



Presentation of Herbert T. Kalmus Gold Medal to Merle L. Dundon, at left, by SMPTE President Kreuzer. The Citation was read by Herman H. Duerr (at right), Chairman of the Herbert T. Kalmus Gold Medal Award Committee.

portantly, the ability to analyze the technical aspects of the problem, to develop and supervise a staff of scientists, experimenters, and engineers exploring and solving these problems in a well conceived and directed plan, traveling always toward the ultimate goal of natural color in a form practical for use in the motion-picture theater. It is seldom in the annals of technical development that the ability to direct the business, economic and technical aspects of a highly specialized enterprise have been successfully

carried out by a scientist whose ability reached equally into the fields of technology, economics and business."

The twenty years since these statements were made have continued to bear witness to Mr. Rackett's statements. Continued improvements in Technicolor's imbibition process of making three-color prints have provided theatergoers with natural color of the highest quality.

The abilities which enabled Dr. Kalmus to foresee the possibilities of a successful

color system and to lead his organization through the early uncertain years to success were due in part to his formal scholastic training and his early experiences in business. Dr. Kalmus was graduated from the Massachusetts Institute of Technology with the degree of Bachelor of Science in 1904. In 1907 he received the degree of Doctor of Philosophy at the University of Zurich. Following several years as research associate at MIT and a short period as professor of physics at Queen's College in Canada, he became a partner in the newly organized firm of consulting engineers of Kalmus, Comstock & Westcott, Inc. It was at this time, in 1916, that he first began active work on color photography, and organized the Technicolor Corporation.

Early Technicolor pictures were made by cementing together two film strips back to back, with dyed gelatin relief images on the outer surfaces. Later, by use of the Technicolor split-beam cameras for making two original negatives, and use of imbibition printing to provide a single image composite print with a silver soundtrack, the two-color imbibition process was developed. This was further developed to the three-color process by addition of a third film as a bipack in the split-beam cameras, and use of three matrix films for imbibition printing, with a light silver picture image and silver soundtrack.

Important as were the technical problems in the progress of Technicolor's growth, it was Dr. Kalmus' understanding of the economic problems and his creative business ability which enabled him to succeed in bringing full color to the theater many years before it otherwise would have been provided.

In conferring Honorary Membership to Dr. Herbert T. Kalmus, the Society of Motion Picture and Television Engineers welcomes a true pioneer whose contributions to the motion-picture industry have been unique and whose continued active interest is an inspiration to all who are associated with current motion-picture development.

Fellows

The following members were raised to the rank of Fellow. Certificates were presented by Dr. John G. Frayne, Past-President of the Society:

- | | |
|-----------------|-----------------|
| W. S. Ball | C. W. Hauge |
| P. M. Cowett | S. E. Howse |
| R. B. Dull | K. B. Lewis |
| L. G. Dunn | D. L. MacAdam |
| C. P. Ginsburg | H. W. Pangborn |
| T. B. Grenier | B. F. Perry |
| Louis Hagemeyer | Douglas Shearer |
| | C. S. Stodter |

Journal Award

The Journal Award for 1958 was presented to George Lewin for his two papers on "The Infrared Transparency of Magnetic Tracks." Four other papers were chosen for Honorable Mention. Recipients of Honorable Mention and the papers are:

- Willy Borberg for "Effect of Gate and Shutter Characteristics on Screen Image Quality"
 Armin J. Hill for "Analysis of Background Process Screens"
 Donald Kirk, Jr., for "Economic Consider-

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Presentation of Journal Award to George Lewin, at left, by SMPTE President Barton Kreuzer. The Citation was read by Editorial Vice-President Glenn E. Matthews (center).



Presentation of David Sarnoff Gold Medal to Albert Rose, at right, by SMPTE President Kreuzer. Axel G. Jensen, Engineering Vice-President, at left, read the citation.

ations in Closed-Circuit Television System Design”
 R. G. Neuhauser for “Black Level—The Lost Ingredient in Television-Picture Fidelity”

The following citation, accompanying the Journal Award, was read by Glenn E. Matthews, Editorial Vice-President, on behalf of S. P. Solow, Chairman of the Journal Award Committee:

The Journal Award was established in 1933 and was first awarded in 1934 to the

late Dr. Peter A. Snell for his paper on an experimental study of visual fatigue that appeared in the Society’s *Journal* in May 1933. It is of interest to note that this work was done under the only fellowship ever granted under the auspices of our Society. The Award this year marks the 25th time that it has been given.

