with both high-tech equipment and fine furniture, making it a comfortable and creative working environment. – John Switzer (Chairman), Sony Broadcast Products.

San Francisco, March 26, 1992 – Over 125 members and guests assembled at Pacific Bell to hear Richard A. Mizer give a presentation on the "Future of Fiber-Optic Digital Communications – As Pacific Bell Sees It."

The company is developing an advanced fiber-optic broadcast transmission and switching system. The San Ramon facility serves as the hub of the fiber-optic network, with lines all around the state of California.



San Francisco Section members examining a monitor for an HDTV image during the March meeting.

Mizer noted that in January 1992, Pacific Bell began its transmission of HDTV, and added that the Academy Awards telecast would be transmitted in high-definition via optical fiber transmission lines. Recently, Channel 4 (KRON-TV) began its transmission of newscasts of a basketball game, which was compressed to 45 Mbits and presented no artifact problems. He suggested that the SMPTE form a standards committee to study this area further.

He added that engineers working in optical transmission technology feel that the transmission of images, digital video, and motion pictures via fiber optics will revolutionize the way movie theaters do business, and for cable television systems, fiber optics can deliver within 1000 ft of the home consumer. The balance of the distance can use coaxial cable for delivery.



Richard Mizer (right) giving a group of San Francisco Section members a tour of the Pacific Bell Laboratories during the March meeting.

After the main presentation, there was a question-and-answer period, followed by a tour of the Pacific Bell facility, where attendees had the opportunity to view demonstrations in HDTV and NTSC. — Vernon L. Kipping (Chairman), Consultant.

Toronto, March 9, 1992 — Wilson Markle, Telesat Canada, presented the first paper of the evening. He provided the audience with a status report of his company's advanced television program and demonstrated the results using Sony's high-definition large-screen projection facility.

Markle noted that there was a revolution in the television industry as a result of HDTV technology, citing that in the next ten years, audiences will be enticed by the brighter, wider, cleaner images. He discussed the technical and system bandwidth requirements and gave insight into the practical resolution issues for comfortable HDTV viewing. He said that the industry requires new standards that can only emerge where there is a political will and an economic infrastructure to support them. He pointed out the differences between the North American 1125/60 and the European 1250/50 system and discussed the compatibility issues that exist between them.

During his presentation, Markle said that Telesat's objectives in carrying out HDTV tests were to affirm the viability of HDTV, develop applications for HDTV, stimulate the production industry, and develop technical leadership in the area. He concluded his talk with a statement indicating that the company's experimental program is likely to continue for several more months and invited attendees to visit the HDTV mobile.

The second paper was presented by David Pierdon, Dome Productions. His company was retained by Telesat for the operation and maintenance of the HDTV mobile and had participated in many different HDTV events, which allowed him to gain experience in this technology. He cited some interesting examples and highlighted his discussion with a visual presentation of a production that was carried out by Dome Productions, via helicopter, in the Canadian Rocky Mountains. He provided the audience with insight into the physical problems of carrying out an HDTV production, noting the significant problems of size, weight, and power of the equipment.

He noted that in the medical productions that had taken place, the images were so realistic that the crew members experienced difficulties with the results. He added that when taping baseball games, a total of five cameras and four videotape recorders seem to be necessary to produce a broadcast with a high production value. — Wally Bebenek (Chairman), Ampex Canada.

Engineering News

The calendar below shows the dates and times of upcoming Engineering Committee meetings and the cities where they will be held.

Those requesting additional information on participation in these meetings should contact the Engineering Dept. at SMPTE Headquarters, (914) 761-1100.

June			
1	1:30 p.m.	WG on Editing Procedures	Los Angeles
Mon.	5:00 p.m.	P18.27 (O. Morgan)	TBA
1	6:00 p.m.	WG on Time and Control	Los Angeles
Mon.	9:00 p.m.	Code P18.25 (S. Vigneaux)	TBA
2	8:30 a.m.	Committee on TV	Los Angeles
Tues.	2:00 p.m.	Production Tech. P18 (M. Weiss)	TBA
3	9:00 a.m.	WG on Diagnostics/	Los Angeles
Wed.	12:30 p.m.	Monitoring S17.36 (R. Wilson)	TBA
3	1:30 p.m.	WG on Advanced TV	Los Angeles
Wed.	5:00 p.m.	Productions S17.39 (F. Remley)	TBA
4	9:00 a.m.	WG on Serial HDTV	Los Angeles
Thurs.	12:30 p.m.	Interfaces S17.13 (H. Gaggioni)	TBA
4	1:30 p.m.	WG on ATP Studio Systems	Los Angeles
Thurs.	5:00 p.m.	S17.02 (J. Kutzner)	TBA
4	1:30 p.m.	WG on Ancillary Data	Los Angeles
Thurs.	5:00 p.m.	S17.10 (J. Safar)	TBA
4	3:00 p.m.	AHG on Jitter	Los Angeles
Thurs.	5:00 p.m.	S17.12	TBA
5	8:30 a.m.	Committee on TV Signal	Los Angeles
Fri.	1:00 p.m.	Technology S17 (W. Nicholls)	TBA
9	1:30 p.m.	WG on Digital Pictures	Eastman Kodak
Tues.	4:30 p.m.	H19.16 (G. Kennel)	Hollywood, Calif.
10	9:00 a.m.	Committee on Hybrid Tech.	Alliance MP TV
Wed.	1:00 p.m.	H19 (R. Stumpf)	Prod. Sherman Oaks, Calif.
August			
5	7:00 a.m.	AHG on Audio Production	Disney Garden
Wed.		A12.68 (M. Strong)	Burbank, Calif.
September			
7-9		Committee and Subgroups	Toronto
Mon.-Wed.		on TV Rec. and Repro. Tech. V16 (T. Cavanagh)	TBA
16	7:00 a.m.	AHG on Audio Production	Disney Garden
Wed.		A12.68 (M. Strong)	Burbank, Calif.
21-22		Committee and Subgroups	New York Area
Mon.-Tues.		on TV Production Tech. P18 (M. Weiss)	
23-25		Committee and Subgroups	New York Area
Wed.-Fri.		on TV Signal Tech. S17 (W. Nicholls)	