

93rd Semiannual Convention Held at Atlantic City, April 21-26



Dr. Elmer W. Engstrom, president of Radio Corporation of America, snips a ribbon of motion-picture film to open the equipment exhibit. Looking on, left to right: Exhibit Chairman Dennis E. Kealey, Convention Vice-President Geo. W. Colburn, President Reid H. Ray.

The Spring Convention held in The Traymore at Atlantic City was one of the best in the 47-year history of the Society, on the basis of all aspects together: A final registration figure well past the 700 mark, the format of the program and quality of the technical sessions, the accomplishments of the sundry committees, and the interest generated by the equipment exhibit.

The State of the Society

Society President Reid H. Ray, head of the St. Paul, Minn., motion-picture production organization bearing his name, welcomed members and guests at the Get-Together Luncheon on Monday, April 22. Brief excerpts from his address follow:

"As the 23rd president of the Society, I would like to quote from the welcoming speech of the *first* president, C. Francis Jenkins. It was in Atlantic

City in the spring of 1917 that Mr. Jenkins said: 'When in October this meeting was set for Atlantic City, I wondered who would come. I am gratified, therefore, to see so many of you here, for you represent the workers, those who can be depended upon to accomplish things. I think we may with profit and prophecy compare our industry to the sunflower, which from a tiny seed shoots up in the spring a tender green sprout, which the browsing beast crops if left unwatched. But safely past this period of growth, it begins to form a woody stalk to stand alone against the autumn winds and hold aloft its golden crown.'

"And so, with the same spirit of friendliness, I welcome you to the 93rd Semiannual Convention in the spring of 1963 and am most appreciative of the attendance.

"Through 47 years, our Society has matured, and through the intelligent

and long-range planning of previous administrations, the Society has grown to its present international eminence and esteem by accomplishing the aims and objects of our Constitution. There are many the Society has served through establishing standards, fostering education, and disseminating scientific information. Past is but prologue, so we look now into the future.

Immediate Activities

"That the years ahead shall continue to be fruitful to the Society is the concern of your administration. We have obligations to our Fellows, our Active, Associate and Student Members, and our Sustaining Members; we also have obligations to our future engineers who will follow. . . To consummate our program will take the efforts of many, and these I can count on, I am sure.

"About July 1, Society headquarters will move to a new location on East 41st Street in New York. Here larger and uncrowded work areas will enable the staff to accomplish its work in surroundings conducive to creativity and efficiency. A planned public relations program, supervised by editorial personnel, is under way, and a committee is formulating a long-range program to build the image of SMPTE to one of a warm, cooperative, and understanding Society.

"Improved editorial policy has shown progress, and when committees meeting this week conclude their work, a program of publications now in the planning stage will move into the production stage. Our monthly *Journal* will continue to serve as a means of disseminating information throughout the world . . .

The Near Future

"We must stimulate, promote, and inspire future engineers in the fields we represent . . . To bring knowledge and wisdom to deserving students in the engineering sciences of motion pictures, television, instrumentation and high-speed photography calls for a helping hand stretched out to the deserving. An SMPTE Scholarship Fund should be established and become an annual award when a deserving young engineer is selected by the Committee for Scholarship Awards. Then we will carry out more completely our Constitution's Article II, which states that the Society ' . . . in order to foster its scientific purposes . . . shall . . . use funds and properties of

any kind to advance the scientific aims of the Society.'

"There are, as you know, several photographic, scientific and engineering societies that seem to have unnecessarily overlapping functions and activities. The question of whether there should be an organizational merger of any sort has been explored by an Inter-Society Liaison Committee. It has reported in the affirmative, and this Society's Board of Governors has accepted the report. The next step is the formation of committees in the separate societies to draw up possible step-by-step procedures and recommendations for implementing these... This will take time, but the objective is to benefit all members and workers in motion pictures, television, photographic science and instrumentation...

"If we did not look toward higher goals, we would not be fulfilling the principles on which our Society was founded in 1916. It has been said, 'We must look at the past not only because it shows us how finite we are, what creatures of our determinations, but also because we are responsible agents in history, and we must study the past to free ourselves for the future. We must know the past, and then we must not be preoccupied with it.'

"I believe I can promise that the Officers and Board of Governors serving with me this term have these aims firmly established for fulfillment before the end of 1964."

Horizons in Electronics

The Monday Get-Together Luncheon speaker was Dr. Elmer W. Engstrom, President of Radio Corporation of America. He last spoke to the Society when he was the recipient of the SMPTE Progress Medal in 1955 for leadership in developmental research in sound motion pictures and television.



Dr. Engstrom speaking.

Electronics may be the "single most important instrument" for meeting the world's social and economic problems, he said. Dr. Engstrom described electronics as "a new and essentially unlimited technology capable of application to virtually every organized human activity." He said that image electronics "is becoming one of the most useful tools ever placed in the hands of man, and such use will in time overshadow all its other purposes."

Dr. Engstrom noted that in advanced industrial civilizations, organized social and economic activities frequently have grown "almost beyond the capacity of men or mechanization to handle." Electronics would be necessary, he said, "if only to cope with the growing complexity of life in an increasingly crowded and busy world."

"Although I do not meet my colleagues in motion pictures as often now as during an earlier period," he told the SMPTE members and guests, "nevertheless I am reminded constantly of our community of interests. The motion picture continues to be a common linking force in a

multitude of services. The motion-picture-electronics relationship has been one of benefit and gain to both.

"On the newer horizons of technology, further opportunities for exploration are evolving, and these also hold great promise for the growth of our two techniques. On the Atlantic Missile Range at Cape Canaveral, motion-picture systems match those of television in ingenuity and in importance to the nation's space effort.

