

to their thicknesses. The image structure introduced by electron scintillations has a resolution limit proportional to the square root of the product of the cathode illumination, photocathode sensitivity, and integration time.

In this paper, the electron optical resolution of an image intensifier is derived as a function of the voltage between photocathode and phosphor screen. The resolution characteristics of the phosphor thickness and mica thickness are examined. Experimental data are presented to support the analytical data.

A locked-frequency-sweep generator, R. J. Taylor, *Royal TV Soc. Jour.*, 12: 98-100, Spring 1969.

Details of a novel waveform generator suitable for sensitive investigation of the frequency response of video equipment in situations where conventional sweep signals cannot be used.

Geometric distortions in television imageries, Kam W. Wong, *Photogrammetric Eng.*, 35: 493-500, May 1969.

This paper describes the various sources and forms of geometric distortions in a TV system. Equations are formulated to describe the composite effect of the systematic distortions in TV pictures. It is evident from this study that geometric distortions in a TV system are highly systematic in nature. Through careful prephotography calibration and an efficient use of a resau grid, relatively high-quality geometric measurements can be made from TV pictures.



ATLANTA, April 28—Seven visitors from a Motion Picture Class of Westminster High School presented a 15 minute movie which they had produced. It was a very interesting low cost production. Two sample TV commercials of a local producer of excellent quality were shown. In addition an excellent program on "Lens, lens quality and testing demonstration," was given by Jack Behrend, Behrend, Inc.—Billy S. Marks, *Secretary-Treasurer*, Atlanta, GA.

TORONTO, May 8—The meeting was preceded by an informal dinner at the Valhalla Inn. Twelve members and three guest speakers were present. K. G. Lisk, Eastman Kodak Co., discussed the results of a survey which was made of the adjustment of thirty home television receivers. Brightness range, correlated colour temperature of a neutral field and ambient lighting conditions were measured. C. Evans, Eastman Kodak Co., delivered a paper prepared by Dan Zwick of Eastman Kodak's Research Laboratory on "Color Balance and Density Variations of Color Films Intended for Television." He dis-

cussed the results of a study which was made of the quality evaluations to arrive at suggestions for a recommended practice for colour-film densities.

J. Zankowski, Eastman Kodak Co., discussed various methods of agitation in immersion processing and how they could be measured. All three papers were well received by the members.—Henry A. J. Clapp, *Secretary-Treasurer*, Toronto.

NEW YORK, May 14—The May New York Meeting was held at the United Engineering Center in New York. Three papers were presented: Michael Koo, Philips Broadcast Equipment Co., spoke on "System Timing of the Digitally Controlled PC-11 Color Camera." Dr. W. E. Good, General Electric Co. presented a paper on "A New Approach to Color Television Display and Color Selection Using a Sealed Light Valve." K. B. Benson presented a paper for Paul Wittlig, CBS Television Network, "Large Studio Backgrounds Projected from Video Sources." The papers were well presented and well received, with enthusiastic applause after each.—Paul F. Wittlig, *Secretary-Treasurer*, New York.

CAPE KENNEDY, May 17—The tour of the Martin-Marietta facilities was very interesting to all who attended. Shown were all the equipment needed for making 16mm films. Several movies were shown of their finished product, that were taken in different sections of the world. Douglas McKinny, Industrial Motion Picture Products, explained in detail all the steps required in arriving at the final point which we viewed. A picture of the pet alligator located behind their plant was also shown.

After the meeting, everyone gathered at the Gold Key Inn for cocktails and dinner. Everyone seemed to have a very enjoyable time.—James D. Caron, *Secretary-Treasurer*, Cape Kennedy.

NASHVILLE, May 17—An entertaining and very informative film was presented, showing from inception to final moving into the construction of the new broadcast facilities of WHAS-TV studios, Louisville, KY. A discussion of the various technical problems encountered in this construction was given by William C. Hunter, Director of Engineering, WHAS, Inc. A complete tour of the facility was then given followed by a refreshment break. Individual areas were then visited by interested members where further discussion in greater detail could be had.—Aaron Shelton, *Secretary-Treasurer*, Nashville.

