Nominations for Society Offices

The Board of Governors at its meeting on July 19, 1963, approved the following slate of nominees for the Fall elections:

Engineering Vice-President: DEANE R. WHITE

Financial Vice-President: JOSEPH T. DOUGHERTY

Sections Vice-President: WILTON R. HOLM

Treasurer: BYRON ROUDABUSH

Governors From East Coast: J. S. COURTNEY-PRATT, RICHARD S. O'BRIEN, RICHARD E. PUTMAN, ROBERT RHEINECK, EDWARD M. WARNECKE

Governors From Central Area: O. S. KNUDSEN, WILLIAM D. HEDDEN, ROBERT A. COLBURN, WILLIAM H. SMITH, MALCOLM G. TOWNSLEY

Governors From West Coast: ROBERT D. SHOBERG, EDWARD P. ANCONA, JR., EDWARD H. REICHARD, G. CARLETON HUNT, A. ALAN JACKSON, JOHN O. AALBERG

Education, Industry News

Four types of color TV cameras were compared during a demonstration of color TV equipment conducted by Marconi's Wireless Telegraph Co. and English Electric Valve Co. in London during July. Two of the cameras operated on the system of three camera tubes producing red, blue and green signals; the other two used "separate luminance" signals. According to an account of the demonstrations issued by Marconi, the principle of the separate luminance signal was first demonstrated by Marconi in 1954, but possibilities of this system were not fully explored at that time. The luminance system again came into prominence when RCA announced a 4-tube camera operating on this principle (New Products, *Journal*, p. 652, Aug. 1963; see also, I. C. Abrahams, "Analysis of color errors in color television cameras," *Journal*, pp. 595–601, Aug. 1963).

The first of the two "separate luminance" cameras which were demonstrated employed four separate camera tubes, one for the luminance signal and the other three for the red, green and blue signals. The other separate luminance camera uses only three tubes, one of which is a luminance signal. The red and blue components of the light input are directly converted into electrical signals in two of the tubes and the green component is derived from the three signals. Of the two 3-tube, standard-type color cameras demonstrated one employs 3-in. image-orthicon equipment, producing red, green and blue signals, and the other is based on the same principle, but employs three 4½-in. image orthicon tubes.

The Society of Photographic Instrumentation Engineers held its 8th Annual Technical Symposium August 5–9 at the Ambassador Hotel, Los Angeles, with the cooperation of the Air Force Systems Com-

mand. Keynote address was delivered by Brigadier General Joseph J. Cody, Jr., USAF, who spoke on "The Eyes and Ears of the Space World." A major feature of the Symposium was an Exhiborama of Equipment in which latest developments in photooptical instrumentation equipment were exhibited by some fifty manufacturers. SPIE national offices are at 205 Avenue I, P.O. Box 288, Redondo Beach, Calif.

Tours of the Fostoria, Ohio, plant of the National Carbon Company, division of Union Carbide Corp., were held July 16 and 17 for members of the press. Hosts for the tours were J. W. Cosby, Marketing Manager, and Philip H. Freeman, Sales Manager, of arc carbon products for National Carbon. In addition to an inspection of production facilities, the tours included the development laboratory at Fostoria and the company's research laboratories at Parma, Ohio, where basic work is done on the physics of the carbon arc as a light source. The tours included informative discussions and explanations of the history and development of the carbon arc as a light source and examples were shown of current research activities.

The 1964 Electronic Components Conference, sponsored by the Electronic Industries Association and the Institute of Electrical and Electronic Engineers, with the American Society for Quality Control participating, will be held May 5–7, at the Marriott Twin Bridges Motor Hotel, Washington, D.C. The Technical Program Chairman is Dr. John J. Bohrer, International Resistance Co., 401 N. Broad St., Philadelphia 8, Pa.

