

SMPTE Elections

Officers of the Society for 1968 (including those remaining in office for the 1967-68 term and those elected to serve during the 1968-69 term) are:

President: G. Carleton Hunt (1967-68)
Executive Vice-President: Deane R. White (1967-68)
Engineering Vice-President: William T. Wintringham (1968-69)
Editorial Vice-President: Rodger J. Ross (1967-68)
Financial Vice-President: Joseph T. Dougherty (1968-69)
Conference Vice-President: E. B. (Mike) McGreal (1967-68)
Sections Vice-President: Wilton R. Holm (1968-69)
Secretary: H. Theodore Harding (1967-68)
Treasurer: Saul Jeffee (1968-69)
Past President: Ethan M. Stifle (1967-68)

The five Affairs Vice-Presidents were re-elected and will continue in office through 1969. They are:

Vice-President for Educational Affairs: D. Max Beard

Vice-President for Instrumentation and High-Speed Photography Affairs: William G. Hyzer

Vice-President for Motion Picture Affairs: Richard J. Goldberg

Vice-President for Photo-Science Affairs: J. S. Courtney-Pratt

Vice-President for Television Affairs: Richard S. O'Brien

Those elected by their respective regions to serve on the Board of Governors for the next two years are:

Eastern Region: K. Blair Benson, John J. Kowalak, Henry M. Kozanowski, Allan L. Williams

Central Region: Jack Behrend

Western Region: Jack P. Hall, Edward H. Reichard

Governors continuing in office through 1968 are:

Eastern Region: Kenneth M. Mason, Arthur J. Miller

Central Region: William D. Hedden, Hans C. Wohlrab

Western Region: Herbert E. Farmer, Robert G. Hufford

Canadian Region: Gerald G. Graham

Society elections are conducted by mail ballot.



Detroit Section Color Television Conference

The second annual Color Television Conference sponsored by the SMPTE Detroit Section will be held January 26 and 27, 1968, at the Rackham Memorial Building in Detroit.

The Conference will consist of four sessions, the topics of which are: Operational Quality Control; Color Film in Television; International Aspects of Color Television; Tutorial on New Developments.

Panel discussions, where applicable, will be developed. Those interested in presenting papers at this conference should contact Roland Renaud, Station WWJ, 622 W. Lafayette, Detroit, Mich. 48231.

A complete Conference schedule will be sent to SMPTE members. Nonmembers interested in registering for the conference may obtain registration information through Wayne State University, Conference Dept., Community Art Center, Detroit, Mich.

The success of last year's Conference, with over 600 registrants, indicates an even better attended "68" Conference.

The Society's Rochester Section and the Rochester Chapter of the Society of Photographic Scientists and Engineers have scheduled six meetings in 1968 beginning January 11. The January 11 meeting will feature a report on the Inter-

national Congress on Photographic Science held in Tokyo and Kyoto, Japan, September 18-25, 1967, delivered by T. H. James of Eastman Kodak's Research Laboratory, and a paper, "The Xerographic Photo Receptor," presented by B. H. Carroll as part of the Visual Encyclopedia series. Dr. Carroll is with the Rochester Institute of Technology.

On February 8, NBC news operations will be discussed by Sigmund Bajak, Director, Newfilm, National Broadcasting Co., New York. On March 14, a graphic arts program entitled "Color Reproduction" will be presented by John Yule of the Rochester Institute of Technology. The Visual Encyclopedia series will continue with "Xerographic Development." On April 4, the facilities and operations of the National Film Board of Canada will be discussed by Gerald Graham, Director of Technical Operations, National Film Board of Canada. May 2 will be Youth Night. Thayer Soule will discuss production of travel films. The Visual Encyclopedia series will continue with "Careers in Photographic Science." May 24 will be RIT Night when outstanding student research papers will be presented.

Earlier program given during the 1967 part of the season include (September 14) a paper on "Geologic Interpretation From Optical Photography," by Herbert A. Tiedemann of NASA's Manned Spacecraft Center. The October 12 program included a paper on "A High-Brightness Front - Projection Screen," by J. S. Chandler and J. J. De Palma, both of Eastman Kodak's Research Laboratories, and a film presentation of the ten 50-second award-winning films from Expo '67 on the theme of "Man and His World."

The November 9 meeting was a joint meeting with the Rochester Chapter of the Optical Society of America. A paper on

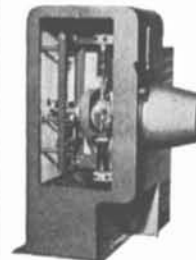
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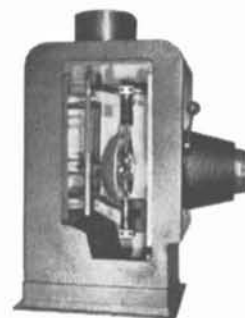
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"Recent Advances in Holography" was presented by Albert A. Friesem of the University of Michigan. "Fundamentals of the Xerographic Process," a part of the Visual Encyclopedia series, was presented by Robert Gundlach of Xerox Corp. On November 30 the use of motion pictures in coaching was discussed by Duffy Daugherty, Coach at Michigan State University.