"Motion pictures work side-by-side with the burgeoning new field of educational TV. There is even an interesting example where television acts as a sort of watchdog to the motion-picture camera, helping it to maintain the proper fix on objects it is photographing. Indeed, I suspect there are few limits to technical collaboration in the constantly changing fields in which we work."

Dr. Engstrom observed that electronics progress will affect all areas of visual communications. "Both the television and the motion-picture arts benefit from the new understanding of materials and optical techniques, from the broadly useful advances in display methods, from new electronic control principles, and from fresh and creative thinking in the art of visual communications," he said.

"Today, at a time of major transition to new electronics horizons, there is much to challenge the imagination and stimulate the opportunities in both our engineering areas," Dr. Engstrom concluded. "We have indeed barely begun to exploit the opportunities for growth."

Other Convention Highlights

Before reviewing the Papers Program and other major activities, several activities deserve attention.

An honored guest at the head table at the Monday luncheon was William C. Hunt of Wildwood, N.J., a pioneer in the motion-picture industry and head of



Arthur J. Miller, Local Arrangements Chairman; Joseph T. Dougherty, Financial Vice-President; Dr. Engstrom; Dr. Deane R. White, Engineering Vice-President.



President Ray, Editorial Vice-President Herbert E. Farmer, Treasurer Wilton R. Holm, Dr. Engstrom.

mark
16/35

TOP SECRET
SIMPLICITY



P R O C E S S O R

• semi-portable • accepts 16mm or 35mm
film without adjustment • speeds up to 3000 ft. per hour
• daylight operated • standard or hot solutions • adjustable speed,
temperature, replenishment • completely automatic

Detailed information on request.

OSCAR FISHER COMPANY, INC. ♦ *Newburgh, N. Y., U. S. A.*



AUTOMATIC PROCESSING EQUIPMENT • PROCESSING SINKS •
TEMPERATURE CONTROLS • REFRIGERATION UNITS • HEATING
AND REFRIGERATION UNITS • FILM DRYERS • CHEMICAL HAND-
LING EQUIPMENT • PRINT WASHERS • FILM WASHERS • GAS
AGITATION UNITS • DEVELOPING TANKS • FILTERS • PROCESS
TRAYS • PUMPS • TRAY RESTS • DUCKBOARDS • SILVER RE-
COVERY UNITS • FILM STORAGE VAULTS • PASSIVATING POLISH •
SAFE LIGHTS • VIEW LIGHTS • ILLUMINATED DRAIN BOARDS



Governor G. Carleton Hunt with his uncle, William C. Hunt, and President Ray.



President Ray; Dr. Henry N. Kozanowski, Program Chairman; Dr. Engstrom.

Hunt's Theatres, Inc., a sustaining member of the Society. Mr. Hunt, who is 91 years old, operated one the first nickelodeons in the United States. He is the uncle of SMPTE Governor G. Carleton Hunt.

On Sunday evening before the Convention, there was a very well attended program similar to one held in Toronto two years ago: after a buffet dinner the current film *The Birds* was shown.

On Wednesday afternoon there was a complete sell-out of the quota of tickets for a trip outside Atlantic City where the Federal Aviation Agency gave a lecture tour of the National Aviation Facilities Experimental Center.

The Wednesday evening cocktail party and dinner dance brought a splendid turnout for a rewarding mid-week respite.

Short Film Subjects

These exemplary, often entertaining, short films are an adornment of SMPTE programs. The excellent lot of films which were shown throughout the week at the opening of papers sessions was chosen by Tom Hope of Eastman Kodak Company. They were:

A City Called Copenhagen, 20 min, 16mm color. Produced by the Danish (Government) Film Unit. A light and humorous travel story with imaginative cinematography and editing, this film avoids many of the stereotyped approaches used in so many travel films.

Commodore Boat Trailer, 8 min, 8mm color. Produced by Spicewood Productions, Inc., Austin, Texas, for Lone Star Boat Co. A fine example of 8mm reduction print from 16mm, entertainingly showing how easy the product works, even in the hands of young ladies.

Glas, 9 min, 8mm color. Produced for The Netherlands Government by Bert Haanstra. Print by Technicolor, London. A 16mm print of this film was on the Lake Placid SMPTE program, October, 1961. Outstanding for its film edited to the musical score. No narration; a strong visual story of making glass bottles.

The Mental Status Examination, 40 min, 16mm black and white. Produced by the Communicable Disease Center for National Institute of Mental Health. Demonstrates the techniques of conducting an in-

ital interview in a mental status examination in order to diagnose, understand, and treat emotionally disturbed patients. Shows how information is compiled and analyzed. Case histories presented in dramatic form.

A Night Out With Mr. Toad, 11 min, 16mm color. Produced by Ken Middleham Productions, Riverside, Calif. Close-up cinematography shows crickets, dew drops and other small life seen through the eye of a toad.

Project Gemini — Mission Concept, 21½ min, 16mm. Produced by National Aeronautics and Space Administration. A report film made to tell Congress what the new two-man Gemini space program will be.

Project Telstar, 27 min, 16mm color. Produced by Audio Productions for American Telephone and Telegraph Co. A graphic story of the planning and final launching of the satellite Telstar.

Say It Again, 10 min, 16mm color. Produced by Empire Photosound, Minneapolis, for International Minerals and Chemicals Co. An industrial film telling executives what audio-visual facilities are available for their use.

The Sun Is Not For Sale, 25 min, 16mm black-and-white. Produced by WRCV-TV, NBC in Philadelphia. A little boy sees his farm being auctioned.

Symphony In Motion, 10 min, 35mm color. Produced by Winik Films for Paramount Pictures. Gymnastics performed in Sweden by talented girls and men.

Timberline, 24 min, 16mm color. Produced by Homer Groening Advertising Agency for Timberline Lodge, Government Camp, Oregon. A lampoon on Ingmar Bergman, this story of life at a ski lodge has surprises — girls in bikinis, for example.

