

speeches to customers or other audiences. In addition, attending meetings of the SMPTE and SBE is also very important in establishing contacts within the industry.

Gary Vann, a professor at the college, was the second speaker. He spoke about how Napa Valley College is working to provide students with the requisite skills needed in the TV industry, and noted that the college has a very active SMPTE Student Chapter.

Vann started the TV instructional program in 1970; classes began in 1971 in one classroom, and 1973 brought the program's first graduates. He said a key factor to the program's success has been the formation of an advisory committee to provide guidance in skills and abilities needed in the television and electronic industries. Another successful element is the generosity of manufacturers who have provided technical equipment. Of note, the college has a policy of open attendance and the first 27 students who apply are accepted. However, he stressed that students entering the program should be well versed in mathematical skills.

Since the program has a heavy academic load, Vann advises students against working at a job. The pace of study is such that if a student misses several classes, it is very difficult to catch up. During the first year of study students are introduced to the equipment and to electronic courses; during the second year, the students get into schematic diagrams. The college also has a program offered by the International Telecommunications System that provides grants enabling students to attend training programs offered by manufacturers. — Vernon L. Kipping (Chairman), Consultant.

**Toronto, May 12, 1992** — The meeting began with a presentation, entitled "Advanced Digital Nonlinear Editing and ISDN File Transfer Technology," by Seth Haberman, Montage R&D Corp. Haberman gave the audience a brief history of his company's development, noting that Montage was one of the first suppliers of random access editing equipment using multiple high-quality consumer decks to accomplish the feat. He said that now, with the advent of compression video, the Montage III equipment operates entirely in the digital domain.

The technical portion of his discussion centered around the technologies involved in interframe compression. He noted that with interframe compression, each frame of a video is treated as a separate entity and processed according to one of a number of algorithms, which differs from the interframe compression scheme that builds frames from known reference points. Haberman pointed out that Intel's DVI product operates in this manner, as does the Fractal technology and the J-Peg standard. He described the basic principle of the mathematical transformations of the J-Peg standard and the principles of subsampling employed by Intel's DVI, and provided insights into the practical limitations of each technology, citing the relative impairments that viewers perceive when observing pictures.

During the discussion, details of design parameters employed by Montage were given and the audience provided a rationale for the technologies that were selected. Haberman also discussed the company's special interest in providing interfaces through ISDN and other data networks that are now emerging in North

America and gave some insights into the relative merits of carrying compressed video into the home through either the cable or telephone company's technologies. He concluded with a fascinating demonstration of the performance of the equipment and its ease of operation.

The second paper of the evening was presented by Michael Arbuthnot, Ampex, who discussed his company's DCT videotape format. He gave a general description of the 19mm tape format, noting that the product is encoded with digital component signals, compressed 2:1 with a CCIR 601 digital interface. He said that the equipment is aimed at film-to-tape and post-production markets where broadcasters and producers require a cost-effective, high-quality, digital component tape format.

He pointed out some of the key features of the machine and tape format, including that since the tape width is 19mm, the track parameters closely match that of the D-2 format and therefore, Ampex considers that format to be robust; similarly, in light of the advanced mathematics that have been applied to the development of the compression algorithms, the format is purported to be extremely competent in terms of multigenerational performance.

He noted that the machine uses approximately 100 new semiconductor devices, weighs approximately 100 lb, and consumes 165 W. The tape cassettes allow operation lengths from 15 min to 3 hr. He also described the complete line of switchers, editors, and digital effects products that are available for the new format — Peter Laidlaw (Secretary/Treasurer), Imagineering Ltd.

## News

**Bob Hammond**, Sony Corp. of America, has been named Chairman of the Education Committee of the SMPTE Washington, D.C. Section. He replaces Norm Stein, Department of Defense, who will continue his role as Section Manager. To support the section's educational interests, the committee is currently developing a speakers bureau. Individuals who are interested in becoming a part of this bureau should contact Bob Hammond, Chairman, Education Committee, SMPTE, Washington, D.C. Section, 1305 Burni Ruth Ln., Severn, MD 21144.

**The Fitchburg State College SMPTE Student Chapter** has announced the results of its election of officers. Arthur Whitehead will serve as president, Ethan

Becker will act as vice-president, Rachel Barber was named secretary, and Ann Catalini will serve as treasurer. To date, the chapter has held several meetings, served as host of five workshops, and organized trips to attend meetings of the SMPTE New England Section.

**Shoichi Takada** has been named president of Fujinon Inc. He will be in charge of all operational aspects of the company's four divisions: broadcast and communications products, binocular, industrial, and



medical. His responsibilities include the supervision of sales, marketing, and product development for each division. Prior to his promotion, Takada served as executive vice-president of Fujinon, Inc. Before that he was manager of the company's optical products sales division.

**Howard T. La Zare** has formed FTI Film Tec International, a company that provides engineering solutions and services to the film laboratory community worldwide. A two-time recipient of the



Academy Award for Engineering Achievement. La Zare previously served as senior vice-president of engineering at Deluxe Laboratories from 1984 to 1992 and was vice-president of engineering at Consolidated Film Industries from 1963 to 1984. A Fellow of the SMPTE, La Zare was Vice-President, Motion-Picture Affairs, from 1982 to 1983; Governor from 1983 to 1984; Director of Engineering, Motion Pictures, in 1984; Editorial Vice-President from 1985 to 1988; and Governor-At-Large from 1990 to 1991. As president of the company, his engineering services will cover all aspects of film processing, including environmental concerns.