Theme for the 1967-1968 season is "Xerography." All local section meetings are sponsored jointly by SMPTE and SPSE. Meetings are held at the Dryden Theater in Rochester, N.Y. Further information is available from J. E. Brown, Eastman Kodak Co., Rochester, N.Y. 14650.

The Society of Photographic Scientists and Engineers (SPSE) will hold its Annual Conference on Photographic Science and Engineering June 10-14, 1968, at the Sheraton-Boston Hotel in Boston. Features of the conference will include a special session covering photographic reconnaissance research and development activities of the United States Air Force. Papers will be presented by scientists from the Air Force Avionics Laboratory and from contractors reporting on work sponsored by the Air Force. Subjects will include several papers on color photography, high-speed optics, V/H sensing and radiometric energy considerations. The conference is international in scope and several sessions will be chaired by foreign photoscientists. Some 75 technical papers will be presented.

Further information is available from SPSE, Suite 204, 1330 Massachusetts Ave., N.W., Washington, D.C. 20005.

Photographic Systems for Engineers is the subject of a tutorial seminar for non-photographic engineers and senior technicians. Sponsored by the Society of Photographic Scientists and Engineers, it will be held January 11-12 in Los Angeles. Topics to be covered include Introduction to Photographic Systems; Photographic Sensitivity; Photographic Sensitometry; Photographic Lenses; Use and Measurement of Lenses; Data Projection — Light Sources and Optics; Film and Paper Processing Techniques; Film Handling and Image Registration; Control of Tone Reproduction; Information Capacity of Photo Materials; System Applications of Transfer Materials; and System Applications of Graphic Displays. Previous seminars for persons who have occasion to use photooptics, but who are not in the field of photography, have been held in New York, San Francisco and Boston. Further information is available from the Seminar Registration Chairman, Joseph Schmidt, Technicolor Corp., 6311 Romaine St., Hollywood, Calif., or from SPSE headquarters at 1330 Massachusetts Ave., N.W. Washington, D.C. 20005.

New officers and councilors have been installed by the Rochester Chapter of the Society of Photographic Scientists and Engineers (SPSE). New officers for the

1967-1968 season are: President, John L. Simonds; First Vice-President, Richard D. Zakia; Second Vice-President, Sheldon Phillips; Recording Secretary, Mrs. Mildred Krainock; Executive Secretary, Leland M. Porter; Senior Director, John C. Barnes; Director and Past-President, David A. Engdahl; and Directors, Thomas T. Hill and James S. Moser. Councilors are: James Card, Carl J. Claus, Lothar Engelmann, Paul J. Gilman, Jr., Charles Heinmiller, Rudolf Kingslake, Allie C. Peed and Warren L. Rhodes.

A delegation from the University Film Producers Association represented United States film teachers at the 14th Annual Meeting of the International Congress of Schools of Cinema and Television held September 4-9 in Madrid, Spain. The delegation was headed by UFPA President, Raymond Fielding of the University of Iowa. Accompanying him were Professors Richard Goggin, of New York University, and Frank Paine, of Southern Illinois University. UFPA is the official active member of the International Congress from the United States and one of its founding members. The meeting was attended by representatives of film schools in both western and eastern countries. The meeting featured discussions of state schools of cinema and university film departments in terms of contrast and comparison. The meeting concluded with the announcement of newly elected officers of the International Congress. The new President is Prof. Wohl of Poland and Dr. Fielding is the new Vice-President. Prof. Groshev of the USSR is Second Vice-President, Prof. Cuenca of Spain is Treasurer and Prof. Tessonneau of France is Delegate General. The 1968 meeting will be held in Rome, Italy.

The National Association of Educational Broadcasters (NAEB), 1346 Connecticut Ave., Washington, D.C. 20036, has announced changes in its organizational structure to provide for a combined service unit for the entire association called Instructional and Professional Services Division. Formerly each membership compartment provided exclusive instructional and professional services. Also, an advisory group called a Division Board is provided for instructional and professional services. NAEB services now available include an answering and referral service for handling questions of members and others on all aspects of instructional radio and television. In addition, special assistance is now available on government programs and federal funds for instruction and professional training. Other NAEB services include publications, meetings and speaker and consultant services. New services being planned include more frequent newsletters; more special reports with in-depth digests of specific topics; Educational Broadcasting Regional Institutes; Instructional Materials Information Clearinghouse; and Library and Information Service made available from a collection of books, papers, pamphlets, etc., in instructional radio and television.