The Triumph of Lester Snapwell, 22 min, 16mm color. Produced by Eastman Kodak Co. Starring comic Buster Keaton, the film is for simultaneous release in 70 countries as Kodak introduces its new Instamatic camera and film program. Intended primarily for overseas audiences, the film is mostly pantomime.

Values and Interpretations, 27 min, 16mm black-and-white. Produced by the American Cinema Editors. Three well-known Hollywood film editors take a sequence from

the TV series, *Gunsmoke*, and edit it into three versions.

Where Mileage Begins, 25 min, 16mm color. Produced by Audio Productions for General Motors Corp. The story of a 4-cycle engine, including dramatic stop-motion sequence of hundreds of parts assembling themselves into finished motor.

The Papers Program

The body of the Convention was organized into a format of twelve sessions of technical papers and one session of equipment papers and demonstrations, with no sessions concurrent. Under the Society's organization the papers program is the responsibility of the Editorial Vice-President, Herbert E. Farmer of the University of Southern California, and of the Papers Committee Chairman, C. Loren Graham of Eastman Kodak Co. They are responsible for all convention programs wherever held.

Dr. Henry N. Kozanowski of Radio Corp. of America at Camden, N.J., was Chairman of the Papers Program. It was he who organized 72 papers into an overall program that was very well attended from Monday morning to Friday afternoon, ranging from film processing subjects to concerns in education. Dr. Kozanowski had the support of the Society's worldwide Papers Committee (see the April *Journal*, pp. 309-310) and especially the productive support of the Topic Chairmen, who are most important for every program. These were Rodger J. Ross of the Canadian Broadcasting Corp., O. S. Knudsen of Iowa State University, John J. Kowalak of Movielab, Inc., Morton Sultanoff of Aberdeen Proving Ground, R. L. Pointer of American Broadcasting Co., C. Loren Graham of Eastman Kodak Co., and H. M. Gurin of the RCA Astro-Electronic Division.

There were 72 papers in the printed program which was carried out with only one cancellation and for that a substitution was made.

The first session, "Laboratory Practice," was chaired by John Kowalak, with Edgar Schuller as vice-chairman. Papers were presented by Leslie I. Edgcomb and Gerald M. Seeley of Eastman Kodak on conver-

The Electro-Voice Model 642
Cardiline Microphone Earns

THE FIRST
ACADEMY
AWARD
FOR
MICROPHONE
DESIGN
IN 22 YEARS!

Today's movies, radio, TV and recordings sound better, thanks to a microphone design that has revolutionized sound pickup techniques. It is the Electro-Voice Model 642 Cardiline® ultra-directional microphone.

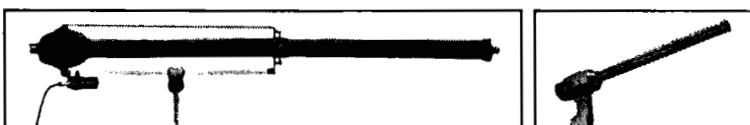
The E-V 642 has contributed so much to motion picture sound that on April 8, 1963 it was presented the coveted Academy Award certificate by the Academy of Motion Picture Arts and Sciences—the first such award to a microphone in 22 years!

Film sound engineers found the unique 642 Cardiline design sharply reduced effects of noise and distance. They obtained clear, crisp sound under circumstances previously thought impossible.

The 642 is another major achievement by Electro-Voice in the art and science of electro-acoustics. This engineering leadership extends equally to professional and commercial sound, home high-fidelity recording and reproduction—even to phonograph needles and cartridges.

No matter what your interest in sound, look to Electro-Voice for the consistently superior engineering that means award-winning performance for you.

Model 642
\$390.00 list



The E-V Cardiline* principle is also found in the famed 7-foot long E-V Model 643 (\$1,560.00) and the popular Model 644 for critical commercial sound installations (\$110.00.) All prices list, less normal trade discounts.

*T.M. Reg., Patents Applied For

Electro-Voice®
"ACADEMY AWARD-WINNING SOUND"

ELECTRO-VOICE, INC., Dept. 631JJ, Buchanan, Michigan
Enter my subscription to "Microphone Facts", the FREE E-V newsletter on professional microphone applications.

Name _____

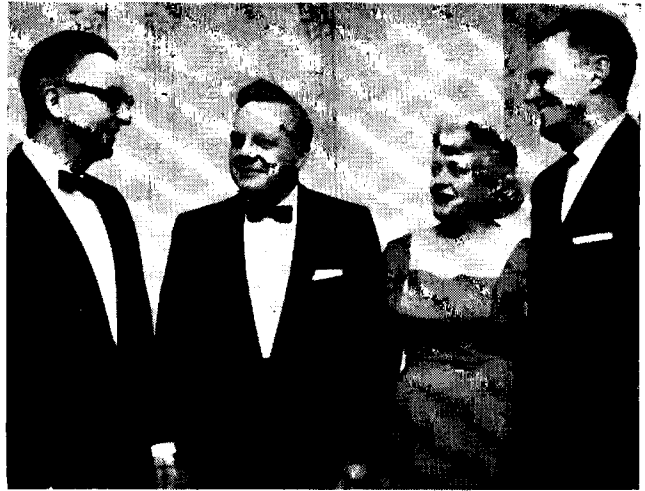
Company _____

Address _____

City _____ State _____



Past President John W. Servies, Mrs. Reid H. Ray, President Ray, Mrs. Servies.



Herbert E. Farmer, Executive Vice-President Ethan M. Stifle and Mrs. Stifle, Governor Kenneth M. Mason.



