Obituaries

Kurt Singer

Kurt Singer died September 21, at the age of 61. A member of the Society since 1949, he became a Fellow in 1961. He was educated in Vienna, Austria, and received a degree in Electrical Engineering from the Technische Hochschule. From 1929 until 1937 his field of endeavor was mainly the development of audio amplifiers, and during those years he was employed by the U.S. Research Corporation of Long Island City, New York, and also by Warner Bros. Pictures Inc., of Burbank, Calif., in the capacity of development engineer. From 1937 until the time of his death he was with the RCA Victor Division of RCA, Hollywood, where he was engaged in the development of recording and re-recording consoles, film recording amplifiers, power supplies and test equipment. A score or more of his developments have been granted U.S. Patents. Active in Society affairs, he was a member of the Committee on Sound. Nine of the many technical papers of which he is author (or co-author) are published in the *Journal*, two of the most recent being "A Transistorized Seven-Position Portable Mixer" in the June, 1957, *Journal*, and (with co-authors C. E. Hittle and Michael Rettinger) "A Transistorized Portable Magnetic Film Recording Channel" in the September, 1960, issue. In 1947 he received an award from the Academy of Motion Picture Arts and Sciences for the development of a continuously variable band elimination filter.

Edmund H. Hansen

Edmund H. Hansen died October 11, at the age of 67. A member of the Society since 1927 and a Fellow since 1946, he had been made a Life Fellow in July, 1962. He was born in Springfield, Ill., in 1894 and received his early technical training at the Detroit Technical Institute. In addition he studied at the University of Florida, the U.S. Naval Academy-Extension, and even after his active technical career, at the age of 64, he completed a two-year course in Atomic-Nuclear Physics given by the University of California-Extension.

He pioneered in radio and facsimile, was Chief Radio Operator on Navy ships *Detroit* and *Cleveland*, and in charge of U.S. Navy radio at St. Augustine, Florida, during 1917–19, and later did Navy communication duties in European waters during 1919–22.

After the war he did phototransmission research work for the *New York World*, and in 1927 joined the Fox Film Corporation, personally recording many of the early sound motion pictures. He was head of the Sound Department at the company's West Coast Studios for about eighteen years, and originated many improvements in Studio Practice. He received numerous honors in sound motion-picture recording. He held more than twenty-five U.S. patents for inventions in phototransmission and sound recording, and published some seventy-five technical articles.

After retiring from Twentieth Century-Fox in 1945 he continued active as a Consulting Engineer, and established his own laboratories at his home in Balboa Island, Calif. He was active in the U.S. Naval Reserves with the rank of Lieutenant-Commander, was a Fellow of the Naval Institute

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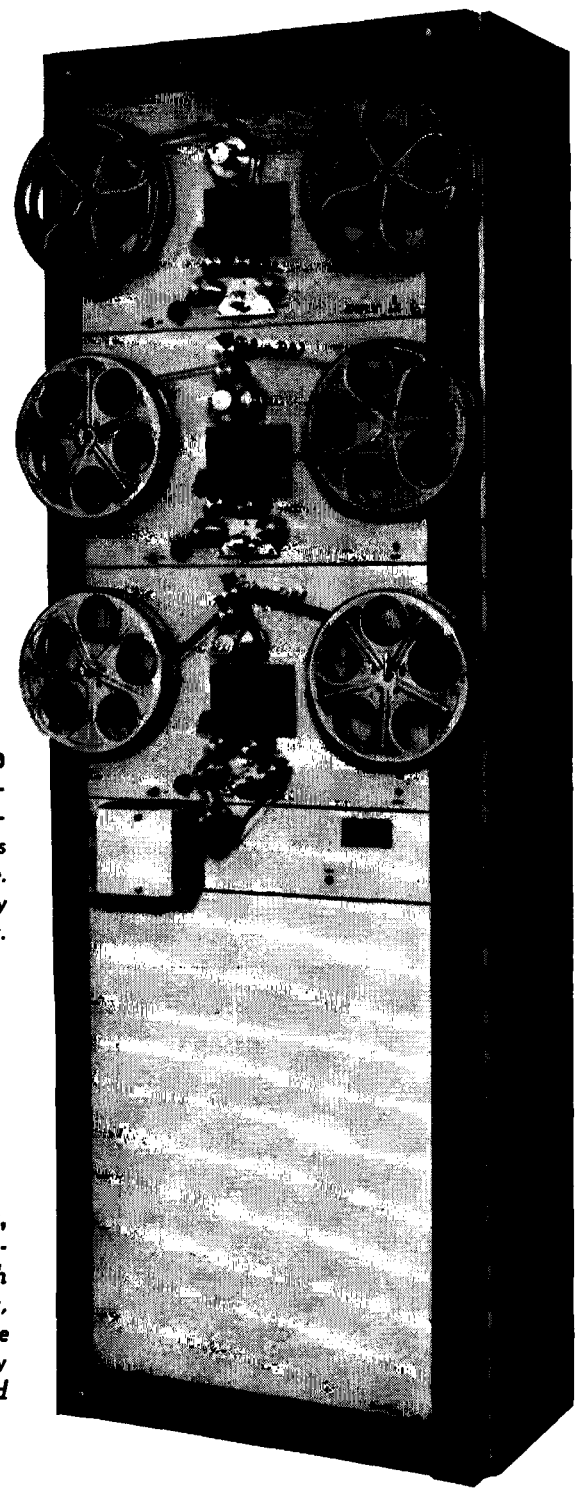