A two-day Workshop in Film Library Administration, sponsored by Educational

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The advertisement features a central image of a film strip with sprocket holes, a close-up of a sprocket, and a film reel. The film strip has numbers 16, 29, 42, 55, 68, 81, 2, 15, 28, 41, 54, 57, and 69 printed on it. The sprocket is shown in a perspective view, highlighting its teeth and central hub. The film reel is partially unspooled, showing the film's path.

Film Library Association, 250 W. 57 St., New York N.Y. 10019, was held in Detroit, beginning November 30. Topics included Automation in the Film Library, Selection Procedures and Problems in Cataloging, Booking and Maintaining Film Collections. Co-chairmen of the Workshop were James Limbacher and Lewis Saks.

The Tenth American Film Festival, sponsored by Educational Film Library Association, 250 W. 57 St., New York, N.Y. 10019, will be held May 28-June 1 in New York. Blue Ribbon Awards will be given in 35 subject categories to 16mm and 8mm films and to filmstrips released during 1967. Entries from the United States, Canada and many countries overseas are expected to bring the total close to a thousand. Closing date for entries is January 31, 1968. Pre-screening committees will screen all entries during February and March to select some 300 finalists.

A Solid-State Acoustoelectric Light Scanner (SALS) developed at Bell Telephone Laboratories uses a scanning acoustic domain to excite light emission sequentially from a row of p-n junctions. The SALS device is described by Basil W. Hakki, of Bell Telephone Laboratories, in a paper, "Solid-State Acoustoelectric Light Scanner," in *Applied Physics Letters*, Vol. II, No. 5, Sept. 1, 1967, pp. 153-155.

In operation, the acoustic domain, a concentration of crystal lattice vibrations, travels with the speed of sound through an n-type cadmium sulfide strip. P-type cuprous sulfide rectangles on top of the cadmium sulfide substrate form the p-n junctions. As the domain sweeps by a p-n junction, the domain voltage causes local breakdown in the junction. The resulting current flow causes the p-n junction to emit a flash of red light. The SALS device is sandwiched between two glass plates for structural strength. Ohmic contacts are applied to opposite ends of the cadmium sulfide strip.

Present research on the device, described by Mr. Hakki, is directed toward its use as either a light-emitting array (for alphanumeric or image displays) or as a scanning light detector.

When an acoustic domain is used to scan a square array, thereby exciting light emission sequentially from its elements, the amount of accessing circuitry is reduced to an amount equal to the square root of the total number of elements in the array. This is because only each row (not each element) of a SALS device need be accessed with external electrical circuitry. For example, one 141×1414 array of p-n junctions (about 20,000) now being explored at Bell Telephone Laboratories would require only the integrated circuitry needed to access each of the 141 rows.

The University of Wisconsin Extension has announced a Measurements and Transducers Institute to be held January 4-5 on the University's Madison campus. Emphasis will be on properties and design principles of measuring systems and transducers and the validity of data gathered with them, rather than on the

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measuring of specific quantities. Further information is available from John T. Quigley, Institute Director, 725 Extension Building, 432 North Lake St., Madison, Wis. 53706.

A sound decay meter invented by Manfred R. Schroeder of Bell Telephone Laboratories is used to test the acoustic qualities of concert halls and auditoriums. The device, which has been patented, was invented while Dr. Schroeder was analyzing the auditory problems of the Philharmonic Hall in New York's Lincoln Center. The meter is used to determine by means of a single sound (such as a pistol shot) a single decay curve representing the average of many curves that would otherwise require many tests to determine. The system includes a filter and an amplifier that feed to pistol shot, or other test signal, into the auditorium. The sound, received in a microphone at another point inside the chamber, is analyzed in a computer and the result is displayed on an oscilloscope.

A miniature television tape recorder-reproducer which can record four hours of slow-scan TV or a half-hour of commercial TV signals on 1-in. tape has been developed by RCA's Communications Systems Division for National Aeronautics and Space Administration. The device weighs 30 lb and measures 14 × 10 × 6.1 in. Developed for possible use in manned space flights, it is intended mainly for the recording of television signals when a spacecraft is outside the range of ground stations. When the spacecraft then comes into contact with a station, the recorder can "dump" information to earth-based receivers eight times faster than it was recorded. Thus, 32 minutes of recording can be transmitted to the ground during the four minutes that a typical space vehicle is in contact with any single station in the NASA network. Key to the recording system is the helical scan station. It incorporates a high-speed rotating head wheel which develops the high head-to-tape speed necessary for sideband recording. Continuous recording is made possible by two diametrically opposed recording heads in the wheel with at least one head always in contact with the tape.

