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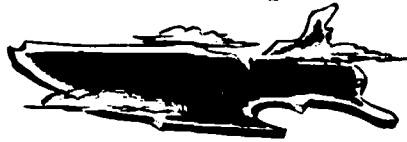
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section reports



The **Atlanta Section** met on March 26 at the Georgia Tech Library, with 17 in attendance. W. D. Hedden, Vice President of Calvin Productions, aided by Lee Davis, also of Calvin Productions, presented a paper on Ektachrome Original Film Processing. Accompanied by slides, the talk covered the engineering improvements made to the Calvin machine for Ektachrome processing. Research into materials and equipment was emphasized; ease of operation and control were the primary requirements. (This paper was published in the January, 1963, *Journal*, pp. 27-31.)

Films were shown that emphasized the care required of technicians for the safe handling of films. Also shown were comparison films covering printer techniques for color and density control of prints, and print comparisons from internegative systems versus color positive systems.

Another film humorously showed the attempts by a commercial producer to satisfy a client company when every level of management had different ideas on the sales approach to be used.—Lloyd Armbruster, *Secretary-Treasurer*, % Eastman Kodak Co., 4729 Miller Dr., Chamblee, Ga.

Sixty-eight members and guests attended a meeting of the **Canadian Section** in Montreal on April 2. The meeting was held at the sound stage of Edwards Productions, which had been converted to a magnificent SMPTE auditorium for the occasion. A highlight of the evening was the large attendance of guests from the Montreal Movie Club; the opening film, *Boom!*, was by one of their members, Gordon Kuskey. An avant-garde cartoon, this film had sound accompaniment by a homemade "beep-sync" system.

Dave Dascal, Canadian Magnetic Film Striping Co., described a new Jewel Striping machine. A roll of leader was striped and dubbed on a Siemens 2000 double-headed projector provided by R. H. Products Ltd., Montreal. The quality of the dub was excellent, and Mr. Dascal was kept busy answering questions and giving out sample rolls. At the conclusion of his talk he gave a brief report on his visit to the Photokina exhibition, pointing out that more than 20 8mm sound projectors were on display there.

After coffee and doughnuts, courtesy of Edwards Productions, Irving Posluns of the host firm read a paper by a co-worker, Barry Lucking, on a new high-speed 8mm multiple dubbing machine. Dual tracks, one forward and one reverse, are laid on standard 16mm magnetic film, which is then dubbed at 36 ft/min onto double 8mm edge-striped film. After dubbing, the film is slit to give two complete release prints. A film demonstrating the dubbing procedure and machinery was shown, and is available on either 8 or 16mm soundstripe. Several demonstration 8mm prints made on the Edwards machine were shown on *Circe*

and Kodak 8mm stripe projectors. The meeting closed at 11 p.m. after a most interesting and pleasant evening.—Michael W. Barlow, *Chairman*, % CFCF-TV, 405 Ogilvy Ave., Montreal, Que., Canada.

Design of light sources and the use of these sources in motion-picture lighting were outlined at the April 10 meeting of the **Chicago Section** by Robert Bower and Bud Fitzsimons, both of Sylvania. They gave special attention to quartz-halogen lamps.

The meeting, held in the Essex Hotel, was attended by 85 persons. Twenty-six members were present at the premeeting dinner.—Jack Behrend, *Secretary-Treasurer*, % Behrend Cine Corp., 161 E. Grand St., Chicago, Ill.

The March 28 meeting of the **Detroit Section**, held at WXYZ-TV, began with a tour of the studio facilities led by station engineers. Following this the three guest speakers, all from Ampex Corp., gave their presentations to the 125 in attendance. Grant Smith presented the technical details of the new Ampex Video Tape Recorder, Model VR-1100. The audience showed much interest in the new portable Video Tape Recorder, model RV-1500, which was demonstrated by Thomas W. Harleman. Norman Bounsall described the Electronic Editor and Editec that he designed and showed a video tape recording demonstrating their versatility in animation applications.—Richard O. Painter, *Secretary-Treasurer*, 811 Atlantic, Milford, Mich.

The **Hollywood Section** meeting had a turnout of 336 persons March 26 at CBS Television City. The first presentation, *City of the Bees*, was made by Dr. Irwin A. Moon and Robert L. Miller of the Moody Institute. This macrocinematographic documentation of the life of the honey bee illustrated a departure from macro-realm photography. The demand for greater depth of field and for light sources that do not cook the bees encouraged the use of unique optical and illumination systems, which the 16mm color print vividly demonstrated.

