news and reports

94th Semiannual Convention

October 13–18, Somerset Hotel, Boston

THE SOCIETY'S substantial Conventions are not put together overnight: as the detailed plans and commitments for the 93rd Convention at Atlantic City were being carried out, many general plans for the 94th Convention were already underway.

Program Chairman is **Morton H. Read,** Bay State Film Productions, Box 129, Springfield, Mass. Mort Read began his planning last year after appointment by 1962's Papers Committee Chairman Robert C. Rheineck and Editorial Vice-President Glenn E. Matthews.

Topic Chairmen already at work early this year for the Fall Convention are: for 8mm, *William D. Hedden* of Calvin Productions; for instrumentation and high-speed photography, *Charles W. Wyckoff*, of Edgerton, Germeshausen & Grier; for laboratory practices, *John J. Kowalak* of Movielab, Inc.; for motion pictures, television and education, *Hartford N. Gunn, Jr.* of WGBH-FM & TV; for optics, *Werner K. Bender*, Kalart Co., Plainville, Conn.; for sound recording, *Robert C. Lovick*, Eastman Kodak Co.; for space technology, *Edward W. Palmer* of New England Telephone & Telegraph Co.; and for papers from abroad, *Rodger J. Ross* of the Canadian Broadcasting Corp. Rodger Ross is the Society's Paper Committee International Vice-Chairman. *Lowell Wentworth* of Bay State Film Productions will assist on the Program.

Deadline for abstracts of papers is June 24; completed papers are due August 12.

The roster of Topic Chairmen will soon be complete and will be announced by Papers Committee Chairman Loren C. Graham. Dr. Graham, of the Color Technology Dept. of Eastman Kodak Co., has been appointed Papers Committee Chairman for 1963–64 by Editorial Vice-President Herbert E. Farmer.

Education, Industry News

The 7th International Congress on High-Speed Photography will be held in Vienna, Austria in 1964. Prof. Dr. Othmar Helwich of Darmstadt, Germany, has been appointed Congress Chairman. Additional information, including dates, location, topics and topic chairman will be published in the *Journal* as soon as such information becomes available. Max Beard, 10703 E. Nolcrest Dr., Silver Spring, Md., is the U.S.A. Delegate from whom information can be obtained.

The 23rd Annual National Audio-Visual Convention sponsored by NAVA will be held July 20–23 at the Sherman Hotel, Chicago. General Chairman will be Robert P. Abrams of Philadelphia, according to an announcement by NAVA President, Harold A. Fischer. The Convention includes the Audio-Visual Exhibit at which all types of audio-visual equipments and materials will be shown, including teaching machines, language laboratories and materials production devices, the announcement stated. About 3500 delegates are expected.

The Fifth Joint Automatic Control Conference will be held at Stanford University, Stanford, Calif., June 26–28, 1964. Professor G. Franklin and Professor L. A. Zadeh, both of Stanford University, have been appointed General Chairman and Chairman of the Program Committee, respectively. Sponsors of the Conference are the American Institute of Chemical Engineers, the American Society of Mechanical Engineers, the Instrument Society of America, and the Institute of Electrical and Electronics Engineers. The IEEE has the prime responsibility for the 1964 Conference.

Prospects of increased participation in international film events during 1963 are reported by the Committee on International Nontheatrical (Film) Events (CINE), 1201 16th St., N.W., Washington 6, D.C. John Flory of Eastman Kodak Co. is National Chairman of CINE. Based on official invitations already received and others expected, film events at which CINE representation is expected include Berlin; Cannes; Cortina; Festival and Seminar On Films on Art, Ottawa, Canada; Buenos Aires; Berlin Agriculture; Brussels; Edinburgh; LaPlata, Argentina; Lebanon; Valencia; Vancouver; and those at Venice (Documentary, Children's, Golden Mercury, and Padua).

Technical Aspects of Communication Satellites was the subject of a two-day conference held at the Illinois Institute of Technology (IIT) beginning May 2. Sponsored jointly by the Committee for Economic and Cultural Development of Chicago, the National Aeronautics and Space Administration, and IIT and its Armour Research Foundation, the two-day meeting was part of the 3rd National Conference on the Peaceful Uses of Space held at IIT May 1–9.