The basic qualifications under which the Journal Award is made are as follows:

(1) The paper must deal with some technical phase of motion-picture and/or television engineering.

(2) No paper given in connection with the receipt of any other Award of the Society shall be eligible.

(3) In judging the merits of the paper, three qualities shall be considered (a) technical merit and importance of material, 45%; (b) originality and breadth of interest, 35%; (c) excellence of presentation, 20%.

It is now my privilege to announce to you that the Journal Award Committee has recommended that the Award for 1958 be made to Mr. George Lewin of the Army



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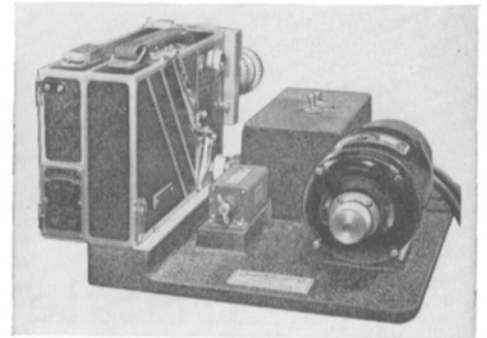


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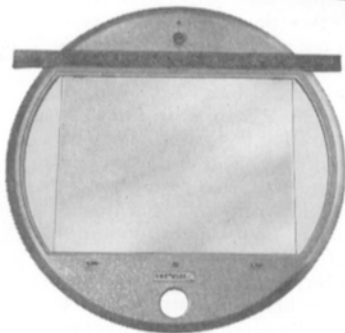
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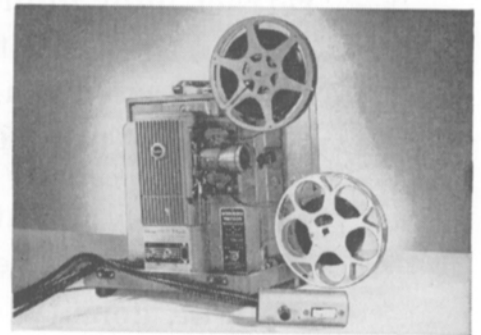
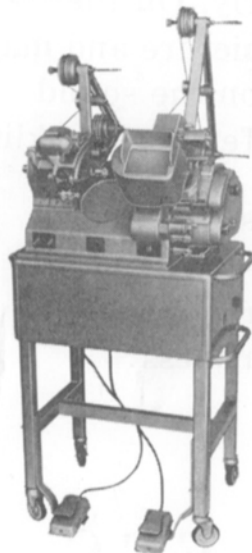
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Pictorial Center in Long Island City, New York, for his papers in the September and December 1957 issues of the *Journal* on the infrared transparency of magnetic tracks.

The author describes his discovery that magnetic tracks are substantially transparent to infrared light. Utilizing the infrared sensitivity of the lead-sulfide photoconductive cell, he shows that excellent reproduction of an optical track can be achieved even though it is completely covered by a magnetic stripe. In this way, a print can be made carrying two excellent soundtracks presenting the possibility of bilingual or stereophonic recordings.

The Committee has voted the Journal Award to Mr. Lewin not only for the caliber of his discovery, but also for the thoroughness and clarity with which he has presented his data on the effects of stripe thickness, aging, exciter lamps, and photocells

on frequency responses and sound levels. It is interesting to point out that at the conclusion of the presentation of the first paper by Mr. Lewin at the Convention of the Society in Washington, on May 3, 1957, the entire audience rose and warmly applauded the speaker.