"Compensation for Drop-Outs in Television Magnetic Tape Recording" was discussed by Edward Walsh, Sid McCollum and Kenneth Williams, Mincom Div., 3M. The phenomenon of drop-outs in tape recording has been shown to be caused by a number of problems relating to tape material and environment. Although the effect gives rise to many problems in the field of information retention and reproduction, it is most widely seen in television video-tape recording, where drop-outs show on viewing screens as random white flashes.

The speakers described the Mincom Drop-Out Compensator, a device which gains its effectiveness from the fact that, line by line, television video signals to a great degree are redundant. Each line of television signal does not vary much from the previous line, and visual illusion can be created to fill in the missing information. The result is a picture that appears to be free of drop-outs.—D. J. White, *Secretary-Treasurer*, % Magnasync Mfg. Co., 5546 Satsuma Ave., North Hollywood, Calif.

The special Academy Awards meeting of the **Hollywood Section** on April 23 brought 186 persons to M-G-M Studios in Culver City.

Waldon O. Watson of Universal-Revue Studios, who is a member of the Academy's Scientific and Technical Awards Committee, presented the following winning devices at the meeting:

Chapman Camera Cranes, manufactured by Chapman Studio Equipment, represented by Ralph Chapman, the inventor.

Bell and Howell Model C Additive Color Printer, a joint effort of Albert S. Pratt, James Wassell and Hans C. Wohlrab. Presentation made by Fred Scobey of General Film Laboratories.

Plug-In Bus Duct, joint effort of Charles E. Sutter, William E. Smith and Louis C. Kennell, Paramount Pictures. Presentation by Messrs. Sutter and Smith.

Norelco Universal 70/35 Projector, produced under the supervision of Fred J. Pfeiff of North American Philips Co. Presentation by Merle Chamberlain of M-G-M.

Cardilene Microphones, Electro Voice, Inc., represented by Dick Schnepf of I. R. Stern & Co., local distributors.

Selective Program Repeater, MacKenzie Electronics, Inc., represented by Louis G. MacKenzie, the inventor.

The Oscar-winning cartoon film, *The Hole*, was presented at the opening of the meeting through the courtesy of Brandon Films, Storyboard, Inc., John and Faith Hubley, producers, and Manhattan Films International, the local distributor. The Norelco projector was used to show both the 35mm opening film and 70mm clips from *Mutiny on the Bounty*.—D. J. White, *Secretary-Treasurer*, % Magnasync Mfg. Co., 5546 Satsuma Ave., North Hollywood, Calif.

The January 15 meeting of the **Huntsville Section** was held in the private conference room of the Pin Palace after a premeeting dinner at which the officers and Managers entertained the guest speaker, Charles O. Probst, Cook Technological Center.

After local announcements, Mr. Probst showed *Exploring the Magnetosphere and Beyond*, a film dealing with the exploration of the Van Allen Belt which was produced by his company for NASA. A second film, *The Three R's of Aerospace Photography*, explained the techniques used in producing the first film. As an extra, a three-minute "fun" film, *Charlie Atlas*, was shown.

Daniel Lovins, RCA Service Co., showed *Film Editing, Interpretations and Values*, a film produced by the Association of Cinema Editors which compared the creative editing of the same sequence by three men.

Both presentations were followed by question and answer sessions.—Karl LaRoche, Jr., *Secretary-Treasurer*, 2209 Euclid Rd., N.W., Huntsville, Ala.

Three Ansco representatives addressed the **Huntsville Section** on February 19. Forty-two members and guests attended the meeting at the Pin Palace.

Dr. Ralph A. Copeland presented a paper on "The Chemistry of Photographic Emulsions," in which he traced the de-

velopment of emulsions from the daguerreotype to today's high-speed color film. With the aid of color slides and a blackboard, he described the physical qualities of light-sensitive silver emulsions. Dr. Copeland's discussion was also supplemented by test tube demonstrations of emulsion chemistry.

A slide presentation on the history of Ansco from the early 1800's to the Space Age was given by Walter Wall. The presentation included slides made by Col. John Glenn during his Mercury flight.