CHICAGO, May 20—The May meeting of the **Chicago Section** was hosted by Bell & Howell Co., Professional Equipment Division, who presented four technical

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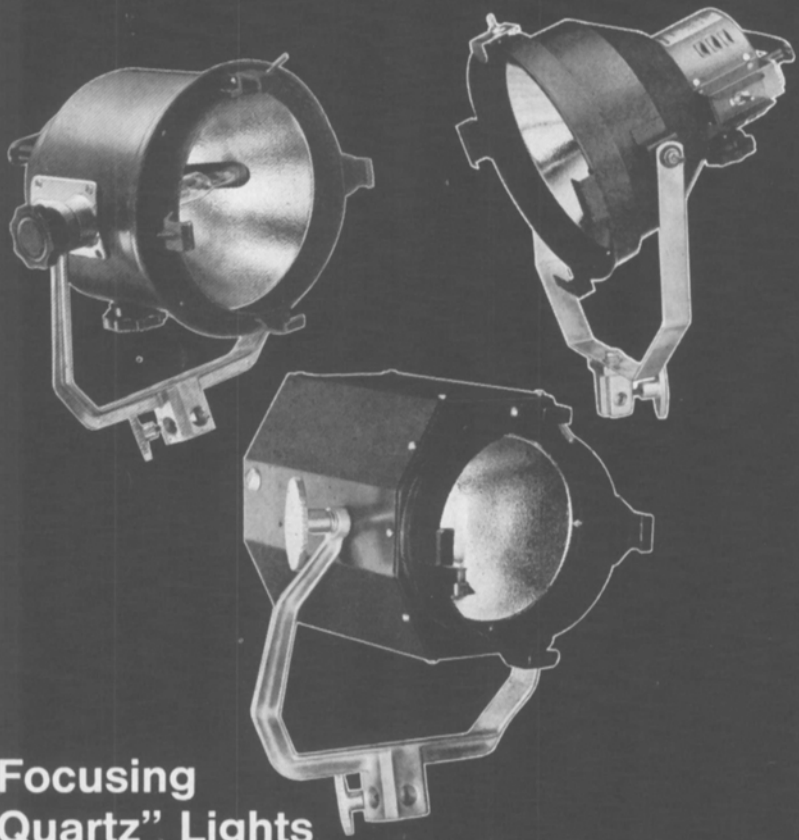
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papers that were originally given at the 105th SMPTE Technical Conference in Miami Beach earlier this year.

These papers were selected for presentation so the members and guests who were unable to attend the Miami Conference could have the opportunity of hearing them since they concerned products and technology that are of very active interest within our industry today.

The four papers were presented by the following: John Ehrenberg, Manager, Professional Equipment Design Engineering; who read two papers on Modular Panel Printer Concepts and A Continuous Optical Reduction Printer; Walter Michel, Chief Electrical Engineer of Professional Division, who read a paper on, "A Magnetic Sound Transfer Console for Super 8 film; and Paul F. Bourque, Product Manager, read a paper entitled, "Concepts of Color Timing." An interesting question and answer period followed the presentation of the paper.

The meeting was enjoyed by 80 members and guests. A pre-meeting dinner for the Section Managers and guest speakers was held in the Harlequin Room of the Fred Harvey Restaurant. It also was attended by 20 members and guests.—Charles Zichterman, *Secretary-Treasurer*, Chicago.

BOSTON, May 21—The meeting took place at Photon Inc., Wilmington, Ma. Members and guests were conducted on a tour of Photon's manufacturing facility with Photon personnel as guides. "The Photon Story," a color sound film was presented and conveyed a greater understanding of the phototypesetting application. Grant Morgan, Chief Product Engineer, Photon, Inc., presented a paper, "Recent Advances in Photocomposition."

Preceding the meeting a dinner was held at the Sheraton Rolling Green Motor Inn, Andover, Ma.—Robert Rubenstein, *Secretary-Treasurer*, Boston.

DETROIT, May 22—The **Detroit Section** held a very interesting meeting dealing with the relatively new subject of liquid crystals. Mr. Joseph W. Jones, a project leader at National Cash Register Co., delivered the main talk. He described in some detail the chemical basis for the thermal sensitivity of liquid crystals, evidenced by their characteristic of reflecting light of different spectral colors as a function of temperature of their environment. He then gave an account of the several uses to which liquid crystal materials are being put. In general, the materials are useful whenever it is desirable to visualize temperature gradients in the range of 40 to 500 degrees F. Medical applications are common, as are industrial uses. Jones distributed small samples of encapsulated liquid crystals to the section members, and pointed out that the encapsulation process results in consistent performance of the devices and provides good mechanical protection.

Following the presentation, the section members were given the opportunity to discuss the subject informally with Mr. Jones over coffee and donuts, supplied by the courtesy of Jam Handy.—F. M. Remley, *Secretary-Treasurer*, Detroit.