George Lewin was born in New York City and was graduated from Cooper Union Institute of Technology. He then took a brief excursion away from engineering which may well have increased his appreciation of good sound by being a professional musician—pianist—in vaudeville, on shipboard and in summer resorts. Then he came back to engineering with the advent of sound in motion pictures at Paramount's Long Island Studios in 1928, with such stars as Eddie Cantor, Claudette Colbert and Ginger Rogers.

For the next twelve years he made the

rounds of the studios in New York and Hollywood, and then returned to the very studios in which he started, but this time taken over for the new Army Pictorial Service in 1944 for World War II. There he has been ever since in his present position as Chief of the Pictorial Engineering Office. He has given special study to the important Army work of language dubbing for films and the practical Reversing System for Narration.

Mr. Lewin has been a regular contributor to the *Journal* and allied magazines, starting with an article on "Dubbing" in January 1931. His work for the Society includes service on the following committees: Papers, 1951-54, and 1956; Journal Award, 1955-56; Warner Award, 1957-58. He was one of the Atlantic Coast Managers in 1954-55 and a Governor of the Society in 1955-56. He has always been an active participant in Section meetings and with his wife, Sylvia, has been most faithful at the Conventions. He was made a Fellow of the Society at the 1956 Convention. He is also a member of the Audio Engineering Society.

In accepting the Award, Mr. Lewin expressed deep appreciation for the assistance given him in preparing the presentation that earned the award and said that he was accepting the honor "on behalf of all these people." Following is the complete text of his acceptance:

In accepting this great honor I must give the credit to the many people who helped me so generously in preparing not only the two papers which earned this award but also the demonstrations which were an integral part of them. I wish to mention particularly Ellis W. D'Arcy, to whom I first demonstrated the discovery and who urged me to write the first paper; Edward Schmidt of Reeves Soundcraft, who provided me with the spectrograms which explained the transparency effect; W. W. Wetzel of Minnesota Mining, T. C. Bagg of the National Bureau of Standards, and Malcolm Townsley of Bell & Howell, who collaborated in preparing the illustrations which made my presentation so much more effective; Joseph E. Aiken and Jack Greenfield of the Naval Photo Center who, in a true spirit of interservice cooperation, loaned me the Navy's projection equipment for putting on my first demonstration; Col. R. H. Ranger of Rangertone, who foresaw the possibilities of the discovery for making stereophonic recordings on 16mm film and prepared the stereophonic demonstration film which accompanied my second paper; and Max Kosarin of the Army Pictorial Center, who provided the film material from which I was able to prepare the dual language demonstration film which accompanied my second paper. I must also give credit to Gar Misener of Capital Film Laboratories in Washington, and Everett Hall of The Thomas Watson Company in New York, who provided me with Minnesota Mining Laminated stripe demonstration material; Ernest Frank of Reeves Soundcraft, who assisted me in preparing data on Reeves Stripe material, and Emil Vorosek of Reeves Studios, who helped me in obtaining the intermodulation data on 35mm striped film for my second paper.

General O'Connell, Chief Signal Officer

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of the U.S. Army, by his generous personal commendation to me after the publication of the first paper, provided the incentive to continue the work which led to the second paper.

Herbert T. Kalmus Gold Medal

Merle L. Dundon was awarded the Herbert T. Kalmus Gold Medal for contributions to the design and development of color products. The Citation, prepared by the Herbert T. Kalmus Gold Medal Award Committee, was read by the Chairman, Herman H. Duerr:

The Herbert T. Kalmus Gold Medal Award was established by the Society in 1955. It is awarded each year to an in-

dividual who has made an outstanding contribution to the development of color films, processes, techniques or equipment useful for color motion pictures for the theater, television or other commercial uses. Previous recipients of the Kalmus Gold Medal are Wesley T. Hanson in 1956 and Wadsworth E. Pohl in 1957.

I have the honor and the pleasure tonight, as Chairman of the Kalmus Gold Medal Award Committee, to announce the selection for 1958. The recipient of the Herbert T. Kalmus Gold Medal for this year is Dr. Merle L. Dundon.

Dr. Dundon is presented this award for his many contributions to the design and development of color products such as Kodachrome-type color films, Eastman Color

Negative and Color Print Film. In particular, the Award is in recognition for this valuable contribution to the development and improvement of the Eastman Color Intermediate Film, which has become an important link in the production of color duplicate negatives.