Preliminary plans for the 1964 Intermag Conference (International Conference on Nonlinear Magnetics), sponsored by the IEEE, have been announced by Conference Chairman W. L. Shevel, of IBM, and Program Chairman R. C. Barker of Yale University. The meeting will be held April 6–8, at the Shoreham Hotel, Washington, D.C. The papers program is expected to center around saturable magnetic devices and materials. Special emphasis will be given to the application of superconductive devices and materials. The 1963 meeting was held last April and emphasized new developments, including magnetic logic, memories, and recordings.

A multimillion dollar addition to the photographic film manufacturing facilities at the Kodak Park Works of Eastman Kodak Co. is now under construction. Increased capacity for making film base will be provided by enlarging an existing film manufacturing building located on Kodak property west of Mt. Read Blvd. in the town of Greece, a Rochester, N.Y., suburb. The new construction, which will add about 90,000 sq ft of floor space, is scheduled for completion in the Spring of 1965. The irregularly shaped addition will be made to the north side of the present building and will be approximately 380 ft long and 80 ft wide. It will consist of three stories and a basement. Previously announced was an addition to the photo-

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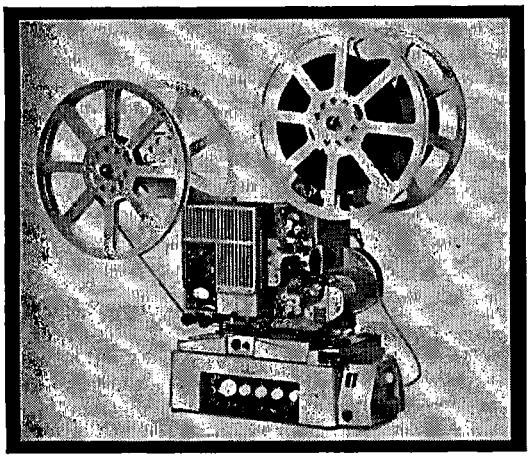
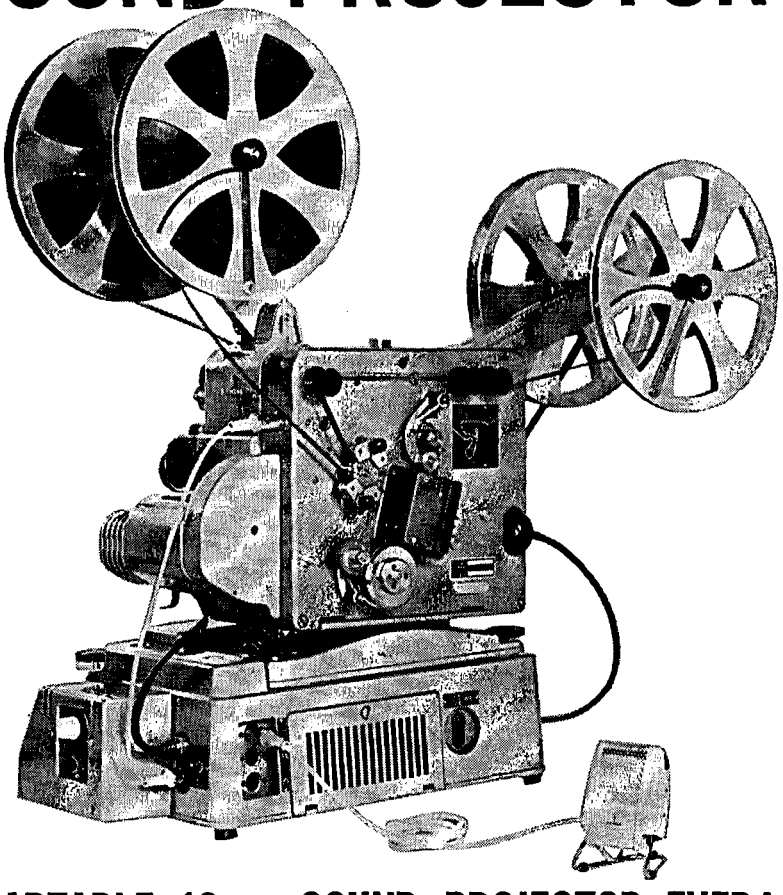
THE WORLD'S ONLY LOW COST 16mm *DOUBLE BAND OPTICAL/MAGNETIC* SOUND PROJECTOR

- **Uses 16mm perforated magnetic film on a separate mechanically interlocked sound system!**
- **Plus all features of conventional optical/magnetic sound projectors!**
- **Permits record, re-record, mix and playback functions with positive synchronization!**





THE MOST VERSATILE, MOST ADAPTABLE 16mm SOUND PROJECTOR EVER!