Mr. and Mrs. Arthur J. Miller.

sion of processing machines to viscous-layer development; by L. B. K. Happé of Technicolor, London, on "Controlled Modification of Color Rendering"; by Henry Dussault of St. Zotique, Quebec, Canada, on a time-delay synchronization system; and by Stanley Gitner and Jules Leni, Comprehensive Filmtreat, New York, on rejuvenation of motion-picture film. Other papers in the laboratory practice session were presented by R. R. Epstein and L. O'Donnell of Canada's National Film Board, on the Pilot-Tone synchronization system; by E. H. Reichard of Consolidated Film Industries, Hollywood, on a vapor recovery system; by Kodak's Oran E. Miller and Stanley A. Powers on new filters for electronic color densitometers; and by Gustavo Anderson of Hazeltine Corp. and T. J. Gaski and Mr. Kowalak, both of Movielab, Inc., New York, on an electronic previewer and exposure analyzer.

Especially well-attended was the Monday afternoon session on 8mm and 16mm film, which had C. Loren Graham as chairman and Malcolm G. Townsley as vice-chairman. New 8mm projectors were discussed in papers presented by Lee H. Schank, Fairchild Camera and Instrument Corp.; Kazuyuki Okada, TOEI Co., Tokyo

(read by by C. Loren Graham); and John D. Mitchell of Kodak. A. Coma of Eclair International Diffusion, Paris, told about a new portable, self-blinded 16mm camera; Morris E. Brown, William A. Martin and Henry O. Schmitt, all of Kodak, presented a paper on a new battery-powered 8mm camera. Closing this session were a paper by Charles O. Probst of Cook Technological Center, Morton Grove, Ill., proposing a new-type 16mm nontheatrical leader, and a paper describing a high-speed multiple dubbing machine for 8mm, by Irving Posluns of Edward Productions, Montreal.

The Monday evening session on "Fundamental Concepts" featured three solid engineering papers: "Optical Measurements on Telstar" by J. S. Courtney-Pratt of Bell Telephone Laboratories, J. H. Hett of Hett Associates, Cresskill, N.J., and J. W. McLaughlin, also of Bell (published in the earlier pages of this issue of the *Journal*); "Quantum Yield, Noise Equivalents, and Resolving Power of the Photographic Process" by Otto H. Schade of RCA; and "The Search for Steadiness of Speed," by W. R. Isom, also of RCA. W. T. Wintringham was chairman of the session.

H. M. Gurin was chairman and C. W. Wyckoff, vice-chairman, for the Tuesday morning papers on the general theme of "Motion Pictures and Television in Outer Space." The papers and authors: "Infrared Tracking Mounts for Missile Ranges" by Bernard D. Plakun, Barnes Engineering Co., Stamford, Conn.; "Cameras and Techniques Used in Photographing Atlas Booster Separation," Charles N. DeMund, General Dynamics/Astronautics; "New Missile-Borne 16mm Intermittent Camera for High-G Environment," T. H. Truesdell, D. B. Milliken Co., Arcadia, Calif.; "Automatic Picture Transmission from Nimbus," R. A. Stampf and W. G. Stroud, NASA; "Improved High-Resolution Electron Gun for Television Cameras," S. Gray, P. C. Murray and O. J. Ziemelis, RCA; and "Design of Satellite Tape Recorders—After Tiros I," A. B. Burt, S. P. Clurman and T. Wu, RCA.

The afternoon and evening sessions on Tuesday were devoted to instrumenta-



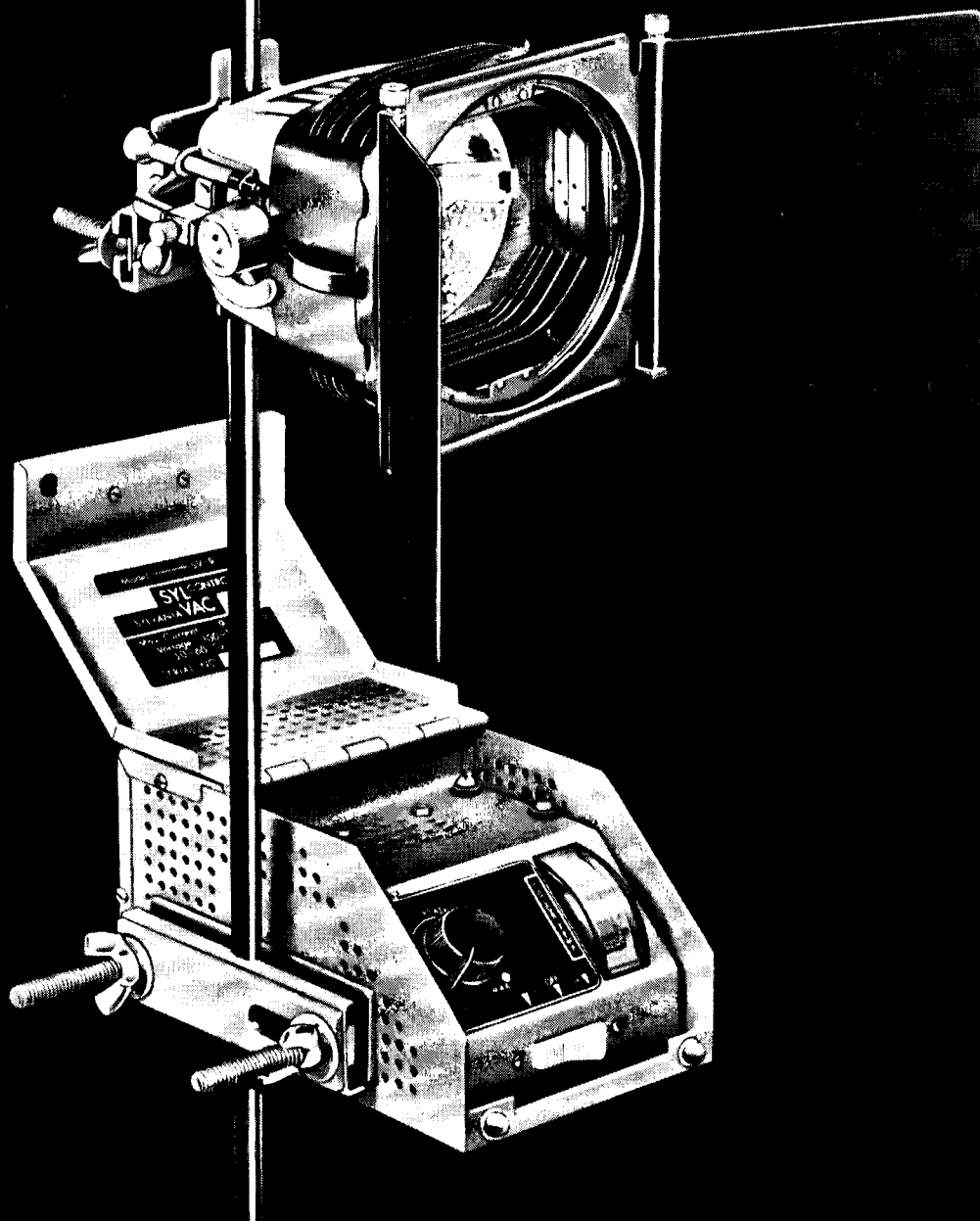
Geo. W. Colburn and Entertainment Chairman Saul Jeffee.