A final fund drive campaign for the United Engineering Center has been announced by the Board of Trustees of United Engineering Trustees, Inc. The Center, dedicated in November, 1961, is located at United Nations Plaza, New York, and is a joint effort of the engineering profession in the United States. It houses headquarters for several national engineering societies representing more than 300,000 engineers. It was also announced that a matching grant of $300,000 had been received from the Ford Foundation to stimulate the final fund drive. The grant will enable completion of the 15th and 16th floors of the building and installation of additional elevators, providing space for several more large national engineering societies.

The American Society for Testing and Materials has announced a policy decision requiring inclusion of metric equivalents throughout its publications. The decision was made upon recognition that U.S. industry faces increasingly stiff competition for markets in countries using the metric system. While the ASTM "believes it necessary and desirable that industry be prepared for wider use of the metric system," the announcement stated, "it does not now advocate or recommend any change in presently established values or tolerances but, rather, advocates publishing both the present units and their precise metric equivalents." The ASTM recommended, however, that in developing new standards, quantities and/or tolerances be selected which will convert to convenient, reasonable metric values.

A total of 8,544 medical films were lent by the AMA Film Library during 1962, according to a report from the American

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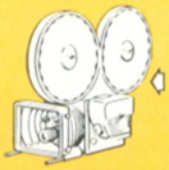

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MANUFACTURERS OF SOUND-ON-FILM RECORDING EQUIPMENT SINCE 1931

Medical Association's Department of Medical Motion Pictures and Television. This figure represents an increase of 9.1% over figures for 1961, the report stated. The greatest number of requests for films during 1962 came from civilian hospitals with a total of 2,110. Service hospitals (Army, Navy, Air Force and U.S. Public Health) represented the largest percentage gain (30.7%). Schools of nursing used 1,686 films, and 1,031 films were requested by medical schools. The remainder of the requests came from medical societies, clinics, individual physicians, health departments and allied medical groups. The film library now contains 1,200 copies of 258 subjects. There are 176 subjects for professional audiences and 82 health films which are used by physicians to address lay groups.

Weekly classes in animation are now underway at the University of Southern California, Los Angeles. The classes, held at night, began February 11 and will continue through mid-June. Courses and instructors are: Filmic Expression, Les Novros; Animation Art, Bill Melendez; Animation Layout and Design, Bernard Gruver; Animation Scene Planning and Camera Technique, Ray Thursby; Cinema Workshop, Herbert Kosower; and Animation, also taught by Mr. Kosower, who is an Associate in Motion Pictures at USC and coordinator of the Animation Program.

The case of instructional TV in Army training programs was recently discussed by Major General Earle F. Cook, Chief Signal Officer of the U.S. Army, at a meeting of the Washington Chapter of the AFCEA. Studies were conducted at Fort Dix, the General said, using the following method: "Two companies entering basic training at the same time were selected. They were matched for intelligence based on Army tests, so that on a man-to-man basis, the two companies were very similar. Based on a flip of a coin, one company was designated as the television company, and the other as the conventional control company." General Cook explained that at the end of the basic training cycle, master tests to measure overall training achievement were given to the TV company and to conventional companies at Fort Dix, Fort Jackson and Fort Ord. "The difference in the scores made by the TV company and the conventional companies showed a range of 10 to 26 points in favor of the TV company," the speaker reported.

Other highlights from General Cook's speech: " . . . television recordings reduced requirements for instructors by approximately 150 hours. . . . The results of the Fort Dix study have given us some new insights into the potential role of television in military training and show a prime example of its effective utilization. Other training applications are possible; for example, television can be used to depict small unit tactical exercises as they take place, thus permitting a dynamic real-time critique. . . . During our across-the-board development of television for military uses during the past ten years, the Army has maintained close liaison with the television industry. . . . When we first began, the image-orthicon camera, then available, was found to be effective but expensive and bulky. In response to the need for a smaller less expensive camera, industry produced the vidicon camera, and development of video tape also found quick military application . . . other requirements in television represent important challenges. . . First, there is the need for simplification of maintenance. . . Second, weight and bulk and power requirements must be reduced. . . Third, there is a requirement for television receivers capable of being viewed in daylight without getting a washed-out picture . . . the extent to which television will find future military application depends upon improving existing equipment, finding new techniques, and lowering power requirements and equipment costs."

