



Earl I. Sponable

Earl I. Sponable, an Honorary Member of the Society, died on 16 November 1977 at the age of 82 following a short illness.

Born in Plainfield, New York, 18 September 1895, he was graduated from Cornell University in 1916 with the degree of Bachelor of Chemistry. Immediately after graduation, he joined with T. W. Case in establishing the Case Research Laboratory in Auburn, New York, and spent the next ten years in pure research and development work on audion amplifiers and on photo-active materials, particularly of infrared sensitive types. Noteworthy among the developments of these years were the first Thalofide cells, used as the basis of an infrared signalling system during the First World War. These war years were spent as a civilian consultant at the Naval Experimental Station in New London, Conn.

After the war, Sponable returned to the Case Research Laboratory, and actively interested himself in the problems of recording sound-on-film. Under his direction, Case developed the gas discharge lamp known as the Acelight for recording and the Thalofide cell for the reproduction of sound. The Acelight was used in the Fox Movietone system as well as in the Fox West Coast studio recording systems during the 1931-33 period. This early work on sound recording was made with the Thermophon microphone designed and built by Earl Sponable, an unique utilization of heated platinum wires resulting in a very high quality record. He designed most of the electrical and mechanical units required for a complete system of sound-on-film recording and reproducing, which constituted the basis for the sound motion-picture industry of today.

Among these and subsequent developments was a single-system sound and picture camera which permitted recording the sound directly on the sprocket, theater reproducing equipment, portable amplifying equipment, and a sound screen of woven material that allowed the sound waves to pass through and thus enabled theaters to install the speakers directly behind the screen.

In the early twenties, Earl Sponable became interested in television and succeeded in transmitting 20-line pictures using a modified Nipkow scanning drum.

In 1926, he joined the Fox Film Corporation and assisted in the development of commercial sound motion pictures, and in the same year designed and built the first sound motion-picture studio — soundproofed, acoustically treated and air conditioned.

In 1927, he participated in the creation of the first sound newsreel and organized it into a worldwide news coverage medium.

Peter Carl Goldmark

Peter Carl Goldmark, one of the great inventors of this age, was killed 7 December 1977 in an automobile accident on the Hutchinson River Parkway in Westchester County. He was 71 years old.

Only two weeks before his death he received the National Medal of Science from President Carter at a White House ceremony honoring Dr. Goldmark together with 14 other top scientists.

A man of vision, one of his plans for the future was the New Rural Society. Under this far reaching plan, new applications of communications technologies would result in a more even distribution of the population by a move away from the congested urban centers to underdeveloped rural regions. Dr. Goldmark's concern for the future of this country — and the world — had been frequently expressed. At one time he had said, "Unless we plan for a radical change, by the year 2100 the depletion of our nonrenewable resources will probably bring about a rapid end to our civilization."

Under his technical direction, Movietone News was equipped, running to over fifty crews in all parts of the world. Among some of the notable news items recorded by Earl Sponable was the report on the Lindbergh flight and Lindbergh's reception by President Coolidge.

From 1926 to 1962, he held the position of Technical Director in charge of research and development work of Fox Film Corporation, subsequently Twentieth Century-Fox Film Corporation. During the Second World War, he served on the Film Conservation Committee of the War Production Board and represented Twentieth Century-Fox Film Corporation in the Television Broadcasters Association.

During the early thirties, Earl Sponable made a survey of every color process known to literature, or covered by patent; the more promising ones were actually set up in the laboratory and experimentally checked. This led to the development of the lenticular color process which, with the cooperation of John Capstaff of Eastman Kodak Co., was successfully demonstrated at the Roxy Theater in New York City.

In addition to his contributions to the development of sound-on-film and the extensive program of color investigation (which has added substantially to the fund of knowledge of the commercial problems entering into the production of motion pictures in color), he has been responsible for many detailed developments in the motion-picture field, such as the development of a system of wide film (70-mm) sound motion pictures called *Fox Grandeur*. The first picture, *Fox Movietone Follies*, opened in the New York Gaity Theater in September 1929. This was followed by *Happy Days* and *The Big Trail* at the Roxy Theater in 1930.

Some twenty years later, he supervised the development of CinemaScope, including the use of magnetic stereophonic sound on 35mm film with an anamorphic picture. Launched in 1953 with the showing of *The Robe*, the system achieved worldwide acceptance. Over 50,000 theaters were equipped for showing wide screen motion pictures.