A system developed by RCA Astro-Electronics Div. combines television and laser technology to transmit and record pictures. The system, designed primarily for use in an earth resources satellite (EROS), uses a new TV camera tube that sends its pictures to a gas laser whose beam traces them on photographic film at a rate of 1,200 lines/s. The camera uses an electron tube called a "return-beam vidicon." In operation, a laser beam image reproducer converts the return beam vidicon's electronic signals to a picture by scanning conventional photographic film with a laser beam. The basic principle employed by the laser beam image reproducer is electronic modulation of the laser beam as it scans the photographic film. Signals from the return-beam vidicon are fed into the recorder and the picture is recreated at the rate of 1,200 lines/s. The scene viewed by the return beam vidicon is reproduced for direct viewing as

a 9 by 9-in. image on film or photosensitive paper.

For satellite operations, the return beam vidicon's images would be stored on magnetic tape aboard the spacecraft until it came within range of a ground station. The data would then be transmitted to the ground station and recorded on tape for later insertion into the laser reproducer. The laser could also reproduce the pictures for instant viewing.

The Norwegian firm, Nera Bergen A/S, has been awarded a contract amounting to 21.6 million Norwegian crowns for equipment to be used in expanding the Norwegian radio link network. The contract, signed by Leif Larsen, Director General of Telecommunications, and Olaf Bordewick, Managing Director of Nera, covers delivery of 1,800 channel broadband equipments for the routes between Tromsø and Hammerfest, Stifjell and Rassegalvarre, Oslo and Bergen and also the delivery of 300 channel branching equipments for 27 local branch-links from the main network. Eight of the branch links will carry television and 19 will be used as branch links for telephones. The eight branch-links for television will cover ten cities in Norway. Most of the routes are two-way radio links with a spare, and automatic changeover in case of failure. The system can carry 300 telephone calls simultaneously, one TV picture with sound, or four program channels for broadcasting. The 1,800 channel broadband links cover expansion of the main network. The system is solid state except for one tube in the output stage. It will be able to carry about 1,800 simultaneous telephone calls, color television with sound, or three program channels for broadcasting. The Tromsø-Hammerfest link will be completed in January 1969, and the cross-connection Oslo-Bergen link will be completed September 1969.

Official Gazette Patent Abstracts Section is a new weekly publication of the Patent Office, U.S. Department of Commerce. The journal, intended to give scientists, engineers and businessmen easier access to technical information contained in patents, will contain abstracts and drawings of U.S. patents. For this reason, the Patent Office requires that abstracts be concise summaries of the technical content of patents, avoiding the use of legal and patent phraseology. Subscriptions to the new journal are available on a six-months basis (January through June 1968) from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, price, \$27. Single copies are available at a price of \$1.25.

Proper Print Handling is a 16mm color and sound motion picture, running 13½ min, that suggests ways to prevent damage to film and increase its life. It is available without charge as a loan from Eastman Kodak Co., Audio Visual Service, Rochester, N.Y. 14650, to film handlers and users, such as government agencies, motion-picture libraries, etc. The movie documents the path traveled by the film from laboratory to user and shows danger areas where film damage can occur.

A two-way closed-circuit television system using the newly developed PK-301 cameras has been designed by RCA to provide two-way visual communications between a patient's room and the children's waiting area at Memorial Hospital, Panorama City, Calif. To set up the electronic face-to-face visit, an attendant pushes a small transistorized TV camera mounted on a dolly into the patient's room and plugs it into a cable connection in the wall. The room's TV set is tuned to a channel not used locally for broadcast reception. A similar camera and TV set are permanently mounted on the wall of the children's waiting room and ready to begin operation as soon as the young visitor steps within camera range.

The National Association of Theatre Owners held its annual convention during October in Bal Harbour, Fla. Among topics discussed was the possibility of a "pushbutton" theater in the not-so-distant future. In relation to the possibility of automation in the theater, Union Carbide's Carbon Products Division, 270 Park Ave., New York, N.Y. 10017, exhibited a joinable carbon that had previously been developed for use in the continuously-operating solar simulation chambers used in the earth-bound testing of space equipment.

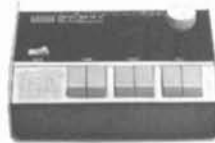
A 16mm Arriflex BL camera (valued at more than \$6,500) has been presented to the University of Southern California's Division of Cinema by Paul Klingenstein, President of Arriflex Corp. of America, on behalf of Robert Richter, President of Arnold and Richter, Munich, Germany. Herbert Farmer, Director of Services in USC's Division of Cinema, said the camera is designed for extremely mobile use, and has the latest refinements in its focusing mechanism, its motor drive, magazines, and in its adaptability as a sound camera.

Reid H. Ray Film Industries has announced the opening of a new office in Phoenix, Ariz. The firm, whose headquarters are located at 2269 Ford Parkway, St. Paul, Minn. 55116, also has sales offices in Chicago. Head of the new office in Phoenix will be Karl P. Fischl who has been appointed Vice-President of Southwest Regional Sales. One of the oldest documentary-industrial film producers, films produced by Reid H. Ray Film Industries within the last six years have won 22 awards in both American and European film festivals.