The Camera Mart Film Editing Workship-Seminar October 7–11 (*Journal*, Jan., p. 46) will have among its lecturers many who are known in motion-picture engineering. A total of fifty speakers and lecturers had been announced as having accepted invitations to participate in the event. Among recent announcements are the names of John Flory, Advisor on Non-theatrical Films for Eastman Kodak; George Stevens, Jr., Director of the Motion Picture Service of the U.S. Information Agency; Maurice Levy of Eastern Effects; John Kowalak, of Movielab; Calvin M. Hotchkiss of Eastman Kodak; Irving Sheib of Q.Q. Motion Picture Titles; Arnold Eagle of Arnold Eagle Productions and the New School; Jack Glenn of Jack Glenn, Inc. and City College of New York. The workshop-seminar is sponsored by Camera Mart, Inc., 1845 Broadway, New York 23. Information is available from the firm's general manager, Charles Lipow.

Installation of Strong 1600-w xenon projection arc lamps in the auditorium of the Lytton Center of Visual Arts, Los Angeles, has been announced by Pembrex Theatre Supply Corp. The Lytton Center Theatre-Auditorium of Hollywood is a newly established art theater and gallery, planned as a gathering place for film-makers and nonprofessional audiences interested in viewing film classics. The theater will feature programs contributing to the appraisal of films as an art form. Members of the Screen Guilds and Unions will participate in special screenings.

Plans for a theater television network using a color television projector called Talaria, developed by General Electric, were announced jointly by National General Corp., operators of 220 theaters, and General Electric. The projector has a high-power light source and an optical projection system similar to that of a motion-picturer projector, but in place of the printed motion-picture film, a thin layer of viscous fluid is used, the announcement stated. The control fluid was developed by General Electric for this particular application. The control layer is continuously scanned by an electron beam in the same manner as the phosphor on the face of the picture tube in a conventional TV set, but instead of producing a picture directly on the control layer, the scanning process controls the light which passes through the control layer to produce a live picture on a large screen.

The renaissance of Cinerama, a modern phenomenon of the motion-picture industry, has sparked a number of related developments including a type of theater based on geodesic dome design. Cinerama, invented by the late Fred Waller and used to train fighter pilots during World War II, was introduced to the entertainment world in *This Is Cinerama* as "putting the audience right in the picture." Hazard Reeves is credited with adding "surrounding" sound to the Cinerama picture.

Now used for feature-length motion pictures (*Brothers Grimm, How the West Was Won*), a specially constructed theater called the Cinerama Dome Theatre has been introduced. Based upon the geodesic dome concept developed by R. Buckminster Fuller, it is built from pre-cast concrete at an estimated cost of $250,000 for a 1000-seat house. A typical theater of this type is about 140 ft in diameter and 52 ft high. The audience enters from a street-level lobby and ascends to a single-floor seating area.

The SPIE Image Enhancement Seminar (*Journal*, Jan. p. 44) was held March 11–12 at the St. Louis Planetarium, Forest Park, St. Louis, under the auspices of the St. Louis Chapter of the Society of Photographic Instrumentation Engineers. R. J. Gast was Chairman of the Seminar. In addition to seminar topics for audience participation discussion, formal papers were presented on various topics within the photographic instrumentation field. Among papers presented were "Enhancement of Images Transmitted Through Fiber Optics" by Anwar Chitayat; "Selected Electronic Techniques for Image Enhancement" by Samuel Levine and Harold Mate; "Detail Rendition and Sensitivity in Recording Light Images and Electron Beams" by Dr. H. F. Nitka; "Automatic Image Correlation" by John Roscoe; "Electrooptical Enhancement of Microscopic Images" by Nicholas Izzo; "An Optochemical Technique for the Enhancement of Response, Resolution, Acutance, and Contrast of Some Photosensitive Emulsions" by Douglas A. McManigal; and "Mechanical Image Enhancement Within the Recording Instrument" by C. G. Holzapfel.