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Preview Projector: Work print on one side and sound track on the other, and the Siemens 2000 16/16 gives you 16mm picture projection with 16mm sound interlock. Preview Theatre quality, too!

Quick Access: original 16mm film on the projector side—original 16mm sound recording on the 16mm magnetic channel, gives you interlocked, synchronous sound. It's portable, too.

Multi-track Films: Show multi-lingual, or other special purpose multi-track sound films, easily, inexpensively. Playback, or playback and record, too.

"One-show" films, "quickie" productions, limited-purpose **"low budget" shows** — whatever the special purpose, with the picture and sound features of Siemens Projectors, you can do them all to professional standards, and at low cost.

Plus many others

The modular designed Siemens 2000 Double/Sixteen offers a wide range of uses to serve virtually the entire spectrum of professional requirements. Its modular **two-system** assembly anticipates every application, assuring maximum adaptability to every sound projection. Permits as many as **nine** ways to record and re-record. The "Single System" side is designed for optical playback and magnetic recording/playback on full and half-track facilities. The "Double System" uses 16mm perforated magnetic film on an added rear sound channel, mechanically interlocked with the projector for absolute synchronization.

Use the Siemens 2000 16/16 as a one-piece sound studio, or as a special purpose Sound-Projector supplement to your existing facilities. No matter how "special" your requirements, you will find this the most adaptable and the most useful Sound Projector ever made.

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graphic emulsion coating area in Kodak Park East. Production in this unit is also scheduled to begin in 1965.

A new scientific data processing center, now under construction at the David Sarnoff Research Center, Princeton, N.J., will house the RCA 601 and 301 computers, together with associated punch-card equipment, magnetic-tape stations, and an on-line printer for use in translating and recording research data passing in and out of the 601. The complex will also include a Fortran processor (Formula Translator) which automatically converts normal mathematical language used by scientists into machine language. It is expected that the center will be used to advance research in such areas as lasers, plasma physics, solid-state theory, character recognition devices, advance computer memories and computer programing.

A plan to lease audio-visual equipment on a nationwide basis has been announced by Bell & Howell, 7100 McCormick Rd., Chicago 45. The leasing program will be administered by Bell & Howell audio-visual dealers throughout the country. Under this program an industrial or commercial organization may lease five or more Model 550 Specialist Autoload Filmosound automatic-threading 16mm sound projectors for a period of either 12 or 24 months. During the leasing period, Bell & Howell will pay all maintenance and service expenses except for replacement of tubes and lamps.

Jack Pill's Camera Equipment, 6510 Santa Monica Blvd., Hollywood 38, Calif., is a new firm established by Jack Pill to supply all types of studio and production equipment as well as motion-picture and television cameras. A cameraman in the Army Signal Corps during World War II, Mr. Pill has been affiliated with leading firms in the motion-picture field, including 12 years with Camera Equipment Co., where he acted as consultant on photo-instrumentation equipment.

The Eclair Corp. of America, 8078 Woodrow Wilson Dr., Los Angeles 46, has been appointed sole distributor in the United States for the new Eclair 16mm camera by Eclair International Diffusion, Paris, France. The firm will also be sole distributor for the Swiss-made Perfectone EP6A, a self-contained, fully transistorized, recorder with playback and synchronous head, and will also handle other Eclair cameras, including high-speed and other special purpose cameras, as well as the 16mm and 35mm Camerette.