DENVER, May 23—Forty-four members of the **Denver Section** and a dozen guests attended our second social meeting, May 23rd, at the Air Force Academy Non-Commissioned Officer's Club. At 6:00 PM the group was bussed to Fairchild Hall where they toured the Academy Television studio and photographic facilities. This short tour was conducted by Oscar E. Means, USAF TV Center Director. A social hour followed the tour. Immediately following dinner, Chairman John Seide welcomed new members, wives and guests and entertained a motion to dispense with the regular business meeting. Jackson Cravens introduced a half hour color sound-film produced by KOAA-TV, Pueblo, Co, entitled *Rosemount Revisited*, which covered several decades of south-eastern Colorado history prior to the turn of the century.

Members, wives and guests expressed their enjoyment of the dinner and program and an informal proposal was voiced that a social meeting be established as an annual affair.—Jackson R. Cravens, *Secretary-Treasurer*, Denver.

NEW YORK, June 11—The meeting was held at the United Nations Association, with an attendance of 100. Two well-written and well-presented papers with good visuals were on the Program. Philip E. Perkins, Eastman Kodak Co., presented a paper for Feichtinger and Witherow, Eastman Kodak Co., on "A New Demand-Drive System for Processing Machines Using Spring-Centered Spools." Ray Wulf, Eastman Kodak Co., presented a paper for Edgcomb and Lelewski, Eastman Kodak Co., Rochester, on "Methods of Agitation for Immersion Photographic Processing."—Paul F. Wittlig, *Secretary-Treasurer*, New York.

HOLLYWOOD, June 17—The June meeting was preceded by a cocktail hour and dinner at the Carriage House in Burbank. It was attended by about 40 persons.

The meeting at the Walt Disney Studio Theater was attended by approximately 155 people. The opening film, "Cameras In Space," was another in a series of impressive space exploration films which emphasized and illustrated the use of various types of cameras in our space program.

The three papers presented were selected from papers which had received high interest at the 105th Technical Conference in Miami Beach, Fl. two papers read by Mr. Bruno of the Eastman Kodak Co. authored by L. Edgcomb and S. Lewski of Eastman Kodak, "Methods of Agitation for Immersion Photographic Processing," and "Molded Squeegee Blades for Photographic Processing," authored by L. Edgcomb and John S. Zankowski of Eastman Kodak Co. Both papers were well illustrated and well received by the audience.

Mr. Van Den Berg presented a paper describing a machine design which has been very successful in permitting the reproduction of black-and-white video tape recordings at up to 150 inches. This technique makes it possible to copy a one-hour video program in less than 3 minutes. This success has come about through the design of an air-gate which

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maintains excellent tape-to-tape contact at the reproduction head. The extremely large number of questions asked of Mr. Van Den Berg certainly attested to the high interest in the field of video duplication.—Anthony D. Bruno, *Secretary-Treasurer*, Hollywood.

OHIO, June 19—Thomas F. Peterson, Jr. of Motion Picture Sound, Inc., introduced the June meeting of the Ohio Section. Following a brief note of welcome by George F. Golden, Chairman of the Section, Mr. Peterson discussed some of the production problems encountered in 35mm theatrical productions made in the Cleveland area. Sample screenings and sample audio tapes were used to illustrate his remarks. Discussion centered around recent productions involving studio and location photography and sound, including Jules Dassin's *Up Tight*, the Sindell Brothers' *Double Stop*, and Robert J. Emery's *David, David*. Budgets ranged from \$10,000 to \$1,500,000, on these shows.

Members met for dinner at the Colony Restaurant prior to the meeting where Society business on next year's programming was conducted. Coffee and doughnuts were served at Motion Picture Sound, Inc., during a program intermission and members had the opportunity to inspect the sound recording and music studios, and observe the operation of the MPS sound effects organ console.

For content and interest this must be counted one of the highlights of the program year in the Ohio Section, and concludes the meeting schedule until September when the program will be held in Columbus.—Robert W. Wagner, *Secretary-Treasurer*, Ohio.