F&B/Ceco Industries, 315 W. 43 St., New York, N.Y. 10036, has acquired all the stock and assets of American Color Laboratories, Inc., in an all common stock transaction. In operation less than two years, American Color Laboratories is located in a two-story building in Hollywood. It is a fully equipped film laboratory, capable of full color services including negative and positive processing and printing, internegatives, interpositives, etc. Specializing in TV commercials, theatrical and nontheatrical films. The laboratory is equipped



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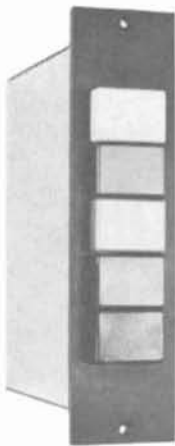
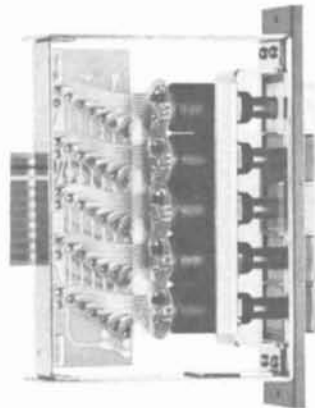
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with additive color film printers and an additive color scene tester as well as specially designed and constructed developing machines for 35mm and 16mm. Other features include modern film storage vaults and a projection room equipped to SMPTE standards.

President and founder of the laboratories is Sherman Grinberg, who also becomes a Vice-President of F&B/Ceco. Plant Manager is Harvey Gausman. Announcement of the acquisition was made by Arthur Florman, President of F&B/Ceco.

Red Lake Hycam High-Speed Motion-Picture Cameras and related accessories will be distributed by Eastman Kodak in the United States and Canada, according to a joint announcement by Robert D. Shoberg, President of Red Lake Laboratories, and Robert P. Bouford, General Manager, Eastman Kodak Stores, Inc., Rochester, N.Y. A training program is underway for persons who will specialize in the sales and servicing of Hycam cameras.

Kodak cameras and projectors will be manufactured in Argentina, as announced by Louis K. Eilers, President of Eastman Kodak Co. Within Latin America, the production of Kodak photographic apparatus in Argentina will complement the manufacture of Kodak film in Mexico and Kodak photographic paper in Brazil.

The Ampex Videotape Duplicating Center in Elk Grove Village, Ill., will accept any Ampex master tape in either 1-in. or 2-in. format, 16mm or 35mm films or slides for duplicating onto video tape. The Center has film chain equipment capable of making monochrome tapes from 16mm or 35mm films plus additional equipment for duplicating 35mm slides to tape. An audio track can be added to the video tapes if the soundtrack is supplied with written instructions. The Center is also equipped with processing amplifiers and related specialized electronic equipment used to strengthen and "clean" video signals.

Physical and operating assets of the recording division of Murlyn Recording and Educational Products Corp. have been acquired by Income Properties, Inc. The acquired recording facilities, studios and personnel will remain at 17 E. 45 St., New York, in an expansion of the present Manhattan Sound Studios by Manhattan Audio Co., which is controlled by Income Properties. Income Properties entered the motion-picture technical service field in February through the acquisition of Cineffects, Inc., and in August it acquired two-thirds of the stock of Manhattan Audio Co.

New members of the Board of Directors of Panacolor, Inc., 100 East 42 St., New York, N.Y. 10017, have been announced by Charles L. Greenebaum, President. Irwin Schloss has been elected Chairman of the Board and new members are Orton H. Hicks and Joseph M. McDaniel, Jr. Mr. Schloss, who has been a director of the company for the past year, succeeds

Harry Harris who was Chairman of the Board until his death in August. Mr. Schloss is a member of the New York Stock Exchange and President of Irwin Schloss & Co.

Mr. Hicks is a director of Encyclopaedia Britannica Films, Inc., Barnett International Corp. and Vice-President Emeritus of Dartmouth College. He is also a member of the board of Loew's International Corp. which he joined to set up a worldwide distribution network for M-G-M 16mm pictures. Mr. McDaniel recently retired as Secretary of the Ford Foundation, a post he had held for 14 years. At present he is a consultant to the Ford Foundation and a director of several companies and institutions.

Panacolor is engaged in the development and manufacture of a new audio-visual motion-picture film system for government, industry, education and home use. The firm maintains laboratories in Lodi, N.J., and Hollywood.

Harry F. Olson is recipient of the 1967 Mervin J. Kelley Award presented by the Institute of Electrical and Electronics Engineers. Dr. Olson retired last year from the post of Staff Vice-President and Director of the Acoustical and Electromechanical Research Laboratory, RCA Laboratories, Princeton, N.J. He is presently a consultant to the Laboratories. The award is in recognition of Dr. Olson's "important and continuing contributions in the fields of electroacoustics, speech processing and wideband-signal recording." He holds more than 100 U.S. Patents. His areas of activity include development of microphones, loudspeakers and headphones; magnetic recording of television signals; recognition analysis, coding and synthesis of speech; advancement of electronic and electromechanical printout systems; and the development of underwater acoustical devices. He is the author of several books and has published many technical papers.