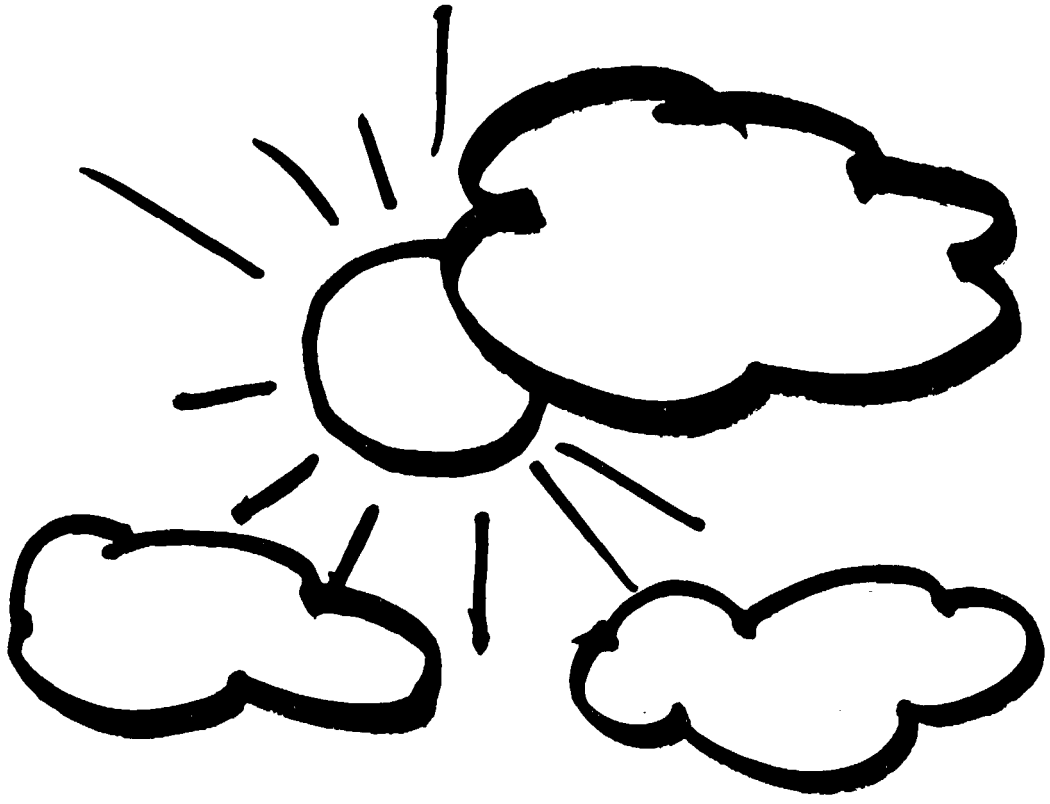
A new branch of Technicolor Corp., the Commercial and Educational Branch, has been formed to consolidate Technicolor's activities in the expanding industrial and educational markets and to engage in marketing and manufacturing activities, according to a recent announcement. Robert T. Kreiman has been appointed General Manager of the new branch. Technicolor offices are located at 50 Rockefeller Plaza, New York 20.

Eastman Sound Recording Tape will be marketed by International Resistance Co. through its chain of 1,800 authorized electronic distributors, according to a recent announcement. The agreement does not affect present distribution of the tape now available through photographic dealers, the announcement stated. Sound recording tape for professional and commercial users was introduced by Eastman Kodak Co. in 1961, and tape for amateur use was introduced in 1962.

Wilson Gill, Inc., has moved to a three-story building at 1315 14 St., N.W., Washington 5, D.C. Reason for the move is to give the firm room for expanded operations.

Purchase of the assets of Sound Corporation of America, Worcester, Mass., has been announced by Audio Devices, Inc., Stamford, Conn. All facilities for production of endless-loop cartridges, transports and playback units will be moved to Stamford, the announcement stated.

Francis H. Gerhardt, formerly Associate Director of Research and Development of the Photo & Repro Division of General Aniline and Film Corp., Binghamton, N.Y., has been appointed Manager of the



that broad-range stuff

Whenever the sun decides to play hide-and-seek during a filming, a two-stop exposure change can be on you in seconds.