**Steve Bonica** has been appointed president of the newly formed Panasonic Broadcast and Television Systems Co. (PBTSC). As of April 1, PBTSC was created as a new company within the parent company, Matsushita Electric Corp. of America, to provide additional resources to service the needs of its customers. Bonica will be responsible for all sales and marketing activities of the company's wide range of video and audio hardware and software products.



**Quentin R. Nelson** was named national sales manager of For.A Corp. He will be responsible for sales and marketing of professional video and audio products. Prior to this appointment he served as the company's western regional sales manager. In his new position he will direct sales and customer support programs for the company's professional video products,

including video production switchers, digital effects systems, and high-performance time base correctors.

**The 42nd Annual Broadcast Symposium**, sponsored by the Broadcast Technology Society of the IEEE, will be held September 17 to 18, 1992, at the Hotel Washington, Washington, D.C. The event, which is well known for its technical papers on broadcast transmission engineering, will include presentations on AM, FM, and television digital transmission techniques, antenna design and testing, and transmitter development. For more information, contact Ed Williams, Symposium Chairman, PBS Engineering Dept., 1320 Braddock Pl., Alexandria, VA 22314.

**The Association of Moving Image Archivists (AMIA)** has been formed to provide a means for cooperation among individuals concerned with the collection, preservation, exhibition, and use of moving image materials. The objectives of the AMIA are to exchange information, promote archival activities and professional standards, facilitate research, and encourage public awareness of film and video preservation. The organization is offering charter memberships in 1992 and invites all interested professionals to become a part of the community of archivists, producers, manufacturers, scholars, and concerned supporters. Membership is open to any interested individual, institution, organization, or corporation.

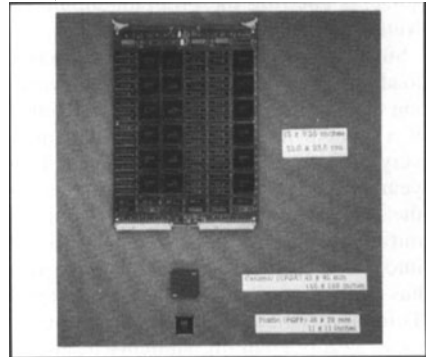
In related news, the 1992 AMIA Conference will be held in California at the San Francisco Marriott Hotel on Fisherman's Wharf from December 8 to 12. Conference sessions will cover such topics as "The Role and Mission of Moving Image Archives," "Public Policy and National Planning for Moving Image

Preservation," "Licensing Policies and Practices in Moving Image Archives," and "New Sound Restoration Technologies." For further information, contact the AMIA Secretariat, c/o National Center for Film and Video Preservation, The American Film Institute, P.O. Box 27999, 2021 N. Western Ave., Los Angeles, CA 90027.

## Errata

"Clock Rate Conversion for Digital Video," by Jukka Hamalainen, *SMPTE Journal*, June 1992, pp. 394-398.

References to D-1 (D1) and D-2 (D2) were inadvertently left in the text. Tables 1 and 2, and Figs. 2, 3, and 9. Where these expressions appear they should read as follows: for D-1 (D1) read (digital) component; for D-2 (D2) read (digital) composite.



Regarding Fig. 5, the author provided two versions of the same thing and both were inadvertently included. The caption should read "Fig. 5. This picture shows the PC board, which was replaced by the ASIC, and two versions of the ASIC, the Ceramic and Metal Quad Flat Pack."

Australian film industry and the Paul Harris Fellowship for his tireless service to Rotary International.

**Nigel Kathwaroon**, an Active Member, died on January 8, at the age of 62. He joined the Society in 1967 while he was employed by Canadian Broadcasting Corp. He later held positions at Central Dynamics, ITP (Canada) Ltd., and Canadair.

**Richard Kraemer**, an Active Member, died in December 1991, at the age of 62. A longtime employee of Iowa State University, he joined the SMPTE in 1956 as a Student Member while attending Iowa State. He transferred to Associate Member status in 1958, and became an Active Member in 1963.

## Obituaries

### Philip H. Budden

Philip H. Budden, a Fellow of the Society, died on October 22, 1991, at the age of 85. An Australian film pioneer, Budden started the country's first film processing laboratory — Commonwealth Film Laboratories — in 1928. Under his guidance and leadership, the company merged with others to eventually become Colorfilm



Pty Ltd., of which he served as chairman of directors

In 1934, after an extended visit to the U.S., where he established a lifelong relationship with Eastman Kodak Co., he brought back the first sensitometric system to operate in Australia — a device that controls contrast and is now an essential tool in all laboratories.

He was active in the development of the SMPTE in Australia and was a large contributor to the establishment of the SMPTE Australian Section. He was also a member of the Australian Cinematographers Society and the BKSTS. During his lifetime he was honored with an OBE for services to the