tion and high-speed photography. The chairmen were Morton Sultanoff and J. S. Courtney-Pratt; vice-chairmen were Charles Wyckoff and Max Beard.

The afternoon session opened with a paper by P. M. Carey of Central Dynamics, Montreal, on a system for simulating the moving perspective view from an airplane. Other papers during this session: "Masks to Pack Circles Densely," E. N. Gilbert, Bell Telephone Laboratories; "A New Fast-Opening, Large-Aperture Shutter for High-Speed Photography," Esther C. Cassidy and Donald H. Tsai, National Bureau of Standards; "A Programmed Kerr-Cell Camera," Sumner Ackerman of EG&G, Boston; and "Shadowgraph of Bright Objects," M. A. Levine, W. G. Chace, C. V. Fish and J. C. Hegarty, Air Force Cambridge Research Labs.

Robert L. Beard of Ford Motor Co. opened the evening high-speed photography session with a paper entitled "Engineering Through Motion Pictures." Also heard were these papers: "The Use of Photographic Triangulation in Determining the Positions of Objects in Large-Scale Experiments," Donald E. Phillips, U.S. Naval Ordnance Laboratory; and "Photographic Studies of Mode and Polarization Phenomena in Ruby Lasers" C. M. Stickley of Air Force Cambridge Research Laboratories, D. W. Lipke of NASA, and T. J. Healey, STL Products, New Hyde Park, N.Y.

Look What's Happened to the SUN GUN® Photo Light!



Now it's all head (no handle)—easier to mount with a new universal post clamp.

Now it comes complete with a new transistorized SYLVAC™ Control that lets you dial the color temperature you need for each shot.

And it's a complete, portable, studio lighting system priced lower than you would ever imagine.

The new 3½-lb. SUN GUN Photo Light is equipped with dual leaf rotating and locking barn doors that turn a full 360°. And there's a full range of standard and optional accessories that lets you do virtually anything with the light from its powerful 1000-watt lamp.

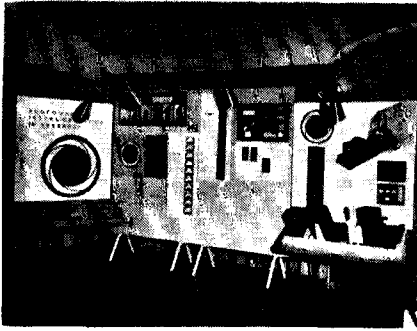
The new SYLVAC Control tells you the exact voltage

across the lamp, allows you to dial the precise color temperature you require—gives you quick, easy, fingertip control of light intensity and lighting ratios for black-and-white work, too. It comes in two models: SV-9 for controlling one SUN GUN photo light, SV-20 for controlling two.

Details? Ask your dealer—or write Sylvania SUN GUN Products, Sylvania Electric Products Inc., 730 Third Ave., New York 17, N. Y.

SYLVANIA
SUBSIDIARY OF
GENERAL TELEPHONE & ELECTRONICS





U. S. Government Exhibits: Above: Naval Ordnance Laboratory, Naval Photographic Center; below: Department of Agriculture, Ballistic Research Laboratory.

The Wednesday morning equipment papers and demonstrations featured a number of the machines on display in the convention's Equipment Exhibit. Chairman for this session was Dennis Kealey; Dominick J. Capano was vice-chairman.

Papers under the topic headings of television circuit development, color and monochrome TV, and automation in TV were presented Wednesday afternoon and Thursday morning. J. L. Wilson was chairman and V. J. Duke, vice-chairman for the first session. For the second session, Frank Marx was chairman; Irwin Ross, vice-chairman.