Then came the design and building of equipment for the use of a large anamorphic picture negative area (55mm film). Two releases, *Carousel* and *The King and I*, were made and exhibited in 1956 as 35mm reductions.



Among Dr. Goldmark's revolutionary inventions are the long-playing record (introduced in 1948); the first successful color television broadcast system; Electronic Video Recording (EVR); field sequential color television; and the high-resolution readout and ground recording system used in the U.S. Lunar Orbiter Program. The field sequential system, miniaturized by

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Earl Sponable had been among the foremost in recognizing the relationship between motion pictures and television, particularly with respect to large screen theater presentation of televised program material.

This was clearly reflected in his sponsorship of the Swiss-developed Eidophor large screen color television system (described in a paper by E. Labin in the April 1950 issue of the *Journal*) which bids fair to influence the creation of providing television-distributed entertainment in the theater with ample illumination.

Earl Sponable can be characterized as one who throughout the years always strove vigorously to improve the quality of the motion-picture industry. Recognition of his personal and professional achievements is evident in the many honors and awards presented to him.

A member of the Society since 1926, he was President for the 1949-1950 term. He was also a member of the Association for the Advancement of Science, a member of the American Chemical Society, Alpha Chi Sigma and Sigma Xi.

In 1953 he received recognition from the Academy of Motion-Picture Arts and Sciences being awarded an Oscar for heading up the development of the CinemaScope system which was accepted internationally.

In addition, he received three SMPTE awards in 1951: Honorary Membership for a lifetime's work in the advancement of engineering in motion pictures and television, the Progress Medal Award for outstanding technical contributions to the motion-picture and television industries, and the Samuel L. Warner Memorial Award for outstanding contributions in the development of sound-on-film.

Additional evidence of the technical contribution is an impressive list of some 20 patents issued to Earl Sponable and a number of published papers on various subjects including newsgathering, film projection, sound recording and theatrical projection of television.

Earl Sponable is survived by his wife, Marie, and a daughter, Kathryn (Mimo), both living in Lake Placid, New York, where the family has maintained a home for the past fifteen years. The members of the SMPTE will mourn the loss of one of the great pioneers of the motion-picture and television industries. — John G. Frayne



Peter C. Goldmark with the EVR system

modern technology, was used by the Apollo astronauts to beam live color television pictures of Man's first walk on the moon to world audiences.

Peter Carl Goldmark was born in Budapest, Hungary, 2 December 1906. He studied at the Universities of Berlin and Vienna and attained the B.S. and Ph.D. degrees in Physics. From 1931 until 1933 he was in Cambridge, England, in charge of television engineering for Pye Radio Ltd. In 1933 he came to the United States where for two years he was Chief Engineer at World Radio. In 1936 he joined Columbia Broadcasting System where he remained for 35 years, retiring in 1971 as President and Director of Research for CBS Laboratories in Stamford, Conn. Shortly thereafter he founded Goldmark Communications Corp.

A scientist and inventor, Dr. Goldmark was also a music lover and a gifted amateur musician, playing both piano and cello. His invention of the 3 $\frac{3}{4}$ LP came about because of the clunk in a Brahms recording. He was at the home of friends "listening to a recording of Vladimir Horowitz playing Brahms," Dr. Goldmark said, "musically it was wonderful but every four minutes came that clunk — the most awful sound in the world — of the records changing. It occurred to me how beautiful such a piece would be if a whole movement, maybe more, could be put on a single record." At the time he invented the LP, Dr. Goldmark did not own a phonograph. "When I returned to my phonographless home," he said, "I thought more about the record-playing problem." This was in 1945. In 1948 the LP was introduced to a world that was, indeed, ready for it.

Dr. Goldmark joined the SMPTE in 1937. He was made a Fellow in 1947 and in 1977, at the Society's 119th Conference in October, he was made an Honorary Member. The Society had previously recognized his achievements by the presentation of three separate awards. In 1969 he received the David Sarnoff Award for "... significant innovations in television, video recording and in the application of television technology in the fields of aerospace, education, printing and medicine."

In 1970 he received the Progress Medal Award "... in recognition of past contributions to the television industry and the record industry and especially for the development of the electronic video recording system."