Robert J. Hinman gave a chart talk on new techniques in the manufacture of film bases and emulsions.

The meeting followed a dinner at which the officers and managers entertained the guest speakers.—Karl LaRoche, Jr., *Secretary-Treasurer*, 2209 Euclid Ave., N.W., Huntsville, Ala.

The March 19 technical meeting of the **Huntsville Section**, held in the Azalea Room of the Albert Pick Motel, was attended by 48 members and guests. The guest speaker, Dr. William E. Glenn, General Electric Co., was entertained at a premeeting dinner by the officers and board members, following tours at the Army Missile Command and the NASA Marshall Space Flight Center facilities at Redstone Arsenal.

Dr. Glenn described an electro-physical method of recording visual and sound images on a special thermoplastic film by means of an electron gun. Dr. Glenn used color slides to aid his description and concluded by showing a motion picture which demonstrated the end product.—Karl LaRoche, Jr., *Secretary-Treasurer*, 2209 Euclid Rd., N. W. Huntsville, Ala.

"Methods for Evaluating Both Photographic and Electronic Image Systems" were described for the **Huntsville Section** April 16 by Dr. George C. Higgins, associate head of Eastman Kodak's physics division in Rochester.

In comparing storage capacity—information "packing" capability—of electronic and photographic systems, Dr. Higgins said 250 million "bits" of information could be recorded almost instantaneously on a square-inch of film, but the same information would take about 50 seconds to gather electronically. Dr. Higgins noted that differences in density of the granular silver structure of film were analogous to signal-to-noise ratio in electronics.

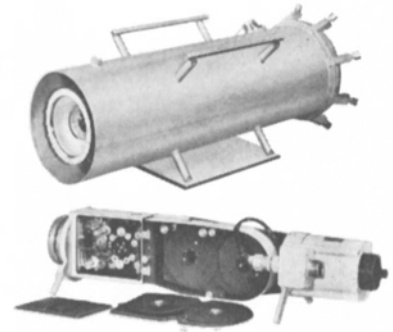
The presentation was illustrated with color slides. A question-and-answer session followed.

Thirty-one persons attended the meeting, which was held in the Azalea Room of the Albert Pick Motel. Dr. Higgins was entertained by the officers and board members at a premeeting dinner.—Karl LaRoche, Jr., *Secretary-Treasurer*, 2209 Euclid Rd., N.W., Huntsville, Ala.

The **Nashville Section** met on March 16 at Peabody College, with 20 persons attending. William Hedden, Vice President of Calvin Productions, compared and demonstrated, through the use of film clips, what could be expected from Kodachrome II, regular Ektachrome and High Speed Ektachrome color films. Then, using color slides, Mr. Hedden described the construction and working details of Calvin's new

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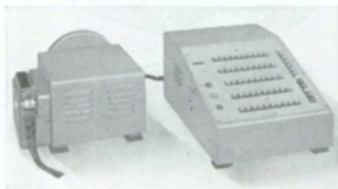
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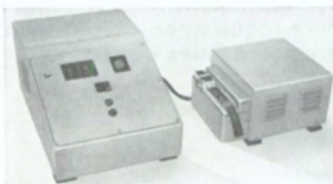
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The entire film transport mechanism maintains frictionless film handling from feed reel to torque tight-wind take-up. Internal threading light, controlled key number printing at the aperture, pop-out lamp holder, internally illuminated controls, negative break switch, new tension rollers below the aperture, all contribute to increased efficiency in your printing operation.

