

Section Meetings

Detroit, May 10, 1988 — New developments in videotape technology were discussed at the Detroit Section meeting, held at Sandy Corp., Troy, Mich. Bob Herman of 3M Corp. led the discussion with a presentation on the history of videotape from its initial development to its current state. Afterwards Herman focused on contemporary videotape formats and provided some insight into the probable future of videotape. Also discussed were past, present, and future magnetic tape manufacturing technologies along with advances in videocassette designs for D-1 and D-2 digital recorders. — Bruce R. Keplin (Secretary/Treasurer), Eastman Kodak Co.

Hollywood, May 18, 1988 — "Computerized Equipment for Increasing Laboratory Productivity" was the subject at the Hollywood Section meeting, held at ABC-TV's Studio 55 in Los Angeles, Calif. Presentations describing three types of computer-controlled systems were delivered during the course of the meeting.

Michael Chewey of Systems Unlimited presented the recently developed Kodak Automatic Plotting System (KAPS). The system, a sophisticated densitometer, allows efficient laboratory grade analysis through the use of a stepper motor drive and a menu-driven user interface. Such an implementation was shown to afford flexibility and simplicity of operation.

Continuous contact motion-picture film printers and recent improvements in exposure control systems was the subject discussed by John Ehrenberg of BHP, Inc. Through the effective use of slides Ehrenberg illustrated equipment development, not only describing the state of the art, but also the determining factors behind such technology. He went on to detail the advantages afforded through the use of servomotors, electronic faders, and digital printer control. Ehrenberg concluded with a description of the latest light valve design.

Dave Williams of Bremson Data Systems followed by describing digital imaging techniques as used in a system for motion-picture film analysis. Williams explained that the system, through the use of a solid state array and split screen display, eliminates the problem of inherent colorimetric differences between film and video images. — Nelson E. Meacham (Secretary/Treasurer), Walt Disney Imagineering.

Houston, May 25, 1988 — At the Houston Section meeting, held at Pearlman Studios, Houston, Tex., Frank Foster of Ampex Corp.'s Magnetic Tape Division provided a detailed explanation regarding

the manufacture of magnetic media, particularly video and audio tape. Foster began with a brief history of the development of magnetic recording tape, followed by a review of the progression of magnetic coatings as well as a description of the binders, plasticizers, conductants, lubricants, oxides, and fungicides necessary in the manufacture of recording tape. Also covered were the physical processes of coating, drying, and slitting, and the numerous quality checks that are performed.

The 40 members were then entertained by a videotape program which graphically — and humorously — illustrated the necessity of careful handling of tape stock as well as the maintenance of a clean environment wherever magnetic tape is used. — Robert Musburger (Secretary/Treasurer), School of Communications, University of Houston.

Nashville, April 22, 1988 — The Knoxville, Tenn., offices of Philips Consumer Electronics Products Corp. provided the site for the Nashville Section meeting where 20 people were welcomed by Bill Kaylor of Philips. Kaylor initiated the meeting by giving some background information about Philips and its operations in Tenn., after which he introduced Alan Boardman. Explaining various high-definition and extended-definition television proposals, Boardman proceeded to cite the advantages and disadvantages of both.

Enhancing the presentation with numerous slides, Boardman further explained Philips's proposal for an enhanced-definition television (EDTV) system known as HD MAC-60. This NTSC-compatible system can be transmitted over two 6-MHz channels, one of which can be displayed on an NTSC receiver; the additional channel provides an augmentation signal which, when combined with the first signal, extends the number of scan lines, increases the aspect ratio, and adds other picture enhancements. It was noted that some audio enhancements are also possible. Further discussion revealed additional specifications: it should work well with transmission systems having a minimum carrier noise level of 14 dB, it should exhibit relatively few motion-smearing problems while providing a resolution of approximately 480×480 lines, and it should also allow for multichannel digital audio. Boardman also mentioned the possibility of transmitting the compatible signal over a VHF channel while sending the augmentation signal over a UHF channel. Although questions from the audience were raised concerning timing and phasing problems that this method might introduce, Boardman contended that theoretically it was

possible. — Buddy Gailey (Secretary/Treasurer), Nissan Motor Manufacturing Corp.