In 1971 he received the Journal Award for "Color Electronic Video Recording" published in the August 1970 issue of the *Journal of the SMPTE*.

A member of a number of professional societies other than the SMPTE he was the recipient of many awards and honors. He held three honorary degrees — Doctorate of Humane Letters from Dartmouth College; Doctorate of Science from Fairfield University; and Doctorate of Engineering from the Polytechnic Institute of New York.

Dr. Goldmark was guest speaker at the Society's 111th Conference in New York. His address was entitled "It Is Later Than You Think."

Arthur C. Hardy

Arthur C. Hardy, a Life Fellow of the SMPTE, died 31 October 1977 at the age of 81. He was born 2 December 1895 in Worcester, Mass. He was educated at the University of California where he received the Master of Arts degree in 1919. Noted as the inventor of the recording spectrophotometer, he spent 44 years as Professor of Physics at the Massachusetts Institute of Technology. He retired in 1961.

The spectrophotometer, developed in 1927, is an instrument used to measure and record the color of any substance rapidly and with precision making it possible to transmit the number code of the color to distant locations and have the color exactly reproduced. He helped develop sound recording on film for motion pictures in association with General Electric Company and was the holder of numerous patents on the measurement of light, the recording of sound on film and color reproduction.

A member of SMPTE since 1927, he served on the Society's Board of Editors from 1933 through 1948. He served also on the Honorary Membership Committee and the Projection Theory Committee. He contributed a number of papers to the *Journal*, among them, "The Rendering of Tone Values in the Photographic Recording of Sound" (September 1927); "The Optics of Sound Recording Systems" (September 1928); "The Optics of Motion Picture Projectors" (March 1930); "The Depth of Field of Camera Lenses With Special Reference to Wide Film" (March 1931); (with O. W. Pinco) "A Simple Cine Photomicrographic Apparatus" (August 1931); and "Theory of Three-Color Photography" (October 1938).



Ernie Crisp

Ernie Crisp, accomplished photographer and instructor of professional cinematography at Eastman Kodak's Marketing Education Center, died 29 October 1977 in a biplane crash near Palmyra, N.Y. He was 49.

A native of Oklahoma City, Crisp was educated at Northeast University and Butler University. He began his career in photography at the end of World War II as a cameraman in the Army Air Corps, spending a year in the Philippines. He became a camera repair technician at Tinker Air Force Base in Oklahoma City in 1947. In 1950 he became Laboratory Manager for Elko Photo Products Co., and in 1954 he was appointed staff photographer for Station KWTW in Oklahoma City.

In 1959 Crisp was named chief photographer for Time-Life's television station in Indianapolis, covering many overseas assignments such as the 1964 Olympic Games in Tokyo and Winston Churchill's funeral. In 1966 he was promoted to Manager, WFBM production center, Indianapolis, where many top flight documentaries and industrial films were produced, including the official annual Indianapolis 500 film. He joined Kodak in 1970.

Crisp had served as President, Indiana News Photographers Association; and Faculty Coordinator of the TV Newsfilm Workshop in the University of Oklahoma. Recipient of many awards, Crisp was twice chosen Indiana Photographer of the Year (1963 and 1964); National Press Photographers Association's Photographer of the Year (1966); and the NPPA Joseph Costa Award for service to news photography. Early in 1977 he received the Robin Garland Memorial Award (NPPA Educator of the Year).

He joined the SMPTE in 1971.

He is survived by his wife, his mother, and three daughters and a son.

Announcing a new SMPTE publication on one-inch helical videotape

Editorial Vice President K. Blair Benson has announced that the SMPTE will publish a book on one-inch helical videotape. Publication date will be coincident with the opening of the National Association of Broadcasters' convention, 9-12 April 1978, in Las Vegas. The book will comprise the papers on one-inch helical video from the 12th SMPTE Television Conference (Atlanta, 3-4 February 1978). A transcript of the panel discussion to be held during the

Atlanta meeting will also be included, as well as a paper tracing the development of the related standards work on one-inch videotape and copies of the pertinent Standards.

Prepublication Price of the book will be \$12.00 (valid until 9 April 1978). Those attending the NAB Show will also be able to purchase this book for \$12.00. Thereafter the price will be \$15.00, with the usual discount to SMPTE members.