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TYPE	FILM WIDTHS	SPEEDS(fpm)	OPTIONAL ATTACHMENTS ACCOMMODATED		
MD416	16mm	36	MR416 MAGNETIC RECORD	OD416 OPTICAL DUBBER	OR416 OPTICAL RECORD
MD417	17½mm	90	MR417 MAGNETIC RECORD		
MD435	35mm	90	MR435 MAGNETIC RECORD	OD435 OPTICAL DUBBER	OR435 OPTICAL RECORD
MD447	17½mm	45	MR447 MAGNETIC RECORD		
MD437	COMB. 17½/35mm	DUAL 45/90	MR437 MAGNETIC RECORD	OD435 OPTICAL DUBBER	OR435 OPTICAL RECORD
MD427	17½mm	DUAL 45/90	MR427 MAGNETIC RECORD		
MD497	COMB. 17½/35mm	90	MR437 MAGNETIC RECORD	OD435 OPTICAL DUBBER	OR435 OPTICAL RECORD
MD436	COMB. 16/35mm	DUAL 36/90	MR436 MAGNETIC RECORD	OD416 AND OD435	OR416 AND OR435

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and a Fellow of the Institute of Radio Engineers. He is survived by his wife, the former Dorothy Dinwiddie.—*E. I. Sponable.*

Charles E. Ives — 1902–1962

Charles Ellis Ives devoted more than forty years to photographic science and engineering. He carried out research in several fields of motion-picture engineering, including film processing, instrument design, surface treatment of films, analysis of film defects, and problems of film storage. He was one of the pioneers in the development of equipment and methods for rapid processing of films in solutions at elevated temperatures. In addition to his research work, he gave generously of his time, experience and wisdom to the many individuals who came to him for advice and guidance, and to several photographic societies in which he served on committees, in an editorial capacity, and as an officer. He also took an active part in the work of the American Standards Association, where he served as alternate on the Sectional Committee PH4 (Photographic Processing), and as Chairman of the Subcommittee PH4-2 (Photographic Processing Procedures).

Charles Ives was born February 26, 1902, in Rochester, N.Y., and attended grammar school and high school in that city. Unable at the time to continue with a higher education, he entered the employ of the Eastman Kodak Company in July, 1919. He was not content to end his formal education at this point, however, and continued for many years to take courses in the Extension Divisions of the University of Rochester, Nazareth College, and St. John Fisher College. He completed successfully studies in chemistry, physics, mathematics, engineering, and languages, gaining the ability to translate technical articles in his field from French, German, Spanish, Dutch and, to some extent, from the Russian.

Shortly after joining Kodak, Mr. Ives began research on the problems of motion-picture processing. In 1940 he became supervisor in the photographic chemistry department and continued his research on motion-picture film processing and allied problems. He planned the organization and layout of a film processing laboratory. During World War II he worked actively on several photographic projects for the Armed Forces. In later years he directed work on the design of rapid processing equipment using very small volumes of hot solutions — a revolutionary advance in the technique of film processing. His research work in this field has been recognized as of great value by the Armed Forces and by industry, as indicated by the adoption of similar techniques for commercial use. He was a member of the Department of Military Photography of the Research Laboratories in 1956 and 1959, and at the time of his death on October 16, he was Technical Staff Assistant to the Head of the Applied Photography Division.