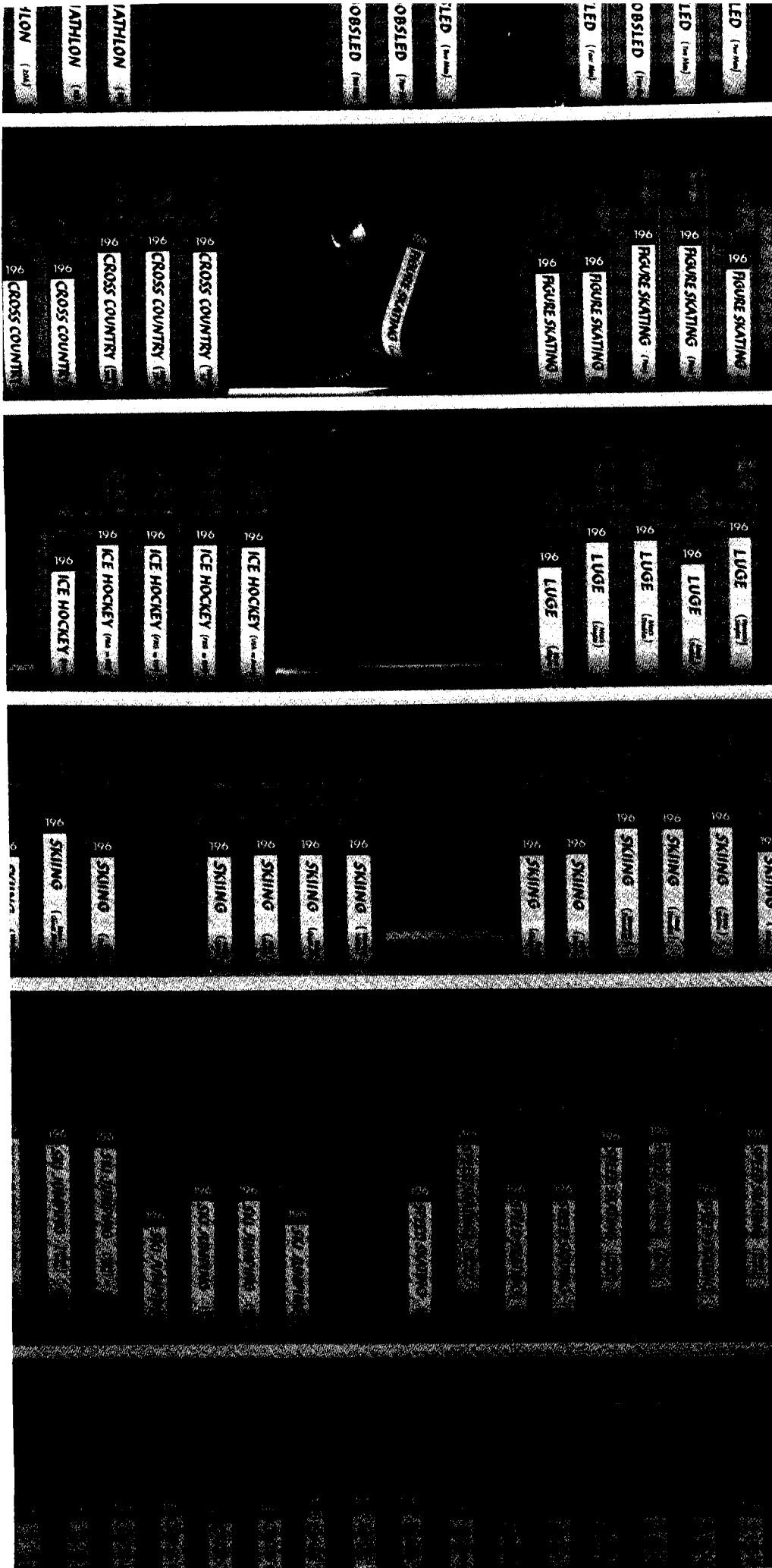
Nashville, May 18, 1988 — Nashville State Technical Institute was the site of a joint meeting of the SMPTE and ITVA Sections. Section Chairman Duane Muir introduced Charles Jablonski, NBC's managing director of engineering for the upcoming Summer Olympics. Through the use of slides Jablonski described the television facilities being built by NBC in Seoul, South Korea. He noted that this, the 24th Olympiad, is expected to be the largest in history and that the temporary facilities there will be NBC's third largest, being surpassed only by those in New York and Los Angeles. It was also pointed out that this is to be the first Olympics to be broadcast in stereo.