This is the first of a series of "seminars-in-depth" planned by the SPIE.

Zoomar International Inc., Glen Cove, L.I., N.Y. has been appointed exclusive representative for Ets Pierre Angenieux of Paris and Evershed Power-Optics Ltd. of London for the United States, Canada and South America, it was recently announced. This affiliation will make available a comprehensive range of standard zoom lenses as well as special optics, the announcement stated.

The Committee on International Non-Theatrical Events (CINE) has conferred Golden Eagle certificates upon 68 American-produced films, entitling them to enter the "finals" for selection for entry in international film festivals. The certificates were presented by CINE National Chairman John Flory during ceremonies held in Washington, D.C., in November.

Sponsors and producers of 42 American films which had won awards in 16 inter-

national film festivals were honored during the ceremonies. Film festival awards were presented by Michael Robb, Information Minister of the British Embassy, for the Edinburgh International Film Festival; Gian Luigi Milesi Ferretti, Minister of the Italian Embassy, presented awards for the Venice International Film Festival; and Wilbert H. Pearson, of the Motion Picture Service of the U.S. Information Agency, presented awards for other festivals.

CINE, which has as its purpose the selection of nontheatrical (as distinguished from commercial and drama) films for entry in international festivals, has been in existance five years. Organized at the request of a number of festival authorities, CINE is the official coordinating agency for American entries with the responsibility of processing for entry nontheatrical films and short subjects of general interest that best meet the requirements of each festival. It is a voluntary organization, depending for financial aid upon interested groups. Regional screening committees totaling more than 150 qualified persons act as judges. Selections made by regional committees are submitted to a national committee for final judging. The films are grouped according to subject matter under various categories including agriculture, business and industry, education, medicine, religion, science and television.

The Biological Photographic Association for its 32d meeting joined with the University Extension, Univ. of California, Berkeley, to present a Conference on Photography in Science. About 20 papers were presented during the five-day conference held last August in San Francisco. Papers of special interest to professional photographers include "Optics: Theoretical and Practical" by Rudolf Kingslake; "Image Structure" by C. S. McCamy; "Photography and Automation in Marine Research" by Carl J. Shipek; and "Advances in Photography as the Result of Scientific Progress," by Henry Lester. Information about BPA is available from Mrs. Jane W. Crouch, BPA Secretary, Box 1668, Grand Central P.O., New York 17.

The International Television Programme and Equipment Market, organized with the cooperation of Radiodiffusion-Television Francaise, was held during the first week in March at the Palais des Congrès Internationaux, Lyons, France. A three-day event designated International Study Days (March 2–4) brought together members of the television and film industries in both artistic and technical fields for exchange of information on common problems. Among the topics of discussion were light weight television equipment, and non-optical methods of recording pictures.

An award for "outstanding services to meteorology by a corporation" has been presented to the Radio Corporation of America by the Meteorological Society. The award is in recognition of RCA's successful Tiros program. Six Tiros meteorological satellites have been successfully launched and Two (Tiros V and Tiros VI) are still in orbit and sending weather information back to Earth. Acceptance of the award on behalf of RCA was made by Barton Kreuzer, Division Vice-President and General Manager of the Astro-Electronics Division, RCA Defense Electronic Products.

Tiros (Television Infrared Observation Satellite) was developed, tested and produced by RCA for the National Aeronautics and Space Administration under the technical direction of the Goddard Space Flight Center. Tiros I was launched in the Spring of 1960 (*Journal*, p. 272, Apr., 1960) and by the end of 1962 six Tiros satellites had been placed in orbit (with two still "alive"), and more than 203,000 TV pictures of weather systems and ice floes had been transmitted to meteorologists during the 1150 working days the satellites had spent in orbit.