Mr. Ives joined the Photographic Society of America in 1935 and was awarded a Fellowship in the PSA in 1952. He joined the Society of Motion Picture Engineers in 1938, and was made a Fellow of this Society in 1945. In that same year (1945) he received the Journal Award of the SMPTE for the best paper published in 1944, with co-authors C. J. Kunz and H. E. Goldberg. The paper, "Improvement in Illumination Efficiency in Motion Picture Printers," was published in the May 1944 *Journal*. During the 43 years of his work in the Kodak Research Laboratories, he published about 32 technical papers, of which 28 appeared in the *Transactions* or the *Journal* of our Society.

In 1951 he joined the Society of Photographic Engineers. In May 1954 he was elected Financial Vice-President of that Society for a two-year term, and subsequently became Executive Vice-President, an office he held from May, 1956, until the SPE became a part of the newly formed Society of Photographic Scientists and Engineers in 1957. He was made a Fellow of the Society in 1959 and elected First

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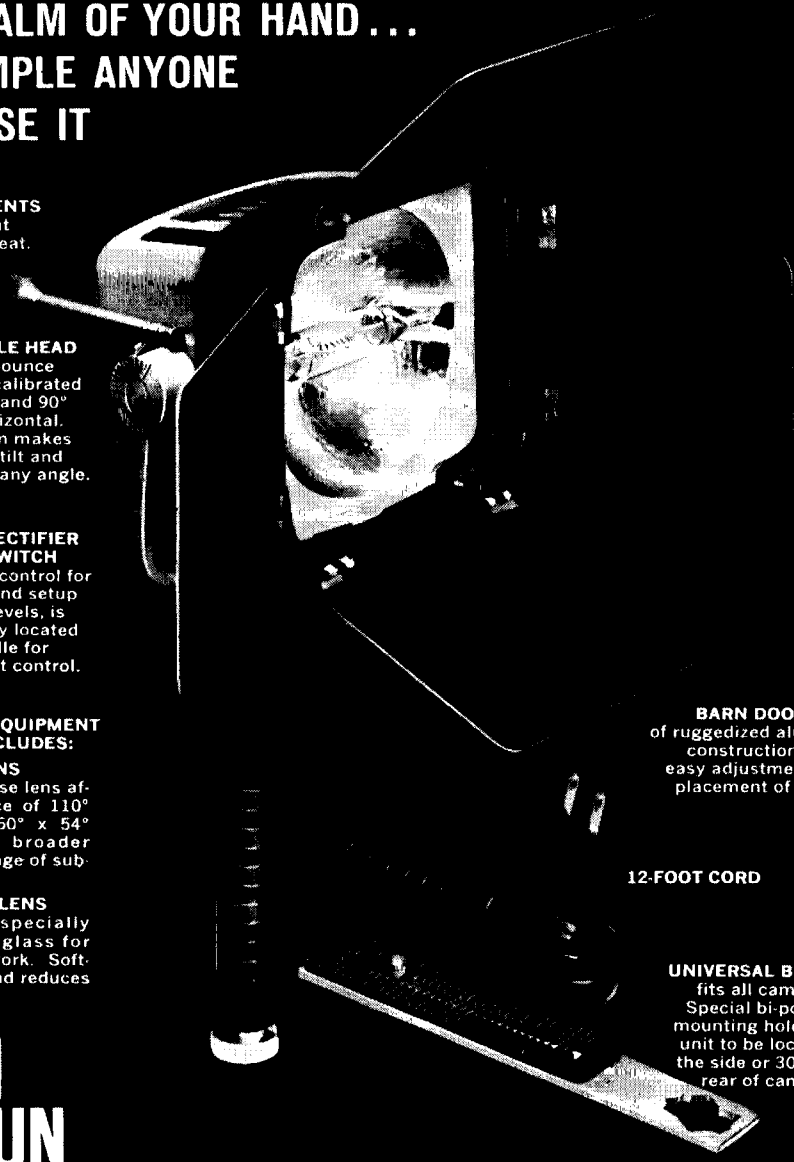

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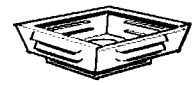

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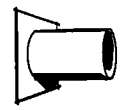

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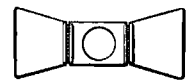

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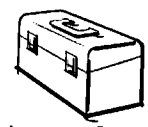

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Vice-President in 1961. It was with regret that President Levinos of SPSE accepted his resignation from that office in 1962 when his health no longer permitted him to devote to it the time he felt it deserved.