The facilities are to include four large editing systems corresponding to each time of day: morning, afternoon, evening, and night. Each of these systems will have 7 VCRs; 11 smaller editing systems will also be available with 4 VCRs each. Overall, a total of 117 Panasonic MII VCRs consuming a total of 10,000 hours of tape will be used. In addition two studios will be included, the control room for each studio having a wall of 150 monitors.

Following the slide presentation, the audience was shown a videotape program which featured examples of graphics to be used for Olympic programming as well as the musical theme for the Olympics. The floor was then open to questions from the audience; cost considerations and staffing were two of the issues raised. — Buddy Gailey (Secretary/Treasurer), Nissan Motor Manufacturing Corp.

New York, April 27, 1988 — At NBC's Studio 8H in New York City, more than 150 SMPTE members and their guests attended the first in a series of meetings featuring proposals for advanced television systems. Michael Isnardi of the David Sarnoff Research Center presented details of the EDTV system which broadcasts an NTSC-compatible 6-MHz signal. This signal contains left and right screen information which can be decoded by an EDTV receiver. It was pointed out by Isnardi that this signal can be broadcast immediately without rendering present NTSC receivers obsolete. In the future, a second 6-MHz signal could also be broadcast; this would extend the definition and resolution of EDTV into HDTV. This upward compatibility would allow the concurrent use of NTSC, EDTV, and HDTV receivers. Terry Smith of the Sarnoff Center gave an update on hardware development, including field tests being conducted on transmission equipment.

Following this discussion, Dr. Robert Hopkins of the Advanced Television Systems Committee (ATSC) gave the audience a brief overview of that committee's



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Robert Hopkins, Terry Smith, and Michael Isnardi, speakers at the New York Section meeting, April 27, 1988.



New York Section members pose questions on EDTV and HDTV systems at the April meeting.

coordination of the proposed system evaluations. Hopkins noted that some of the challenges facing the ATSC are analysis of spectrum allocation in crowded markets, viewer testing of systems, and coordination of HDTV efforts between the SMPTE, NAB, NCTA, EIA, and IEEE. In addition the committee must also decide by June 1, 1988, which of the proposed systems will further undergo development and evaluation. — Roger Salles (Program Chairman), Geocam Corp.

New York, May 25, 1988 — Approximately 100 SMPTE members and their guests were in attendance at NBC's Studio 8H as Yozo Ono of NHK and Charles Rhodes of Philips Consumer Electronics Corp. explained their respective companies' proposed advanced television systems. It was the second in a two-part series on the subject.

Ono described the NHK-developed "HiVision" system as one which is based on 1125 lines, 60 Hz, and a 16:9 aspect ratio, now adopted as a standard by the SMPTE. It was explained that the number of lines was chosen to enable transfer to 625/50 and 525/60 systems and also because tests have shown that even a decrease of 100 lines will result in a noticeably worse picture. Ono also explained NHK's MUSE system. This transmission

system presently requires a bandwidth of 9 MHz in one channel. It was noted that if the components are split into 6-MHz and 3-MHz noncontiguous channels there is considerable degradation in quality, but the 6-MHz channel is compatible with an NTSC receiver. Also developed by NHK, according to Ono, is a 6-MHz compatible MUSE system which reportedly yields limited improvement over NTSC.

