

from  $\frac{3}{4}$  to  $\frac{3}{4}$ -in transfers, 3rd, 4th and 5th generations. The demonstration prompted an active discussion among members of the audience.

Concluding the meeting, Joseph Roizen provided a visual report on the equipment highlights from the SMPTE Television Conference held recently in Atlanta. — Joerg D. Agin (Secretary-Treasurer), Eastman Kodak Co., 3250 Van Ness Ave., San Francisco, CA 94109.

**Toronto, 14 March** — The meeting was held at the Ryerson Polytechnical Institute with an attendance of 55 members and guests. The principal speaker was Robert Ross, a graduate of the Photo Arts course at Ryerson Polytechnical Institute. He is currently with CBC in the Operational Development Division of the Engineering Headquarters in Montreal. In his presentation he pointed out some of the advantages of videotape over film recording in the field, the advantages including low running costs, immediate verification, quiet cameras, no processing and easy insertion of characters and effects. On the other hand, he noted, there have been a number of film improvements to meet the challenge, including new high-speed reversal stock, new negative stock with low-grain structure, low-light films, crystal-controlled motors, video view finders and time-code insertion. Some of the benefits that are still on the side of film include more reliable equipment, ease of servicing, easier access to some locations, worldwide availability of stock, lighter equipment and universal standards.

Further steps which should be taken to improve film's place in television, Ross said, include improved film handling, better practices to give better results, improvements in time codes for editing and, perhaps, that film should go "off line," i.e., transfer to videotape for editing, etc.

Ross believes that there should be more emphasis in educational institutions on courses for filmmakers to be introduced to television broadcastings. Filmmakers, he believes, should change their attitudes toward videotape and should work together with electronics people.

There was a short intermission for refreshments through the courtesy of Bonded Films. Following this, Frazer Scantlebury and Paul Sampson, fourth year students in the Radio and Television Arts Course at Ryerson, used a color camera and a portable videocassette recorder to demonstrate ENG equipment.

The demonstration was followed by a panel discussion on film vs videotape. Panel members, in addition to Ross, were Robert Gardner, Chairman of the Radio and Television Arts Department of Ryerson, Hans Drege of the Photo Arts Department and Robert Rouveroy, an independent cinematographer.

Gardner believes that videotape is better for sports, news and actualities, and that film is better for drama. This same view was expressed by Drege, who said that in his opinion videotape records things as they are, but that film creates or recreates life.

Rouveroy said that television needs pictures that people will watch. In his opinion imperfect pictures that people like are better than so-called perfect pictures that do not attract viewers.

Many questions regarding film and videotape were directed to the members of the panel. Many of the questions were on the use of film for original tapes and the transfer of film to videotape for post-production work. This technique is being used successfully by a firm in Toronto. A lively discussion kept the meeting going until 10:30. — Ray J. Brule (Chairman), 3M Canada Ltd., P.O. Box 5757, London, Ont., Canada N6A 3S3.

## Obituaries



**Paul S. Aex**

Paul S. Aex, a Life Member of the Society, died 9 August 1977 at the age of 61. A native of Rochester, N.Y., he was graduated from Rensselaer Polytechnic Institute in 1938 with a degree in Chemical Engineering and in 1939 he began his career with Eastman Kodak Co. His first post was that of Development Engineer in the Cine Processing Department at Kodak Park where he did experimental work on 16mm Kodachrome motion-picture film with the emphasis on development work on 16mm Kodachrome duplication printing and processing.

In 1949 Aex was named Supervisor for Quality Control in the Photographic Processing Division and in 1953 he became Assistant Superintendent of the Film Processing Division. Two years later he transferred to the Palo Alto Processing Laboratory as Assistant Manager. In 1960 he moved to the Chicago Processing Laboratory as Deputy Manager where he was appointed Manager in 1961. He retired from Eastman Kodak on 1 April 1976.