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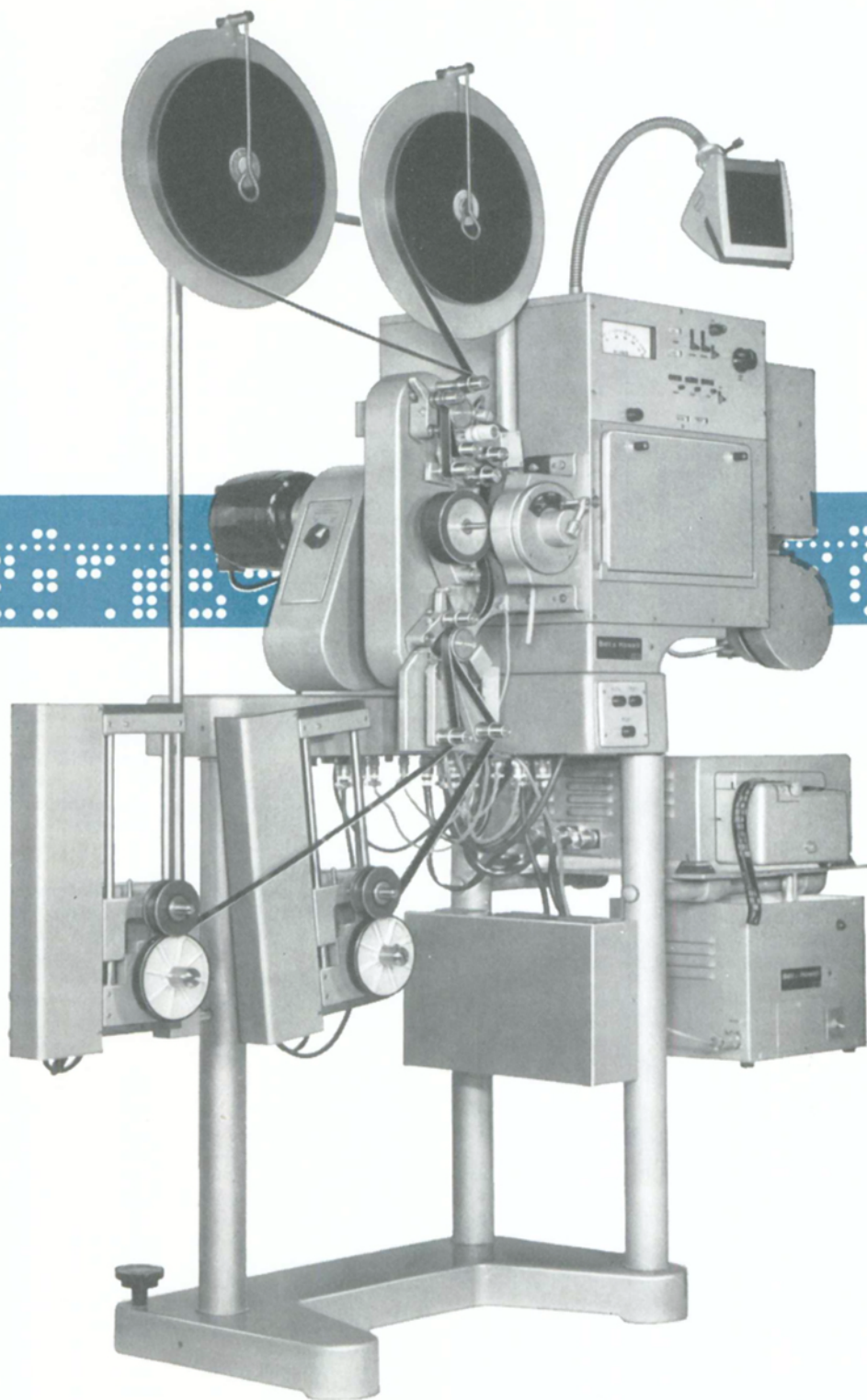
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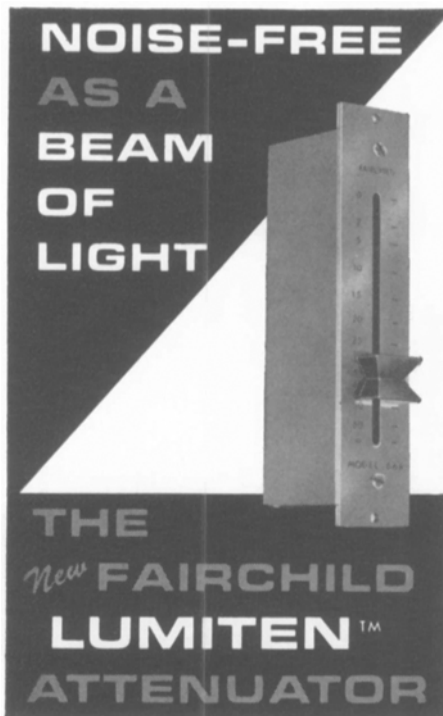
- Ability to make scene-to-scene color corrections
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- Available accessories include: a tape checker-tape duplicator unit (6173C), 1000-watt rectifier (6160), 16mm, 35mm, 35/32mm soundheads, and RF cue kits (6395).