A detailed description of Philips's advanced television system was given by Rhodes who explained that it is a progressively scanned 525-line system which is compatible with NTSC. The visual effect produced appears to be of a resolution of about 775 lines; however, motion description is improved, as each picture is defined every $\frac{1}{60}$ sec compared to NTSC's $\frac{1}{30}$ sec. The transmission consists of the NTSC channel plus a second channel containing the augmentation information via a line difference signal, thus achieving good horizontal resolution while reducing bandwidth to 4.5 MHz. There will be some diagonal resolution lost however. It was proposed that the augmentation channel be transmitted on a UHF carrier with white at 0% modulation and black at 100%; this would require only a third of the normal NTSC transmission power. — Roger Salles (Program Chairman), Geocam Corp.



Charles Rhodes and Yozo Ono explaining proposals for advanced television systems at the New York Section meeting, May 25, 1988.

Ohio, May 7, 1988 — The Ohio Section, in conjunction with the Ohio Student Chapter and the Ohio University School of Film, held its first annual all-day meeting at Ohio University in Athens, Ohio. The basis for the meeting was to present to students some of the latest technological advances in both film and video. The keynote speaker was Irwin Young of Du Art Film Labs who began the morning session by discussing the future of film and video and specifically noting the many challenges facing the industry. Addressed in turn were the advancements that are developed to help meet these challenges. Young illustrated this by describing a solution that he helped develop for producers confronted with the problem of working in unusual shooting environments or on limited budgets. Using a 35mm demonstration film enlarged from Super-16 format, he effectively demonstrated that the use of Super-16 is a practical alternative when working within such constraints. The discussion was very much appreciated by the attendees, most of whom were students from the School of Film.

The subsequent series of afternoon sessions was composed of smaller workshops on the following topics: Camera Technology, Ed Shrider, Broadcast Video Corp.; High Speed Photography, Ernie Walker, NASA Lewis Research Center; SMPTE Time Code Editing, John Barak, Industrial Video, Inc.; Standards Conversion, David Ginaven, Classic Video, Inc.; Stereo for Film and Video, Greg Silsby, Audio-Technica U.S.; Strobed Video, William Richardson, NASA Lewis Research Center. — John A. Barak (Section Chairman), Industrial Video, Inc.

Rochester, April 22, 1988 — Twenty-five people were on hand at General Electric Co. in Syracuse, N.Y., for a program describing and demonstrating "Large Screen Video and Data Projection through Light Valve Technology." Participating in the lecture/demonstration were Al Haase, formerly of General Elec-

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tric; Dr. William Good, Light Valve Engineering; Tom True, Light Valve Engineering; and L. Paul Gelinas, General Electric Co. Discussed were the principles of GE light valve technology as used in an application for video and data projection. A variety of input sources at horizontal scanning rates ranging from 15.75 to 31.5 kHz was used to demonstrate the equipment which consisted of a GE Talaria PJ 5155 MLR designed to project video and computer signals. This was followed by a discussion of current advances using two light valves and combined optics as well as HDTV technologies. — Bill Denne (Secretary/Treasurer), Tektronix, Inc.

Rocky Mountain, May 19, 1988 — The Rocky Mountain Section meeting was held at the new headquarters of Film Video Equipment Co., a 52,000-ft² facility containing one of Denver, Colo.'s largest stages, measuring 50X70 ft. Prior to a tour of the facilities, members and their guests viewed a film, courtesy of Eastman Kodak Co., which featured the 1987 Clio Award winners. Joan Aiello of Eastman Kodak Co. was on hand to describe the Clio award and to host this portion of the meeting program. Following the film and a tour of the facilities, attendees enjoyed what has become a tradition, a springtime ice cream social provided by their Section Managers. — Andy Anderson (Secretary/Treasurer), KRMA-TV.