John M. Lupo has been appointed to the newly created position of Project Manager, Professional Motion Picture Products, Photographic Products Div., 3M Co., St. Paul, Minn. He was formerly Product Manager for Graphic Products, in the Photographic Products Division. In his new post he will be responsible for sales and distribution of Ferrania professional film products in the United States.

James A. Gleason has been appointed Vice-President in Charge of Production of Manhattan Sound Studios, 460 W. 54 St., New York, N.Y. 10019. He was formerly Production Chief. In his new post he will be responsible for standardizing the quality control of all sound recording and production activities as well as for conducting a training program for the development of engineering talent.

Morris Schwartz, founder and President of Kalart Company Plainville, Conn. 06062, has become Chairman of the Board of Directors and Leonard J. Quartin, Executive Vice-President since 1961, has been elected President. Mr. Schwartz's

future activities will be primarily in the new product development area of the company and Mr. Quartin will act as the firm's top operations administration officer.

Mr. Schwartz founded Kalart in 1922 as a commercial and industrial photographic laboratory and started manufacturing photographic equipment in 1931. Among photographic products developed and produced under Mr. Schwartz's guidance are photoflash synchronizers, lens-coupled range finders, focuspots, the Kalart camera, editor/viewers and others. By corporate acquisition, Kalart expanded its manufacturing and sales to include such products as Craig movie editors, the Victor line of 16mm sound movie projectors, the Sound-view 35mm filmstrip and slide sound projectors, TSI projectors and Tele-Beam television projectors for large-screen television. In 1952 Mr. Schwartz was awarded the Joseph A. Sprague Memorial Award by the National Press Photographers Association for "his engineering genius, inventive skill and steadfast service to the profession of photography."

Mr. Quartin has been with the firm since 1937, first as Inspector when he developed the company's first Inspection and Control Department. He was elected a Vice-President in 1957 and became Executive Vice-President in 1961.

Three appointments to executive posts have been announced by Graflex, Inc., a subsidiary of General Precision Equipment Corp., Rochester, N.Y. 14603. Ben Maddalena has been appointed Vice-President of the firm. Robert S. Mayerson has been appointed Director of Marketing and George W. Lehman has been named Manager of Sales. Mr. Maddalena joined Graflex in 1962 as Vice-President of Planning. In his new post he will be responsible for all marketing operations, including domestic and international marketing as well as customer relations and special product sales. Mr. Mayerson has been with the firm since 1963. He will oversee domestic marketing operations. Mr. Lehman has been with the firm since 1941. In his new post he will be responsible for field sales operations in the commercial, industrial and government markets.

William J. Robbins has been appointed Product Marketing Manager, Photographic Products, for the Photolamp Div. of Sylvania Electric Products Inc., 730 Third Ave., New York, N.Y. 10017. He has been with Sylvania since 1953. In his new post he will be responsible for marketing activities on photographic lighting products designed for equipment manufacturers. Other appointments announced by Sylvania include George H. Mulcahy as Marketing Manager and David A. Pettigrew as National Sales Manager for the Photo Lamp Division.

Erwin Jaffe has been appointed Director of the ANPA Research Institute Laboratory, Easton, Pa. Since 1964, Mr. Jaffe has been Director of Research and Development at Mack Printing Co. in Easton where he supervised many technical improvements including conversion to extensive computerized phototypesetting utilizing several telecommunications networks. From

SMPTE test films for television



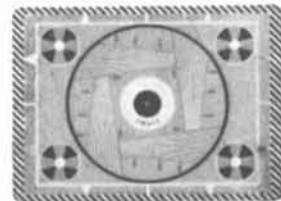
NETWORK, LOCAL, CCTV...

a test film library for engineering and telecine

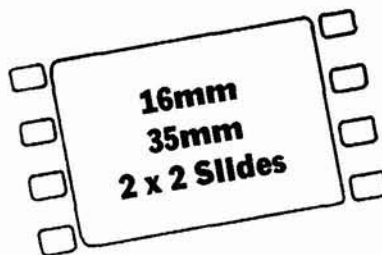
VIDEO TEST FILMS

TEST FUNCTIONS:

- alignment • resolution
- focus • linearity
- low and medium frequency response
- storage and transfer characteristics
- automatic brightness control
- qualitative picture analysis



FOR COLOR TELEVISION

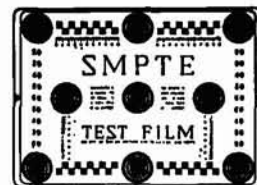


comparative and qualitative test of system's ability to reproduce color

PROJECTOR PERFORMANCE

Test and Adjust:

- picture steadiness • jump and weave
- shutter timing (travel ghost)
- framing • focusing
- aperture alignment



SOUND REPRODUCTION *optical / magnetic*

Test, Adjust and Calibrate Projector

- scanning beam slit position
- multi-frequency response
- azimuth and focus of sound optical train
- signal level and balancing, output
- flutter
- scanning beam illumination



FOR THE SCREENING ROOM

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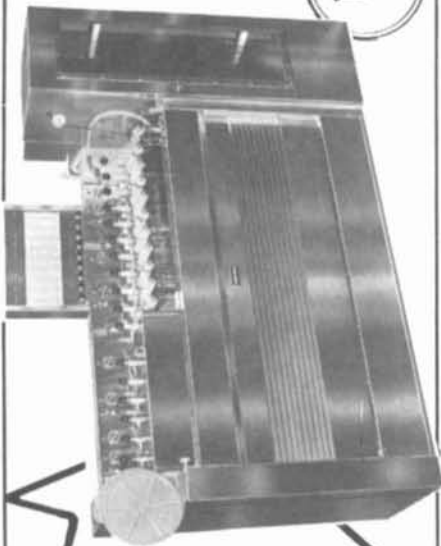
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1961 to 1964 he had been Chief Physicist for ANPA Research Institute. Mr. Jaffe is the author of several books on physics, photography and printing.

Fred B. Adair, Jr., has resigned as Executive Vice-President of Manhattan Sound Studios, 460 W. 54 St., New York, N.Y. 10019. He was founder of the predecessor company and he was President of Manhattan Sound Studios until its acquisition (in August) by Manhattan Audio Co.

The opening ceremony of the United Nations General Assembly (September 19) was televised in color by two Marconi Mark VII color television cameras. Marconi cameras have been in use at United Nations headquarters since 1951, but the Mark VII cameras are the first color cameras that have been used for broadcast purposes at the UN. The Mark VII was featured in the Queen's Award to Industry for 1967 (*Jour.* Nov., p. 1140). More than 200 of these cameras have been sold, most of them in the North American continent.

A. Stanley Pratt has been elected Fellow of the Royal Photographic Society of Great Britain in recognition of a long and distinguished career in the motion-picture industry. For the last seven years he has been Chief Engineer of the Mitcheldean plant of the Rank Organisation. He was recently appointed Chief Engineer of Rank Xerox Ltd. following reorganization of the top management structure and the incorporation of the Mitcheldean plant into Rank Xerox Ltd. In 1963 he received an Academy Award for his work on the design of the Bell & Howell Additive Color Printer (*Jour.*, p. 430, May, 1963).

Ira R. Kohlman has been appointed Director of the newly formed Graphic Arts Div. of LogEtronics Inc., Springfield, Va. The firm produces equipment for electronic and x-ray photography, optics, humidity conditioning and graphic arts. Mr. Kohlman was formerly Manager of Graphic Arts Equipment Sales. In his new post he is responsible for all other phases of product planning, marketing and technical services as well as sales supervision for LogEflo automatic film processors and other graphic arts products.

Robert E. McKenzie has been appointed Assistant Director of the Graphic Arts Division. He was formerly Manager of Technical Service.

Martin Gersten has been appointed General Manager and Director of Research and Development of Rectilinear Research Corp., 30 Main St., Brooklyn, N.Y. 11201. The firm manufactures loudspeakers and other electronic components. Mr. Gersten was formerly Director of Research and Development at General Camera Corp.

Donald J. Sheaff has been appointed Vice-President and General Manager of the Television Division of Technicolor, Inc., 6311 Romaine St., Hollywood, Calif. 90038. He was formerly Vice-President of Production in the Television

Division. He had formerly been with Technicolor (1946-1957) in the Motion Picture Division.

Albert R. Landers, Vice-President, West Coast Operations, De Luxe Laboratories, 1418 N. Western Ave., Hollywood 90027, has been appointed a Director of the Motion Picture Industry Pension Plan. Mr. Landers replaces Earle D. Schwieger who has resigned.

Bradley Dewey, Jr., has been appointed President of Reeves Soundcraft Division of Reeves Industries, Inc., Great Pasture Rd., Danbury, Conn. 06810. The Soundcraft division manufactures and markets magnetic tape for computers, instrumentation use, and home and professional sound recording. Dr. Dewey was formerly President of the Cryovac Division of W. R. Grace & Co.

Edwin R. Levine has been appointed Senior Field Engineer for Philips Broadcast Equipment Corp., 299 Route 17, Paramus, N.J. 07652. He was formerly with the Visual Communications Dept., General Electric Co., as a video systems specialist concentrating on color broadcast equipment.

Robert M. Williams has been appointed to the newly created post of Manager, TV Transmitter Mechandising, for RCA Broadcast and Communications Products Div., Camden, N.J. Mr. Williams has been a salesman of RCA broadcast equipment since 1960, with headquarters in Charlotte, N.C.