He joined the SMPTE in 1944. Among his publications is a paper published in the November 1947 *Journal*, "A Photoelectric Method for Determining Color Balance of 16mm Kodachrome Duplicating Printers."

### Hellmuth Etzold

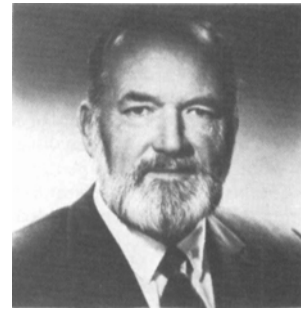
Hellmuth Etzold, Professor of Electrical Engineering at the University of Rhode Island, died 15 March 1978 in Wakefield, R.I., at the age of 68.

Etzold was born in Germany. He was educated in physics at the University of Leipzig and completed his doctoral work in physical chemistry at the University of Freiburg. Much of his professional career was in the audio and acoustics fields. He headed the Sound and Film Motion Picture Technique Section of the Forschungsgesellschaft Fuer Funk und Tonfilmtechnik and was a lecturer and chief engineer at the Technical University of Berlin. Later, in the United States, he became a research engineer for the American Foundation for the Blind. In 1963 he joined the University of Rhode Island as a Special Lecturer. He became an Associate Professor in 1965, and in 1975 he was made a full professor. He did considerable research and consulting in the audio and acoustics fields.

His career was a varied one. He had strong interests in chemistry and music as well as in acoustics. He profoundly influenced the careers of many students by his insistence on precise measurements and measuring techniques and the interpretation and presentation of experimental results.

He had been a member of the SMPTE since 1955. Other professional organizations of which he was a member include the Acoustical Society

of America, the American Institute of Physics, Audio Engineering Society, Groupement des Acousticiens de Langue Francaise, and Deutsche Kinotechnische Gesellschaft. He was a U.S. delegate to several meetings of the International Electrotechnical Commission.



**Frank A. Holmes**

Frank A. Holmes, founder and president of Frank Holmes Laboratories, Inc., died 3 March 1978 of a cerebral stroke in Canton, People's Republic of China, while on tour with the United States-China People's Friendship Association. He was 61 years old. A well known and respected figure in the film industry for 40 years, he had worked with Jam Handy Productions and with Technicolor before opening the Frank Holmes Laboratory in 1948, an establishment that developed into one of the nation's leading slide duplication and filmstrip production houses.

Born in Mott, N.D., Holmes was basically self-taught. Much of the film processing and camera equipment in the laboratory was designed and built by him.

According to the U.S. Department of State, Holmes's body was cremated at memorial services attended by leading Canton foreign affairs officials. The ceremony was prepared in the traditional Chinese manner and a large photograph of Holmes wreathed with flowers has been placed in the Canton Memorial Hall as an expression of friendship between the Chinese and American peoples symbolized by the tour in which he had participated.

Holmes had been a member of the SMPTE since 1952. Professional societies other than the SMPTE of which he was a member include the Society of Photographic Scientists and Engineers, the Society of Photographic Instrumentation Engineers, the National Micrographic Association, the American Radio Relay League and the Esperanto League. He served as a Lieutenant in the U.S. Army Signal Corps from 1942 to 1946.

He is survived by his wife, Ana, and by three sons, two daughters and three grandchildren.

*Addendum to the Obituary of Arthur C. Hardy, Journal, February 1978, p. 69.*

Dr. Hardy was co-author with Fred H. Perrin of the *Principles of Optics*. This book ranks with the works of A. A. Michelson, James P. C. Southall, R. W. Wood, Parry Moon, Editor Albert G. Ingalls, Francis A. Jenkins and Harvey E. White as one of the pioneer American works on optics. It appeared in 1932 and remained in print in its first edition for over 40 years. Hardy and Perrin remained a standby of students and practitioners during the formative years of the present-day disciplines of applied optics. — Lawrence T. Sachtleben, RCA Advanced Technology Laboratories.