A recently patented multiple-sensor airborne reconnaissance system, designed to integrate radar, photography, and infrared inputs, and present the total information in superimposed form on a single film surface, may be used to discover and identify hidden war materials on the ground, no matter how carefully hidden or camouflaged. The patent has been issued to Gen. George W. Goddard, Special Assistant to the President of Itek Corp., of Lexington, Mass. Gen. Goddard, a retired Air Force Brigadier General, served for 22 years as Director of Research at Wright Field Reconnaissance Center. He holds a number of other patents in aerial photography, one of the more recent being for aerial and ground-based photographic equipment for photographic nuclear explosions.

Development of a solid-state element called a metal oxide semiconductor transistor which is capable of being fabricated in large interconnected arrays has been announced by the Radio Corp. of America. Culmination of two years of research sponsored jointly by the U.S. Air Force Cambridge Research Laboratories, Bedford, Mass., and RCA, the unit, a semiconductor device made from silicon and capable of amplifying electric voltages is described as an "insulated-gate field-effect transistor." By varying the input voltage on the insulated gate, the device as a whole can be made to switch, amplify, or otherwise regulate its output of electric current in a manner analogous to a pentode vacuum tube. Circuits using these new elements are made by producing conducting paths in a slice of high-resistivity silicon, leaving gaps wherever an active element is desired. An insulator is produced by simply oxidizing the silicon over the gap. A metal electrode or "gate" is deposited on top of the insulator and connected into the circuit. By applying proper voltage on the insulated gate the gap becomes conducting and the circuit is closed. It is reported that arrays of up to 850 of the new components have been produced in an area the size of a dime.

High-speed photoinstrumentation equipments are offered for short term rental or long term lease by Beckman & Whitley, Inc., San Carlos, Calif., it was recentley announced. Lease-rental schedules have been established for the company's Model 189A Synchronized Framing Camera; Model 200 Simultaneous Streak and Framing Camera; Model 770 Nanosecond Streak Camera; Model 339 Continuous Writing Streak Camera; Model 1500 Spectrograph; Model 364 Oscilloscope Camera and the Dynafax Continuous Writing Framing Camera. Accessory equipment is included.

A total of 454 persons, representing a cross-section of American and Canadian motion-picture industry, attended the 17th annual Calvin Workshop at Calvin Productions Inc., 1105 Truman Rd., Kansas City 6, Mo. A Workshop innovation was a sound color picture filmed in secret as delegates and guests arrived, registered and attended morning sessions. Filmed on Kodachrome Commercial, workprinted on Kodachrome (5269) and with a married sound release print made on Kodachrome release stock, the film was rushed to the Calvin Laboratory about 10:00 in the morning and shown to the enthralled audience at 4:30 that same afternoon. In addition to the Calvin staff of creative and technical specialists, prominant participants in the Workshop sessions included Allen Wylie of International Paper Co., Marion Jones of Kimberly-Clark Corp., Charles Probst of Cook Electric, Robert Fuller of Pillsbury, Gerry Hall of National Cash Register Co., and Bill Fetter of Boeing. The sessions ranged from discussions on the earliest sponsored motion picture to the latest development of using computers to draw technical animation in the aircraft industry.

Development of a high-power green light source for experimental work in underwater communications and surveillance techniques has been announced by the Laser Systems Center of Lear Siegler, Inc., of Ann Arbor, Mich. According to the announcement, experimenters have observed more than 10 kw of coherent radiation with a bandwidth of 2 A cantered at 2300 A. The green light is generated by projecting an output beam from a neodymium doped glass laser into a nonlinear crystalline material. The second harmonic of the laser output is physically generated within the crystal. The wavelength of the second harmonic output is 0.53 microns, half that of the laser output of 1.06 microns. The beam width of the emitted green light is reported to be one milliradian. Single pulses of less than 0.1 μ sec duration have also been generated.