The papers: "Video Circuits for Transis-

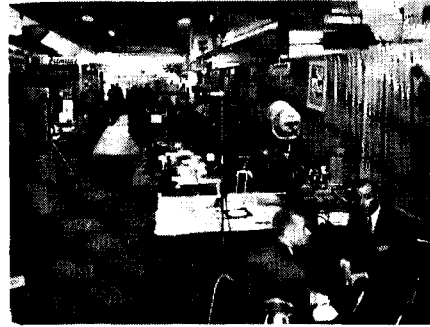
tor Television Cameras," D. Bray and G. E. Hayden-Pigg, EMI Electronics, England; "Power Supplies for Image-Orthicon Transistor Television Cameras," R. Matchell, R. B. Hale and Mr. Hayden-Pigg (read by D. Bray); "A Crispener for Television Images," E. F. Brown, Bell Telephone Laboratories; "A New Method for Marking the Safe-Title Area on Television Preview Monitor Screens," John L. Boor, EON, Seattle; "Pulse Distribution Amplifier With New Pulse Re-Forming Technique," A. J. Banks, RCA; "An Overview of Video Amplifiers for Television Camera Tubes," K. Sadashige, RCA; "Operational Stability and

Color Fidelity of Broadcast Color Television Monitors," Mr. Sadashige and Wallace J. Austin, RCA; "Analysis of Color Errors in Color Television Cameras," I. C. Abrahams, General Electric; "Color Television Matching Techniques," E. P. Bertero, NBC; "Considerations in the Design of a Transistorized Processing Amplifier," A. J. Trost, Ampex; "A Vidicon Camera for Studio Application F. A. Sachs, General Electric; and "An Approach to the Automation of Television Studio Program Production," Minoru Hayashi, Sakae Hosoi, Takao Uminuchi and Kenichi Hara, NHK, Tokyo.

R. S. O'Brien was chairman of the session on "Motion Pictures for Television, and Video Tape," held Thursday afternoon. E. P. Bertero was vice-chairman. The papers: "Factors Affecting the Determination of Monochrome Television Film Exposure," Harold Wright, CBS; "Drawbacks of the Traditional Exposure Meter and Techniques for Using Spot Photometers," Mr. Wright; "Effective Film Production With Electronic-Cam," read by Rodger J. Ross for Fritz Lehr, Arnold & Richter, Munich; "Electrical Installation Techniques for a Large Film Production Center," J. Robert Mann, E-J Electric Installation Co., and A. Norman Leigh, MPO Grand Central Studios, both New York, "Progress in Video Tape Standards: A Committee Report," Robert M. Morris, member of SMPTE Video-Tape Recording Committee; and "A Recently Developed Magnetic Film with Wide Dynamic Range," Alfred H. Moris, Minnesota Mining and Manufacturing.

Three sessions on motion pictures and television in education, held on Thursday evening and all day Friday, closed the 93rd Convention. The chairmen for these sessions were David Anderson, Steve Knudsen and John C. Mahon, Jr. The vice-chairmen were Walter I. Kisner, Dominick J. Capano and Frank Reinking.

The papers: "Motion Pictures and the Defense Industry," L. A. Shaffer and H. N. Collins, RCA; "Design Factors of an Educational Television Program Production Center," Sol Cornberg, New York; "New Techniques in Closed-Circuit Television for Dental Teaching," S. A. DiSanto, University of Pennsylvania; "A Systems Engineering Approach to Educational Facilities," John W. Wentworth, RCA; "Development of the Educational Single-Concept Film in Great Britain," L. B. K. Happé, Technicolor, London; "Are Sound Motion Pictures Necessary?" Maxwell A. Kerr, General Electric; "Motion Pictures for Education—Should They Be Tied to Amateur Movies?" Clyde R. Keith, Board of National Missions, New York; "Experimental Instructional Facilities and Systems for College Teaching and Academic Research," Morton C. Gassman, Alan C. Green and William L. Millard, Rensselaer Polytechnic Institute; "The Film Today: Renaissance of a Medium," Haig P. Manoogian, New York University; and "A Film Program for College Chemistry: A New Approach," David G. Anderson and Andrew Patterson, Jr., Yale University.



Parts of the two levels of displays in the Equipment Exhibit.

The old-fashioned "mix-and-mess" of bulk chemicals can go right in the ash can. Hunt research brings you a totally new concept for processing B & W cine reversal film . . . **CINE LIQUID CONCENTRATES.**

A complete all liquid system for reversal processing, it takes the guesswork out of "mix-it-yourself" chemistry and does away with the waste of bulk chemical inventories. The Cine Liquid system includes ■ *Cine Liquid 1, Reversal First Developer,*