Other printers available:

Model "MB", Automatic Black & White Printer. This model does not include fader, which is available as an accessory.

Model "MA", Manual Black & White Printer. This model can be updated to model "MB" through addition of an accessory reader.

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In addition, the FAIRCHILD LUMITEN allows flexibility in console design. Attenuator circuits can be controlled remotely by placing the FAIRCHILD LUMITEN attenuator actuator at the location and the attenuation network hundreds of feet away at the same time utilizing inexpensive connecting cables. The result is a tremendous cost reduction in wiring and also the ability to change levels from a remote point without the use of expensive servo systems. This design also eliminates the problems of noise pickup in signal cables going to and from conventional type attenuators including the problem of noise cross talk.

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automatic printer. The meeting closed with a tour of the Peabody Audio Visual Department and the TV Studio.—Anton Pilversack, *Secretary-Treasurer*, 1525 McGavock St., Nashville, Tenn.

Twenty-two members met for a premeeting dinner and 158 attended the January 9 meeting of the **New York Section**. The meeting began and ended at W.C.D. Studios, with an interim tour of the Titra Sound Studios.

Dave Horne, Titra Dubbing Co., Inc., gave a step-by-step explanation of how foreign language motion pictures are outfitted with English dialog soundtracks. Points covered were: translation of the original script to maintain a reasonable correspondence with the photography; selection and rehearsal of the dubbing cast; editing film into loops for short-burst narration; recording of new voices. Effectiveness of the technique was demonstrated by screening a portion of a Brigitte Bardot film with the original track and then with the dubbed track. An exchange of technical information with Mr. Horne and his associates, Bret Morrison, Ed Picker and Bob Rosein, followed.—Boyce Nemeck, *Secretary-Treasurer*, Reevesound Co., Inc., 35-54 36th St., Long Island City 6, N.Y.

"Quality Control in Photographic Sound Recording" proved a "magnetic" title because it drew 110 avid photographic sound enthusiasts to the February 13 meeting of the **New York Section**, one of the longest on record. Twenty-three managers, speakers, members and guests attended the premeeting dinner, a somewhat larger turnout than is customary.

The official proceedings got down to the hard facts of quality control. John Maurer opened the discussion with a carefully developed review of the history of cross-modulation testing, illustrating his comments with a series of nine $3\frac{1}{2} \times 4$ -in. slides, effectively showing the image spread phenomenon and the cross-modulation test pattern used by Dr. W. W. Kellogg, and with an enlargement of a 16mm photographic sound record of an "ess" sound. After developing the engineering logic behind the practice of X-mod testing, John came to the practical conclusion that the final test lies in the answer to: How does it sound?

Richard S. Manchec of Eastman Kodak's New York professional films department described the plotting procedure widely used in X-mod work and explained a method developed at Eastman Kodak for reading X-mod distortion directly in percent. Using 2×2 slides, he presented schematics showing the equipment hook-up customarily used and the modifications that make possible the simplified Eastman procedure. He also displayed several "percentage" plots.

John Arvonio reviewed his quality control experiences in a sound service studio where it is necessary for each photographic soundtrack recorder to produce negatives that will accommodate the varying print standards in use in as many as seven different commercial laboratories. After defining the nature of control problems encountered in service studios, he made a plea for standardization.

Jim Townsend described his experiences in quality control of photographic sound records and described a testing method that he had developed utilizing, coincidentally, some of the Eastman "percentage" principals, but basing his readings on a special test signal that he finds convenient to record at the end of every roll of soundtrack negative.

After a short break for coffee and stretching the legs, George Lewin led an hour-long discussion of quality control problems and useful ways of solving them. Participants in the discussion included sound engineers, laboratory control people and equipment designers.

The proceedings were recorded on tape and will be submitted for consideration as *Journal* material as soon as copyright and other clearances have been obtained.—Boyce Nemeck, *Secretary-Treasurer*, Reevesound Co., Inc., 35-54 36th St., Long Island City 6, N.Y.

Members of the **Rochester Institute of Technology Student Chapter** met on November 15, 1962, to hear H. Vinsinger, E. I. du Pont de Nemours and Co., discuss photo recording systems, with special emphasis on PMS papers in photographic instrumentation. Samples of recorded information were presented, and writing rates and processing speed were discussed. A lively discussion period followed this interesting presentation.—Jerry G. Hughes, *Secretary-Treasurer*.