San Francisco, April 19, 1988 — At Stanford University's Shilling Auditorium in Palo Alto, Calif., 50 San Francisco Section members heard about "Glasnost," "Molniya," and Russian television broadcasting. The speakers were Stuart Neubarth of SK Communications and Joseph Roizen of Telegen. Neubarth has designed satellite receiving systems, while Roizen has worked extensively with Russian television on a consulting basis.

The Molniya system, explained Neubarth, consists of four nongeostationary satellites used to relay Soviet television and radio programs to the Soviet Far East. These broadcasts can also be received in North America, using a 16-ft. diameter antenna dish equipped with a dynamic tracking mechanism. It was pointed out that the useful lifetime of these satellites is only about two years. Recorded Molniya television broadcasts were shown offering a fascinating look into Soviet society.

In addition to relating his impressions of the Soviet television industry, Roizen provided some glimpses of the same, making comparisons to recent operations including coverage of the 1988 Winter Olympic Games. Also presented was a copy of the famous "Nixon-Krushchev Kitchen Debate," recorded at the first U.S. National Exposition in Moscow in 1959. The original 2-in. quad videotape recording won an Emmy award at the time. — Peter Hammar (Secretary/Treasurer), Hammar Communications.

News



Honored by the FKTG in Cologne, W. Germany, were Joseph A. Flaherty, Jr., Walter Werner, Herbert Tuemmel, and Pablo Weinschenk-Taberero.

The **Fernseh- und Kinotechnische Gesellschaft (FKTG)**, the German sister society of the SMPTE, has chosen for honorary membership two distinguished members of the U.S. television and motion-picture industries: Fellow and Governor of the SMPTE, Joseph A. Flaherty, Jr., CBS Television Network, and Pablo Weinschenk-Taberero, SMPTE Life Fellow

and member of the Board of Editors. F.J. In der Smitten, president of the FKTG, made the presentation May 17, 1988, at the 13th FKTG Conference in Cologne, W. Germany. Also awarded honorary membership were Walter Werner, former technical director of the Westdeutsche Rundfunk, and Herbert Tuemmel, former chief engineer of Zeiss-Ikon.

Arriflex Corp., of Blauvelt, N.Y., has announced the addition of ARRI Grip, a complete line of lighting and grip equipment, to its existing line of professional production equipment. Vice-president of ARRI Lighting, Charles Davidson, noted that ARRI had been manufacturing virtually everything for camera and lighting crews except grip equipment; now, with the introduction of the new line of products, the company can serve as one source for all production equipment needs.

Otari Corp., manufacturer of professional audio recorders, tape duplicators, and tape cassette loaders, has moved to their new U.S. headquarters at 378 Vintage Park Dr., Foster City, CA 94404. The 34,000 ft² facility includes an acoustically designed listening room by RLS Acoustics of San Francisco, customer training facilities, and a test room for the laser-based thermal magnetic video duplicator.

Video Communication Services (VCS), of Riverton, N.J., has announced its upcoming relocation to Mt. Laurel, N.J. Construction of its new offices, editing suites, and studio with drive-in capability is now underway and is scheduled for completion in late August. VCS's new studio, with its unique jib arm camera support system, will allow the company to concentrate on

providing clients with "a very special video and film look for tabletop and larger studio projects." According to VCS President Frank Siegel, the studio's drive-in capability and scene storage area will allow VCS greater ability in accommodating their customers' needs.

Lawrence Weiland has been elected president, chief operating officer, and director of CMX Corp. The announcement was made following the resignation of former chairman Sam R. Goodman, who will continue to serve as director and consultant to the company. Weiland joined CMX in 1984 as vice-president of marketing. Before that he held various senior management positions at Ampex Corp. and NBC, Inc.



Eugene W. Hammerle has joined AF Associates in Northvale, N.J., as director of engineering. He assumes both line and administrative responsibilities and will manage the new systems engineering department, which includes the design of television systems. Hammerle's previous affiliation was with NBC, Inc.