Ten new installations of Ampex/Marconi Pilot Landing Aid Television (PLAT) systems on U.S. aircraft carriers have been scheduled, according to an announcement from Marconi's Wireless Telegraph Co., Chelmsford, Essex, England. The PLAT system is a multichannel television and sound monitoring and recording facility designed to improve the proficiency of pilots and landing control personnel. The system employs three Mark IV 4½-in. image-orthicon cameras and a type BD871 miniature vidicon camera. The vidicon camera is permanently focused on a data display board in the PLAT control room to record date, time, wind velocity, aircraft approach speed and the wave-off signal. The picture from this camera is combined with that from any of the other

cameras in a simultaneous display, and this composite picture is recorded on a standard Ampex Videotape Recorder on a 90-min reel of 2-in. video tape. Conversation between the pilot and landing operation personnel is recorded simultaneously on one of two audio channels on the same tape, the second one being kept as a "cue" track for additional commentary for debriefing or for possible accident analysis.

Of the outstanding common stock of S.O.S. Photo-Cine-Optics, 602 W. 52 St., New York 19, approximately 53% has been acquired by Alan C. Macauley (who is now S.O.S. President and a director of the company) and Jan T. Macauley. The new President succeeds Joseph A. Tanney, S.O.S. President since the company was founded 37 years ago. Mr. Tanney remains with the firm in the capacity of Chairman of the Board. Other new S.O.S. officers are: Vice-President and General Manager, Dominick J. Capano; Engineering Vice-President and Secretary, William H. Allen; Treasurer, Jan T. Macauley.

In the same announcement it was noted that Claude C. Pitts has been appointed Sales Engineer with headquarters in the Hollywood office of the firm.

Establishment of a new Sales Division, called Camera Sales Center Corp., has been announced by Camera Service Center, Inc., 333 W. 52 St., New York. The new sales center will specialize in the sale of motion-picture equipment, including cameras, lights, sound, editing and projection equipment. Small camera accessories will also be available.

Closed-circuit TV on a fishing vessel has been installed by the Marconi International Marine Co. A new 240-ft stern trawler, the *Junella*, sailing out of Hull, England, early this year, used the system experimentally on a five-week trip. Because of the distance — 180 ft — between the bridge and the site of operation of the fishing gear, the use of closed-circuit TV was decided on as a practical means of making observations otherwise impossible.

Two Marconi closed-circuit TV cameras were mounted in waterproof housings at either end of the gallows bridge aft, with a third suspended from the deckhead in the fishroom. Two monitors were fitted side by side in the wheelhouse, one to show the fishroom and the other to show the trawl warps as they emerged from the water about 12–15 ft behind the vessel. The gallow bridge cameras each looked downward and inward in a "cross-eyed" manner to cover the stern and approximately 25 ft of water beyond.

The Marconi Marine Company is presently developing a more rugged camera housing for trawler use. Other possible applications for closed-circuit TV on the modern trawler include observation of the winch and trawl deck area through a camera mounted on the mizzen mast or after bipod; and a view aft along the trawl deck and down over the stern ramp.

The Motion Picture Advertising Service Co. of New Orleans and the Alexander Film Co. of Colorado Springs, Colo., have combined their local sales organizations into one sales company under the corporate name of Motion Picture Alexander Corporation. Headquarters of the new organization will be in New Orleans. Special production, commercial servicing and laboratory servicing will be carried on by the Alexander Film Co., Colorado Springs.

Leopold Enterprises, Inc., is a newly announced firm, formed to engage in the manufacture of optical, mechanical, and electronic devices. Facilities have been established at 111 Industrial East, Clifton, N.J. Head of the new firm is Rudolf Leopold, who formerly held positions with Allen B. DuMont Laboratories, Camera Equipment Co., and other firms in the motion-picture and television fields.

National Production Associates, Inc., is a new firm offering production services in both theatrical and nontheatrical fields. The organization, which is located at 35 W. 45 St., New York 36, offers facilities including offices, studios, camera and lights, editing rooms and projection equipment. Joseph S. Salzburg is President and Bert L. Coleman is Vice-President.