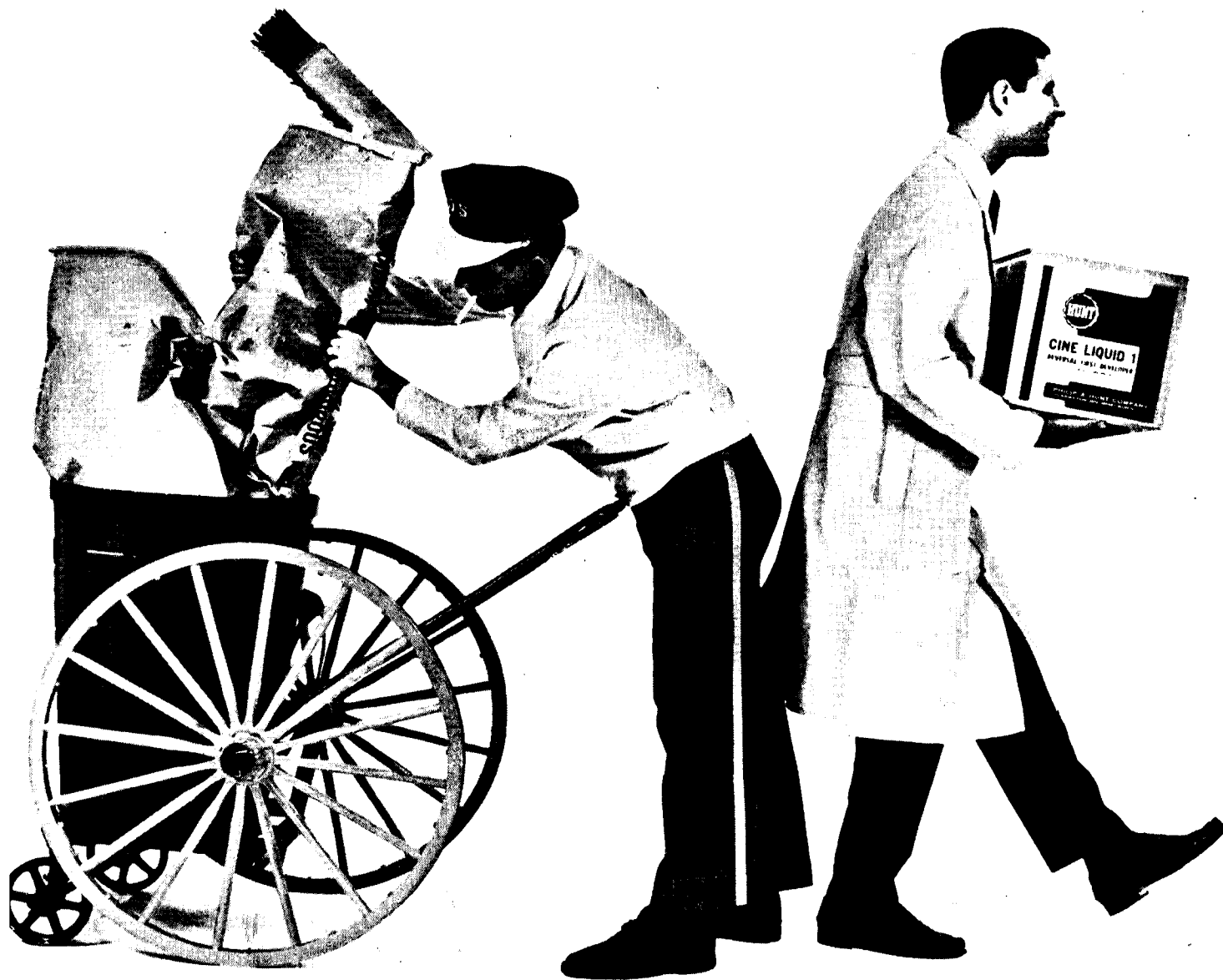
- *Cine Liquid 2, Reversal Bleach Solution,*
- *Cine Liquid 3, Reversal Clearing Solution,*
- *Cine Liquid 4, Reversal Redeveloper.*

At last the problem of developer degradation has been overcome through the exclusive

**throw
away
messy mixing
forever**

Hunt patented *Developer Activator**. By simply adding the *Hunt Developer Activator** to *Cine Liquid 1 (First Developer)* or *Cine Liquid 4 (Redeveloper)*, the user is guaranteed a ready-to-use factory-fresh solution regardless of how long the concentrate has remained in inventory. When using Cine Liquid Concentrates, you'll find them in easy-to-handle 5-gallon Cubitainers, each of which produces 20 gallons of consistent working reversal chemicals. Insure a successful finish to the processing cycle by using *Flash-O-Graph®*, the perfect companion fixer for this system. For more detailed information write for Photographic Information Bulletin No. 11.

*U.S. Patent 3038801 - Foreign Patents Pending

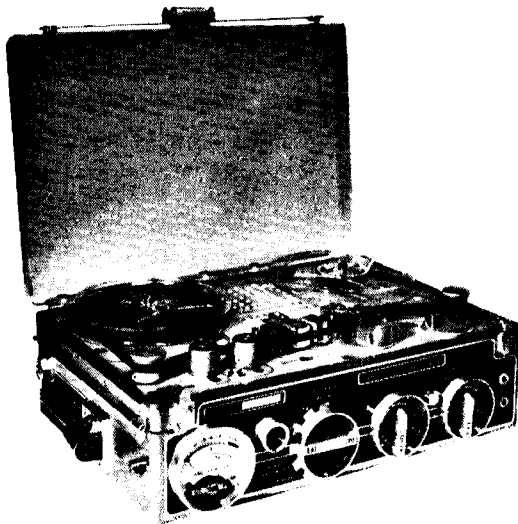


P H I L I P A . H U N T C O M P A N Y

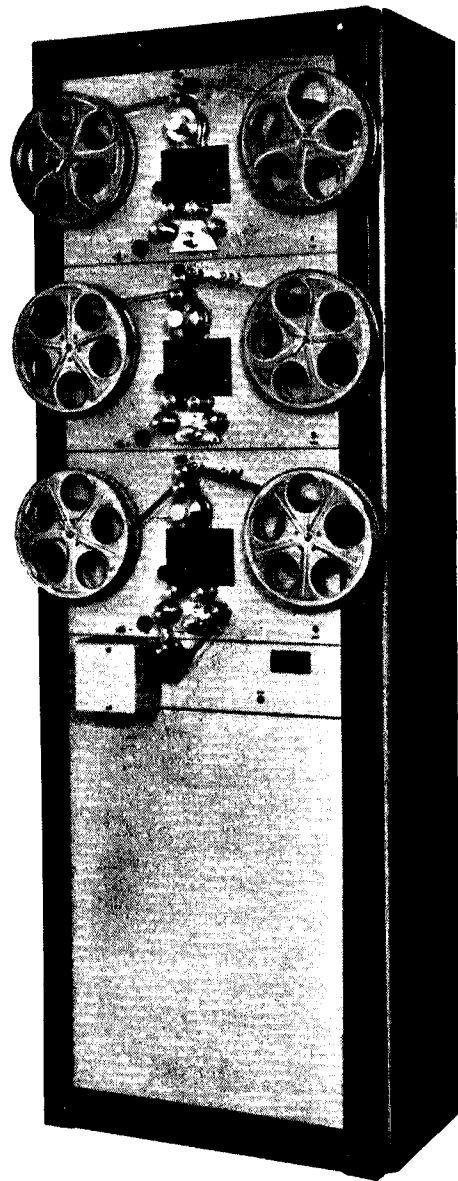
• Palisades Park, New Jersey • Branches in Principal Cities • PHILIP A. HUNT COMPANY (CANADA) LTD. Toronto

M.T.E.

motion picture sound recording equipment



NAGRA
for your original recordings
15 lb. lip-sync recorder,
battery or A.C. operated
for location or studio use.