On November 29, 1962, members of the **Rochester Institute of Technology Student Chapter** heard Albert H. Allard of Eastman Kodak speak on industrial uses of x-rays, particularly in quality control and in non-destructive testing.—Jerry G. Hughes, *Secretary-Treasurer*.

The January 8 meeting of the **San Francisco Section** was held jointly with PGA and AES. The topic of discussion was sound reinforcement in the design and remodeling of auditoriums, theaters and classrooms.

R. A. Isberg, University of California at Berkeley, discussed new techniques and equipment in the field of audio systems and demonstrated directional linear array loudspeakers, frequency shift feedback stabilizers and the RCA directional microphone developed by Rettinger.

The frequency shift feedback stabilizer, designed by Schroeder of Bell Telephone Labs and manufactured by a Detroit firm, shifts the frequency of the audio signal fed to the loudspeaker by approximately 5 c, thereby overcoming some feedback resonances between speaker and microphone. This results in an approximate 6-db increase in volume. The linear array loudspeaker, or line radiator, essentially compresses sound in the vertical plane and radiates the energy directly toward the audience.—Harry N. Jacobs, *Secretary-Treasurer*, 333 Buena Vista, Mill Valley, Calif.

Guest speaker for the February 12 meeting of the **San Francisco Section** was Tullio Pellegrini, well known by Bay Area motion-

picture producers for having developed and manufactured a variable shutter unit for use on Bolex motion-picture cameras.

For approximately the past year and a half, Mr. Pellegrini has been working on a motion picture showing the life cycle of humming birds. In order to show the wing action of these birds, a special shutter unit was incorporated in a 16mm Bolex to give an exposure time as short as 1/13,000 sec at 24 frames/sec. Production problems such as night photography, special lighting, and extension tube work were discussed. Print quality of ER Ektachrome and K2 Kodachrome, intercut as the original and printed on Eastman 7386 print film, were compared.

Mr. Pellegrini's work was so well received by the Encyclopedia Britannica that they purchased it for use in their library. The meeting concluded with the showing of a work print of the film, with magnetic sound, and a lively discussion of the trials and tribulations of making a documentary film of this nature.—Harry N. Jacobs, *Secretary-Treasurer*, 333 Buena Vista, Mill Valley, Calif.

On March 12, 25 members of the **San Francisco Section** met at KGO-TV Studio D. Guest speaker was Walter Beyer of Universal Studios, chairman of the Research and Educational Committee of the American Society of Cinematographers.

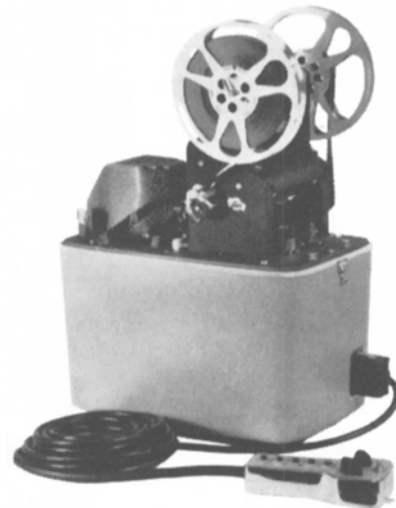
Mr. Beyer outlined the activities of his ASC committee and explained in detail the technical recommendations issued over the last two years to benefit both the television and motion-picture industries. He illustrated existing problems involving the release of theatrical wide-screen prints over TV networks and concluded his paper with a brief news report on achievements in such areas as traveling matte photography, 16mm film projectors, use of xenon high pressure arc lamps in projection and automated projection equipment. Slides and a 35mm film accompanied Mr. Beyer's presentation. A question-and-answer period followed.—Harry N. Jacobs, *Secretary-Treasurer*, 333 Buena Vista, Mill Valley, Calif.

Recent advances in TV camera equipment were described for 40 members and guests of the **San Francisco Section**, meeting at KGO-TV on April 9. The speaker was C. M. Brainard, Vice President of Reeves Electronics, Inc., Los Angeles, who demonstrated four new General Electric cameras.