So we've made KODAK EKTACHROME ER Film—the next best thing to perfect weather. It has the latitude to come through two stops too much or too little with —*voilà!*—a picture.

What broad range means, for instance: for two-stops too much light, reduce the first developer time from 10 minutes to 5½ minutes. If you're able to notice any difference at all between the result and a correctly exposed sample, it'll be a reduction in the graininess of the overexposed film.

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Yeah, And when you do, you'll be let in on a little secret... to wit, our color-emulsion makers move faster than our ad writers. This EKTACHROME ER film is all right until you get to know the new EKTACHROME [MS] which is much finer-grained, stands up better to forced processing for unanticipated underexposure, and can be run head-to-tail in the machine with your ER.

firm's newly created Technical Services office in Los Angeles, according to an announcement by Robert M. Verburg, General Manager of the Division and Corporation Vice-President. Dr. Gerhardt was chairman of the special subcommittee of the SMPTE Color Committee which prepared the revised edition of *Principles of Color Sensitometry*.

William P. Howard has been appointed Sales Manager of Movielab, Inc., 619 W. 54 St., New York 19. Prior to this appointment he was Eastern Sales Manager of Comprehensive Service Corp.

Earle M. Knibiehly has been named Director of Research and Development for LogEtronics, Inc., 500 E. Monroe Ave., Alexandria, Va. He was previously employed by the U.S. government and had served as Chief of the Photogrammetric Laboratory in the Army Map Service.

B. F. Adcock has been appointed Dallas Resident Vice-President of Alexander Film Co., Colorado Springs, Colo. He will represent the firm in Texas and Oklahoma. He has been with the firm for 15 years and prior to the present appointment he was Southwestern Zone Manager.

Anthony W. Severdia has been appointed Manager of Manufacturing of Machtronics, Inc., Mountain View, Calif. He was formerly associated with KGO-TV and KPIX-TV, San Francisco, and the Video Instrumentation Products Div. of Ampex Corp., Redwood City, Calif.

René Mathieu has been appointed Vice-President in Charge of Laboratory Operations for the Geo. W. Colburn Laboratory, Inc., 164 N. Wacker Dr., Chicago 6. Mr. Mathieu joined the laboratory's processing department in 1943 and directed that operation until he was named laboratory superintendent in 1953.

A technique of heating a tungsten cathode with a pulsed laser beam, developed by researchers in Cornell University's School of Engineering, is expected to lead to development of high-frequency radio tubes producing power at 100 to 200 kmc as compared with an upper limit of 100 kmc now available. Heating the tungsten with a pulsed laser beam makes it possible to obtain 10,000 or more amperes per square centimeter as compared to 1 to 10 amperes obtained from conventionally heated cathodes.

Tiros VII, designed and built by RCA Astro-Electronics Division, Princeton, N.J., for NASA's Goddard Space Flight Center, was launched in June. The new weather satellite resembles its predecessors, Tiros I through VI, in size (42 in. in diameter and 22 in. in height), it is heavier than the earlier satellites and carries additional experiments. Among the added experiments are NASA's Medium Resolution Infrared Experiment and its associated Nimbus-type infrared tape recorder; the University of Wisconsin's Omni-Directional infrared detection device, and the University of Michigan's Electron Temperature Probe.

SMPTE Test Films

The Society has available a number of films for testing projection and sound equipment in the various fields listed below. These films are planned by SMPTE Engineering Committees and manufactured to a high degree of precision to serve the needs of maintenance and other engineers, dealers, manufacturers, and audio-visual equipment users.

Television—Picture Only
35mm—Cinemascope
35mm—Picture Only
35mm—Sound Only—Photographic
35mm—Sound Only—Magnetic
70mm—Test Films
16mm—Sound Only—Magnetic
16mm—Picture and Photographic Sound
16mm—Sound Only—Photographic
16mm—Picture Only

A catalog containing details and prices of all the films available in these categories can be obtained from SMPTE headquarters.