Behrend's Inc., Chicago, has announced the opening of an office at 4019 Prospect, Cleveland, Ohio. The new branch will specialize in the sale and rental of motion-picture equipment, including cameras, lights and editing equipment. Mac Blair will be in charge.

Permafilm, Inc., formerly of 723 Seventh Ave., New York 19, has moved to larger quarters at 79 Fifth Ave., it was announced recently.

Camera Mart, Inc., 1845 Broadway, New York 23, has announced its appointment as a dealer of Du Pont film products and as a distributor of Scotch Magnetic Film products. Du Pont products kept in stock will include 16mm black-and-white film, negative and reversal, 35mm negative black-and-white film and 16mm and 35mm white and black leader, the announcement stated.

John S. Kane has been named Vice-President of Reeves Soundcraft, New York, succeeding Frank B. Rogers, Jr., who has resigned. Mr. Rogers will continue with the firm in the capacity of consultant. In his new post, Mr. Kane will act as General Manager of Soundcraft's Magnetic Tape Division in Danbury, Conn. He was formerly Assistant Director of Operations for the International Resistance Co., of Philadelphia.

Richard T. Goldberg has been appointed Vice-President in charge of the Research and Development Division of Technicolor, Hollywood. He has been in charge of special research projects for Technicolor since 1953. In his new post he will be in charge of the firms Research Division, located at Burbank, Calif., and will direct all research activities of the Technicolor laboratories in Hollywood, London and Rome.

Edward E. Engel has been appointed Regional Sales Representative for Reid H. Ray Film Industries of St. Paul for the region including the Twin Cities of Minneapolis and St. Paul as well as Western Wisconsin and the States of Minnesota, Iowa, North Dakota and South Dakota. Mr. Engel has previously held positions with film producers in Chicago as cinematographer and also as director.

Edward C. Powles has been elected President and Treasurer of General Film Laboratory, 66 Sibley St., Detroit 1.

William Szabo has been appointed a Vice-President of Reevesound Company, 35–54 36th St., Long Island City 6, N.Y., it was announced by Boyce Nemec, President of Reevesound. Mr. Szabo will be in charge of contract operations and construction. The appointment is part of a planned expansion of the firm's design and engineering services in the area of communications motion pictures. Mr. Szabo took an active part in Reevesound's participation in the Seattle World's Fair which included the creation, installation, and operation of 50 major motion-picture systems for the Federal Science Pavilion. The company's extensive operations at the New York World's Fair will be under the direction of Mr. Szabo.

David L. MacAdam, Senior Research Associate in the Physics Division and head of the Image Structure Dept., Research Laboratories, Eastman Kodak Co., Rochester, N.Y., is the fourth recipient of the Godlove Award of the Inter-Society Color Council. Presentation of the award "for outstanding contributions to the knowledge of color in science, art and industry" was made by W. J. Kiernan, President of the Inter-Society Color Council, on March 12, during the 32nd Annual Meeting of the Council in New York. The award consists of a plastic prism in which is embedded a gold diffraction grating which produces all the colors of the spectrum. The words "Art, Science, and Industry" are engraved on the back of the award, and in the center appear the words, "The Godlove Award," the name of the recipient, the date of the award, and the name "Inter-Society Color Council."

Dr. MacAdam has done research on methods of color measurement, employing an automatic recording spectrophotometer, and the application of these methods to a study of the accuracy of color reproduction in color photography and printing. He has extended the theory of color photography based upon the characteristics of human vision and spectrophotometric characteristics of dyes and pigments. He also has conducted an investigation of visual sensitivities to small color differences and the influence of vision on color photography and color television. Various papers by Dr. MacAdam relating to these research projects have appeared in the *Journal*, including "Perceptions of Color in Projected and Televised Pictures" (Sept. 1956, pp. 455–469); "A New Look at Colorimetry" (Nov. 1955, pp. 629–631); "Stereoscopic Perceptions of Size, Shape, Distance and Direction" (Apr. 1954, pp. 271–293); "Influence of Color Surround on Hue and Saturation" (Sept. 1951, pp. 197–205); and "Quality of Color Reproduction" (May 1951, pp. 487–512).