William K. Glave, sales manager of Flight Research Div., Giannini Scientific Corp., has resigned to form his own company which will become southeastern sales representative for Flight Research's Multi-data Instrumentation Cameras. The new firm is Photo-Electric Instrumentation Co., Box 741, Ashland, Va. It is affiliated with the company of the same name which covers the northeast for Flight Research.

Italo Tinari has been appointed General Manager of Technicolor Italiana S.p.A., wholly owned Technicolor subsidiary with headquarters in Rome. Dr. Tinari was previously Managing Director of Pennitalia S.p.A., a subsidiary of Pittsburgh Plate Glass.

Herbert J. Braun has been appointed Eastern Sales Manager for the Photographic Still and Motion Picture Divisions of Bebell & Bebell Color Laboratories, Inc., 108 W. 24 St., New York, N.Y. 10011. Mr. Braun specializes in audio-visual services for educational and training programs. He is a co-founder of Films for Educators, producers of single-concept educational films.

Melvin L. Gold has been elected President and Chief Operating Officer of Manhattan Audio Co., new corporate entity of Manhattan Sound Studios, 460 W. 54 St., New York, N.Y. 10019. Mr. Gold was formerly General Sales Manager for National Screen Service and is founder and Honorary Lifetime President of National Television Film

Council. He is concluding his third term as President of Associated Motion Picture Advertisers.


NEC Research and Development is published semiannually in English by Nippon Electric Co., 7-15 Shiba Gochome, Minatoku, Tokyo, Japan, and is available upon request on company letterhead. The subject material is quite varied to correspond with the interests of the company. The Table of Contents (given below) of the October 1966 issue indicates the company's wide range of interests.

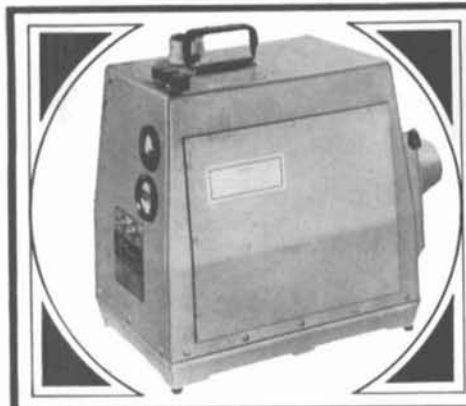
STAR System

- Part I. General Description — M. Morita, T. Fukami and S. Yamato
 - Part II. Power Budget of Satellite Communication System — T. Uchino, S. Ito and K. Maezono
 - Part III. Transmission Portion — M. Miyagi, S. Iwamura, Y. Ueno, T. Akatsuka, H. Shimayama, R. Nagura and M. Harada
 - Part IV. Some Other Alternative Subsystems — H. Kaneko and Y. Kato
 - Part V. Background of Switching Concept — S. Yamato, T. Kikumori, N. Shimasaki and Y. Maruyama
 - Part VI. Switching Portion — T. Kikumori, Y. Maruyama, S. Sugita and T. Tashiro
 - Part VII. Conclusion — M. Morita, T. Fukami and S. Yamato
- On Synthesis of Time-Optimal Control Systems — T. Mikami

Development of a Laser Communication System

- Part I. Instrumentation — M. Ito and T. Uchida
 - Part II. Propagation Test — M. Ito
- Precipitation in Grain Boundaries of Ferrites and Their Electrical Resistivities — T. Akashi
- Domain Wall Observation on Cylindrical Permalloy Thin Films by Pulse Technique — T. Furuoya
- Amplification of Microwaves by the Interaction of an Electron Beam With a Cesium Plasma — Y. Asami, M. Ozawa, K. Ayaki and H. Katoh
- The Modulator and Demodulator for High Speed Digital Transmission on Microwave — S. Ito and S. Yokoyama
- An Experimental High Speed Electronic Switching System Using Delta Modulation — O. Enomoto, A. Tomozawa, H. Katayama, H. Kaneko and T. Sekimoto
- New NPN Planar Transistor — Mesa-Shaped-Emitter Transistor — T. Irie
- Universal Two-Way Multitape Finite Automata — K. Kobayashi and S. Sekiguchi

VHF Aerial Gain Calculation Using Tables of Mutual Resistance Between the Radiating Elements, by P. Knight and R. E. Davies (*BBC Engineering Division Monograph*, No. 66, February 1967), presents a method for calculating the gain of a VHF aerial from the mutual resistances between the radiating elements. The 39-page monograph contains 21 pages of relative mutual resistance tables for (1) Vertical Dipoles; (2) Tangential Doublets; and (3) Radial Unipoles. The monograph is available from BBC Publications, 35 Marylebone High St., London W.1, England. It is priced at 5s. 



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