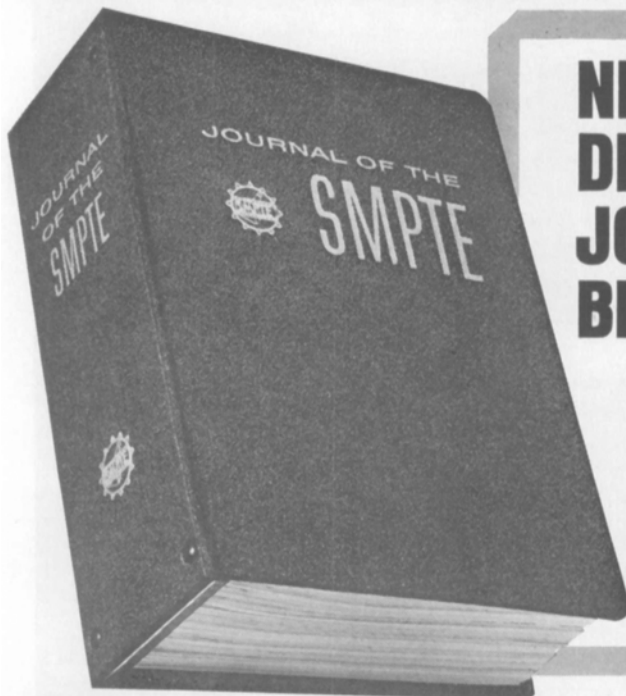
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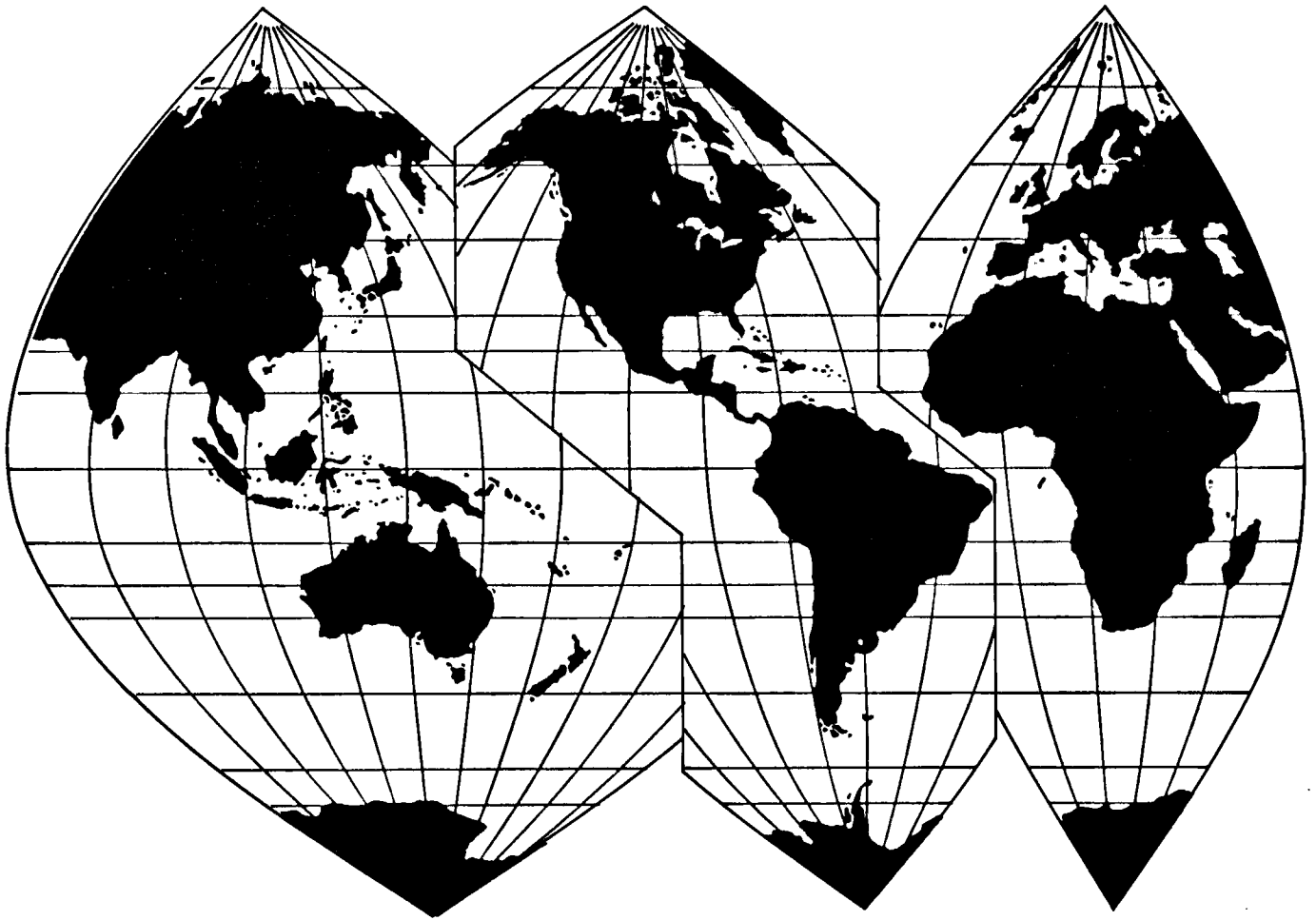
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