Douglass C. Harvey and Lawrence R. Martin of Eastman Kodak Co. have been appointed to new positions in the

Apparatus and Optical Division. Mr. Harvey has been made Manager of Commercial Products Research and Engineering and Mr. Martin has become Program Manager, Research and Engineering.

Mr. Harvey began service at Kodak in 1939 as an assistant engineer in the engineering department at Camera Works. In 1956 he joined the Apparatus and Optical Division as Assistant to the Manager of Development and Engineering and in 1961 he was appointed Associated Director of Research and Engineering for the division.

Mr. Martin has been with Kodak since 1931 when he joined the engineering department of Camera Works as a draftsman. In 1951 he became Superintendent of Manufacturing Engineering and in 1962 he was named Superintendent of Fabrication for Research and Engineering. Mr. Martin was recipient in 1948, with co-authors J. S. Chandler and D. F. Lyman, of the Journal Award for the paper, "Proposals for 16mm and 8mm Sprocket Standards," published in the June, 1947, issue of the *Journal*.

Fred Schaetzing has been appointed Manager of the Gevaert Detroit District office, it was announced by The Gevaert Company of America, 321 W. 54 St., New York 19. In his new position he will be responsible for sales of all Gevaert sensitized photographic products in the states of Ohio, Indiana, Kentucky and Michigan.

Charles A. Jantzen has been elected President-Treasurer of the newly organized New Jersey Chapter of the Society of Photographic Instrumentation Engineers (SPIE). Inquiries about the new chapter should be directed to Mr. Jantzen at 190 Alps Road, Wayne, N.J. Secretary of the new chapter is A. A. Lamphier. Committee Chairmen are: Program, Dennis Crow; Constitution and By-Laws, Mr. Lamphier, John Kalinich and Henry J. Massingham.

Victor James has been appointed Vice-President in Charge of Sales of Arriflex Corp. of America, 257 Park Ave. South, New York 10. Mr. James joined the Kling Photo Corp. in 1952 and was appointed Sales Manager of Arriflex when this company succeeded Kling in 1959.

Victor A. Babits has been appointed Manager of Applied Research at General Dynamics-Astronautics, San Diego, Calif. Dr. Babits was previously Professor of Electrical Engineering at Rensselaer Polytechnic Institute.

Thomas H. M. Elwell has been appointed New York Regional Sales Manager for the Westrex Recording Systems Department of Litton Industries. His offices will be at 76 Ninth Ave., New York. Before joining Westrex, Mr. Elwell was in charge of optical, motion-picture and sound recording laboratories for U.S. Industries, Government Programs Div., Westchester County Airport, New York.

Harry Robert, for the last 12 years sports editor of Telenews and News of the Day, has joined Allegro Film Productions, Inc., 723 Seventh Ave., New York 19. Jerry Forman, founder of Allegro and head of the firm, noted in his announcement of Mr. Robert's appointment, that he and Mr. Robert formerly were co-workers at Hearst-Metrotone News, where they jointly produced *The Big Moment*, *Time Out for Sports*, and other television films.

Lionel H. Wheeler has been appointed Vice-President and General Manager of Colorvision, Inc., 1326 Flower St., Glendale 1, Calif. Mr. Wheeler, who is co-inventor of the Colorvision additive color system of photography, has had more than 30 years experience in the optical field, according to the announcement made by Harold V. Lee, President.

Walter J. Washick, formerly Manager of Colorvision's Engineering Department, has succeeded Mr. Wheeler as Vice-President in charge of Technical Operations, according to Mr. Lee's announcement. Mr. Washick has been a major participant in the concept, design and development of new equipments and techniques in photographic processing and printing, film handling, information recording, and related fields.

Membership Certificates (Active and Associate members only). Attractive hand engrossed certificates, suitable for framing for display in offices or homes, may be obtained by writing to Society headquarters, at 55 West 42d St., New York 36, Price: $2.50.