400 SERIES
magnetic and optical
recorders and dubbers
for your mixing studio.

For Product Catalogue
please write

M.T.E.

Magna-Tech Electronic Co., Inc.
630 Ninth Avenue, New York 36, N.Y. JU 6-7242

and conduct benefited greatly from the attention and advice of Louis C. Mintzer, Jr., of The Traymore Staff.

George H. Gordon of Eastman Kodak Co. as Hotel Arrangements Chairman disposed of the to-be-expected headaches before the Convention, as did also Entertainment Chairman Saul Jeffee of Movie-lab, Inc., Banquet Chairman H. Theodore Harding of E. I. du Pont de Nemours, Sunday Buffet Chairman Robert E. Burns of W. J. German Co., and Luncheon Chairman Fred W. Gerretson, E. I. du Pont de Nemours.

Contributing to the success of the technical sessions were Projection Chairman Boyce Nemeo of Reevesound Co., and

Public Address and Recording Chairman V. D. Armstrong of RCA Service Co., Patrick Air Force Base, Fla. Vic Armstrong had the assistance of on-the-spot volunteers who contributed to a very well recorded Convention — the requirement being the recording of all questions from the audience and author's replies. Working from a newly installed projection booth, Boardwalk Film Enterprises, from whom the service was contracted, was very competently manned.

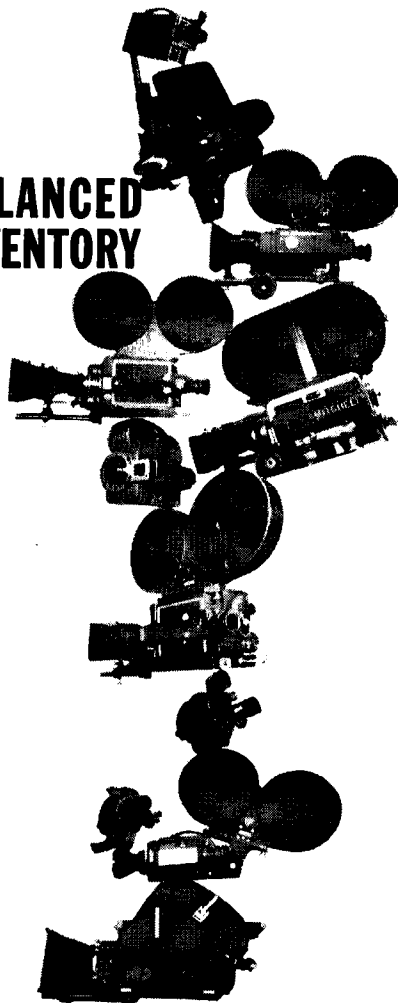
Also accomplishing commendable services were Hospitality Chairman Charles Lo Balbo of Philip Hunt Co., Membership Chairman Donald H. Horton of W. J. German Co., Registration Chairman

Robert Crane of Color Service Co., and Transportation Chairman Irwin L. Ross of WFIL-TV, Philadelphia. Auditors were Harold Jones of Ansco and Sheldon Kaplan of Hollywood Film Co. Most helpful for ironing out special scheduling and arrangements was George Lewin of Army Pictorial Service. Arthur Rescher of Byron Motion Pictures was Publicity Chairman.

Ladies Program

Highlighting the Ladies Program chair-manned by Kenneth J. Coleman were tours of historic Smithville Inn, Fischer's African Violet Greenhouses and Renault Winery. The charming co-hostesses were Mrs. Coleman, Mrs. C. Russell Dupree and Mrs. Arthur Miller.

BALANCED INVENTORY



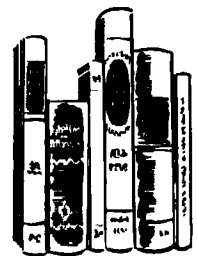
DEPEND ON CSC FOR THE BEST BALANCED CAMERA INVENTORY IN THE EAST
 . . . WHATEVER YOUR NEEDS, CSC CAN PROFESSIONALLY FILL THEM FROM
 OUR VAST STOCK OF THE *finest maintained rental equipment.*



camera service center, inc.

sales affiliate • CAMERA SALES CENTER CORPORATION
 333 WEST 52nd STREET • NEW YORK 19, N.Y. PL 7-0906

books reviewed



Photographic Literature

Albert Boni, Ed. Published (1962) by Morgan & Morgan, Inc., Publishers, 101 Park Ave., New York 17. 336 + vi pp. 7 by 10 in. Price \$22.50.

This is a very interesting new reference book for the literature of the entire photographic field. For over 30 years the Editor, Albert Boni, and a staff of associate editors compiled more than 12,000 references, now collected in this huge bibliographic guide titled *Photographic Literature* and subtitled "An International Bibliographic Guide to General & Specialized Literature on Photographic Processes; Techniques; Theory; Chemistry; Physics; Apparatus; Materials & Applications; Industry; History; Bibliography; Aesthetics; etc."

This fine work appears to be one which will be a greatly appreciated contribution to the photographic literature. It contains more than 1,200 subject headings, which lead the researcher to the best writings on his special interest. Photographers, technicians, scientists, etc., wanting to know more about any photographic subject will quickly find information without the usual time-waste and incalculable search in libraries. There is further given an index of authors comprising more than 3,500 names.

The references cited under the subject headings often include bibliographies, which may lead the researcher to additional publications in the field. For instance the subject heading "Transfer Processes" cites five key-writings which themselves refer to 314 works. Furthermore a list of 30 patents is supplied and last, but not least,