His interests were wide and varied. His sympathy for and understanding of the less fortunate in our society led, among other things, to his involvement in the work of the Baden Street Settlement House in Rochester, N.Y. The intellectual vigor and genuine concern which he brought to the problems of this social agency contributed much to the realism and effectiveness of its programs for the improvement of the quality of life for residents of the "less-chance" areas. He gave unstintingly of his time and energy as a tutor and counselor of the aspiring boys and girls at the Baden Settlement House and as a member of the Group Work Committee. He will be remembered there and in the community at large for his sincerity, his high integrity, his deep social concern, and the creativity of his contributions to the solution of difficult community problems.

As an international authority on the chemistry and techniques of motion-picture processing and many other subjects related to the handling and storage of film, Charles Ives has left an indelible imprint of inestimable value for his fellow engineers. His clarity of thought on the analysis of problems, his careful application to their solution, and his kindly relations to his fellowmen will long be remembered. — *Glenn E. Matthews.*

Canadian Section Plans Coast-to-Coast Meeting

Another first in SMPTE history will be made February 13 in Canada. The officers of the Canadian Section through Maurice French, Publicity Chairman, have announced plans for a closed-circuit television broadcast of a one-hour meeting, to be carried over the facilities of the CTV Network from coast to coast. Members and guests will be able to view the meeting in Montreal, Que.; Toronto, Ont.; Ottawa, Ont.; Moose Jaw, Sask.; Winnipeg, Manit.; Calgary, Alta.; and Vancouver, B.C. Thus, for the first time, it will be possible for every Canadian member to participate in a general meeting of the Section.

The plan for this nationwide meeting, which will originate in Toronto and possibly also in Montreal, grew from a suggestion made by Murray W. Marshall of S. W. Caldwell Ltd. A committee is now busy preparing the program for the meeting; full details will be mailed to Canadian members in the near future. To mark the importance of this meeting in the history of the Society, our new president, Reid H. Ray, has been invited to be present.

Education, Industry News

Telstar, which spent a well-behaved four months "up there," now refuses to obey commands to turn its communications receiver and transmitter on and off. Telstar's developer, Bell Telephone Laboratories, is endeavoring to find the cause, mainly to provide information for improving future satellite reliability. The difficulties do not affect telemetry transmission which has continued to operate properly. All experiments originally planned for the satellite have been carried out, and more than 400 demonstrations have been made. These have included multichannel telephony, telegraphy, and data and other facsimile transmissions. Transatlantic television has been demonstrated 47 times and five of the demonstrations have been in color.

Since July 10 when Telstar was launched by NASA it has reported back to Earth on events occurring in its orbit from 600 to 3,500 miles above the Earth. For example, it has encountered a lot of high-energy electrons. This is an undoubted fact, but whether these electrons represent an unusually high concentration of Van Allen belt electrons or result from the high-altitude nuclear bomb test of July 9 is still being debated.

Various organizations, other than Bell Telephone Laboratories, have contributed in some measure to the many tests preceding the satellite launching. For example, the satellite was subjected to solar radiation provided by carbon arcs that closely duplicate the spectrum of the sun's energy outside the Earth's protective atmosphere. Three solar lamps burning high-intensity arc carbons supplied by National Carbon Company were cycled on and off on a precise schedule to simulate orbital conditions.

Experiments conducted prior to the Telstar tests were described by J. W. Cosby, Arc Carbon Marketing Manager, National Carbon Co., in a talk before the convention of Theatre Owners of America (TOA) held during November in Miami Beach, Fla. In his address, entitled "The Light Merchants," Mr. Cosby described experiments conducted in the laboratories of the National Carbon Co.

He said that it was found that the sun and the carbon arc have identical outputs over the entire range of the spectrum. A Perkin-Elmer recording spectrophotometer was used to measure the spectral energy distribution of radiation from the carbon arc all the way out to 150,000 A. Data were then plotted on a curve showing the spectral energy distribution of the sun outside the Earth's atmosphere from 2,500 to 60,000 A, which includes about 98% of the Sun's energy output, and the two curves were found to follow each other very closely over the entire range.

According to Mr. Cosby, "space equipment designers can now use banks of carbon arcs with no filters or added energy in test chambers to simulate conditions of solar radiation in outer space. The space chambers already in operation use carbon arcs, and large chambers now under consideration will, undoubtedly, also use this high-intensity energy source to simulate solar radiation."