Dr. Dundon was graduated from Mt. Union College in 1917 with the Degree of Bachelor of Science. During World War I he was stationed at the American University Experiment Station of the Chemical Warfare Service. After the war he attended Ohio State University and received the Degree of Master of Science in 1920 and the Degree of Doctor of Philosophy in 1922.

In 1923, Dr. Dundon joined the Research Laboratories of the Eastman Kodak Company, specializing in photographic chemistry and processing. In 1929 he was transferred to the Film Emulsion Department, where he is presently in the position of Assistant Manager of the Film Emulsion and Plate Manufacturing Division.

The Bronze Medal of the Société Française de Photographie was awarded to Dr. Dundon in 1924. Mt. Union College honored him with a Doctor of Science degree in 1943. He is an honorary member of several scientific societies and a Fellow of the Photographic Society of America.

To this distinguished list of accomplishments, the Society of Motion Picture and Television Engineers is proud to add the 1958 Herbert T. Kalmus Gold Medal Award.

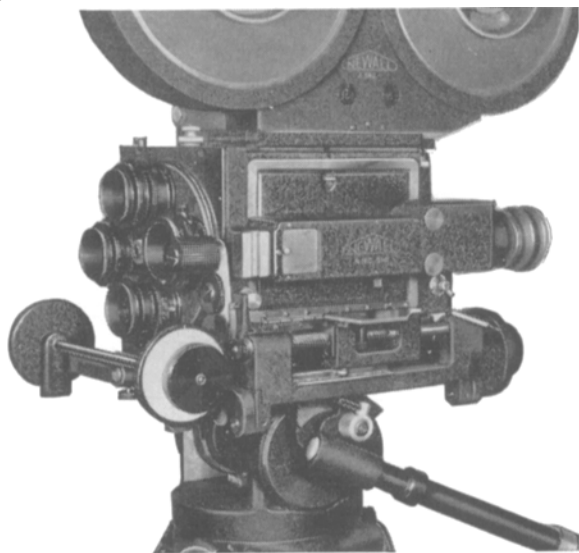
In accepting the Award Dr. Dundon pointed out that among the many workers on color film and processes at Kodak Park in Rochester there has always been a fine spirit of cooperation and team work. Although he appreciated very greatly the honor of receiving this Award, he stated that it really represented a recognition of the work of many individuals working together as a team.

David Sarnoff Gold Medal Award

Albert Rose was awarded the David Sarnoff Gold Medal for contributions to the development of orthicon, image-orthicon and vidicon television pickup tubes. The following citation, prepared by the David Sarnoff Award Committee under the chairmanship of William B. Lodge, was read by Axel G. Jensen, Engineering Vice-President.

Albert Rose was born in New York City on March 30, 1910. He received the Degree of Bachelor of Arts from Cornell University in 1931 and the Degree of Doctor of Philosophy in Physics in 1935. From 1931 to 1934 he was a teaching assistant at Cornell University. He joined RCA in 1935 and since then has been a member of the research staff, first in Harrison and since the opening of the Princeton Laboratories in 1942, at Princeton, N.J.

Dr. Rose is well known for his work on television pickup tubes. In the early development of electronic television the Iconoscope was the most widely used pickup tube but it had a number of defects which made operation difficult and critical. Many of these defects were due to the use of a high velocity scanning beam. Analyzing the problem, Dr. Rose stimulated and participated in research toward a low-velocity



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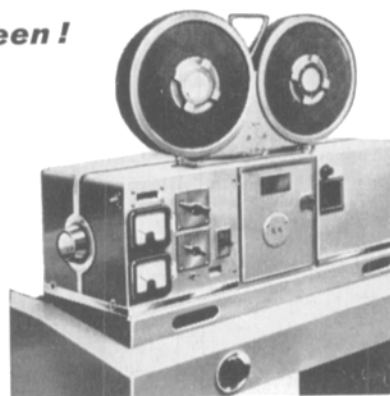
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