Members of the audience expressed particular interest in the Model TE-17 image orthicon camera, which has a sensitivity comparable to an ASA film rating of 200,000, and in the new PE-23 studio vidicon camera, designed to perform 80% of the tasks for which image orthicons

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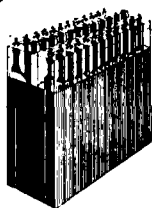
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are presently used. The program was followed by a question-and-answer period, and all present had an opportunity to operate the cameras.—Harry N. Jacobs, Secretary-Treasurer, 333 Buena Vista, Mill Valley, Calif.

books reviewed



Modern Infrared Technology

By Barron Kemp. Published (1962) by Howard W. Sams & Co., Inc., 4300 W. 62 St., Indianapolis 6; and New York, N.Y. 5 1/2 by 8 1/2 in. 255 pp. illus. diagrams, index, Price \$4.95.

The use of infrared rays permits of carrying out many operations that are difficult or impossible with visible light. These run all the way from discovering new properties of materials to various types of secret scrutiny. There have been many developments of technique in recent years, and this book aims to describe these in a simple way for the use of technicians — particularly, it happens, electronic technicians.

The subjects which it covers specifically are the general characteristics of infrared rays, and how they differ, from the "near" infrared of 1-micron wavelength, and just over; to the "far" region just under 100-microns wavelength; sources and detectors of such rays, optics and imaging devices, spectroscopy and spectrophotometry, and various infrared devices from remote temperature meters to cloud attenuation meters.

A very useful appendix is a glossary — though one can quarrel with some of the entries. For example, abbreviations are given for "holocandle power" and "hololumen," but no definitions (which would seem more important) appear for these.

One might say, also, that for a book giving simple descriptions it would be most useful to include good references to enable the reader to fill in his information on any particular item. But not a single reference is given. Also there is no discussion of direct photographic image detection on film. Nor is there any mention of the recent very successful techniques of interferometric spectrometry.

In spite of these gaps the book serves as a handy general reference to most of the recent work on infrared.—*Pierre Mertz*, Consultant, 66 Leamington St., Lido Beach, L.I., N.Y.

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Motion-Picture Production. Wanted: Association with producer of educational films in New York City area. M.W., P.O. Box 97, Midwood Station, Brooklyn, N.Y.

Director of Sound Recording, with 13 yrs experience in the production of industrial motion pictures and slidefilms for a large eastern electrical manufacturer invites position offers which would afford further advancement both in position and salary status. Resume on request. M. D. Robinson, 5 Koon St., Troy, N.Y.

Visual Communications Specialist. Expert in slides and filmstrip production. Executive caliber. Engineering degree. Commercial and industrial background. Thorough experience in complex camera operation, color processing and printing. Own design and installation of photographic equipment with electronic controls. Instructor, technical writer, able to organize training programs. Can submit proof of positive performance. Desire heavy responsibility. M.G., 68-46 Groton St., Forest Hills 75, N.Y.

Director-Cameraman-Editor. Young creative, productive woman seeks position, preferably in Los Angeles area or in New York, with motion-picture or television company, theatrical, industrial or educational providing opportunity for intensive training and increased responsibility. Masters Degree in Theater Arts from UCLA. For full resume write: Scylla R. Trad, c/o Manager of 625 Landfair Ave., Los Angeles 24, or phone GR 9-5404.

Motion-Picture Equipment Sales, Service, Design Man. Married, children. 16 yrs practical shop experience, including machine tool operation, drafting. 8 yrs, engineering, design and development oscillograph recording cameras. Formerly with Camera Equipment Corp. in sales, Animation Equipment Corp. sales and service. Experience in sales, promotion, motion-picture production. Can handle projects from drawing board, through shop, to sales and advertising. Experience in writing instruction manuals, also photography and technical illustration. SMPTE member 18 yrs. Desire position in N.Y. area but will relocate if necessary. Full resume sent on request. Ed Kinderman, 321 E. 21st St., Paterson 3, N.J.

Positions Available

Manager, Renta Department. To coordinate and be in full charge of the many operations which are part of a professional motion-picture equipment rental department. Knowledge of Arriflex, Auricon and other cameras; Moviola and other editing equipment; lighting and sound equipment. Send resume to Charles Lipow, General Manager, The Camera Mart, Inc., 1845 Broadway, New York 23, N.Y., or phone PLaza 7-6977.

Civilian Personnel. Westover Air Force Base is presently recruiting for these positions:

Two Male or Female Physical Scientists (Photo) at a starting salary of \$12,845 per year. Accept-