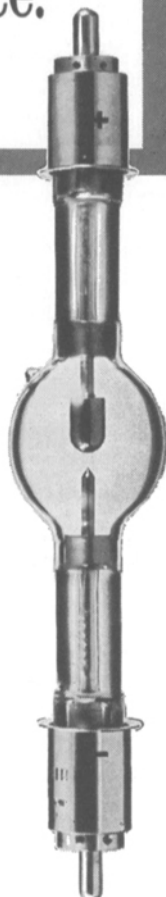


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Education, Industry News



Jeff Friedman joined the Society's staff last November as Editorial Administrative Assistant, to help on information services, publicity, Conferences and the *Journal*. Jeff comes to the Society from work as news reporter for *The New Haven (Conn.) Register*, where he also served as a photographer. He was previously news editor for *The Westbury Times*, a weekly published in Westbury, L.I., N.Y.

From his native Brooklyn, Jeff first went to the University of Vermont to study, then transferred after one year to the University of Michigan which conferred the degree of B.A. upon him in 1961. At Michigan his major was anthropology. He next received a graduate assistantship at the University of Iowa School of Journalism where he edited two Journalism School publications and served on *The Daily Iowan*. He received the degree of M.A. in Journalism in 1963.

The SMPTE has been elected to the Educational Media Council (EMC), a group of nonprofit organizations having a strong common interest in education and specialized interests and skills in the use of communications media in education. The Society's representatives on the Council are Garland C. Misener, Vice-President of Capital Film Laboratories, and Lewis A. Bernhard, SMPTE Executive Secretary. Alternate representative is J. Stanley McIntosh, Executive Director of Teaching Film Custodians. Another recently elected member of the Council is the National Society for Programmed Instruction. The EMC is presently composed of 14 member organizations. EMC President is James D. Finn; its headquarters are located at 250 W. 57 St., New York, N.Y. 10019.

The 1965 Annual Conference of the Society of Photographic Scientists and Engineers (SPSE) will be held May 17-21 at the Sheraton-Cleveland Hotel, Cleveland, Ohio. The theme of the Conference has been announced as "Frontiers in Photography." Some of the topics to be covered are Lasers in Photography; Medical Photography; Space Age Photography; Color Aerial Photography; Unconventional Processing; Improvements in Resolution; CRT Output; and Nonsilver Photography. Information is available from Conference Chairman Roger Ferryman, Metalphoto Corp., 18531 S. Miles Rd., Cleveland, Ohio.

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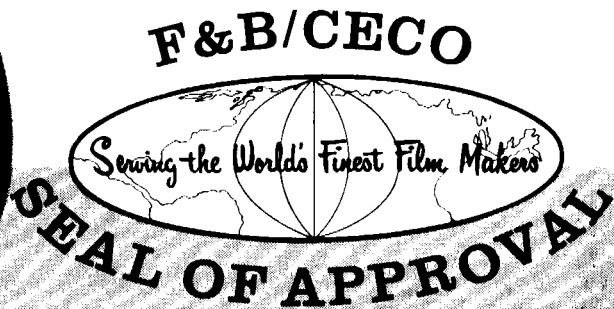
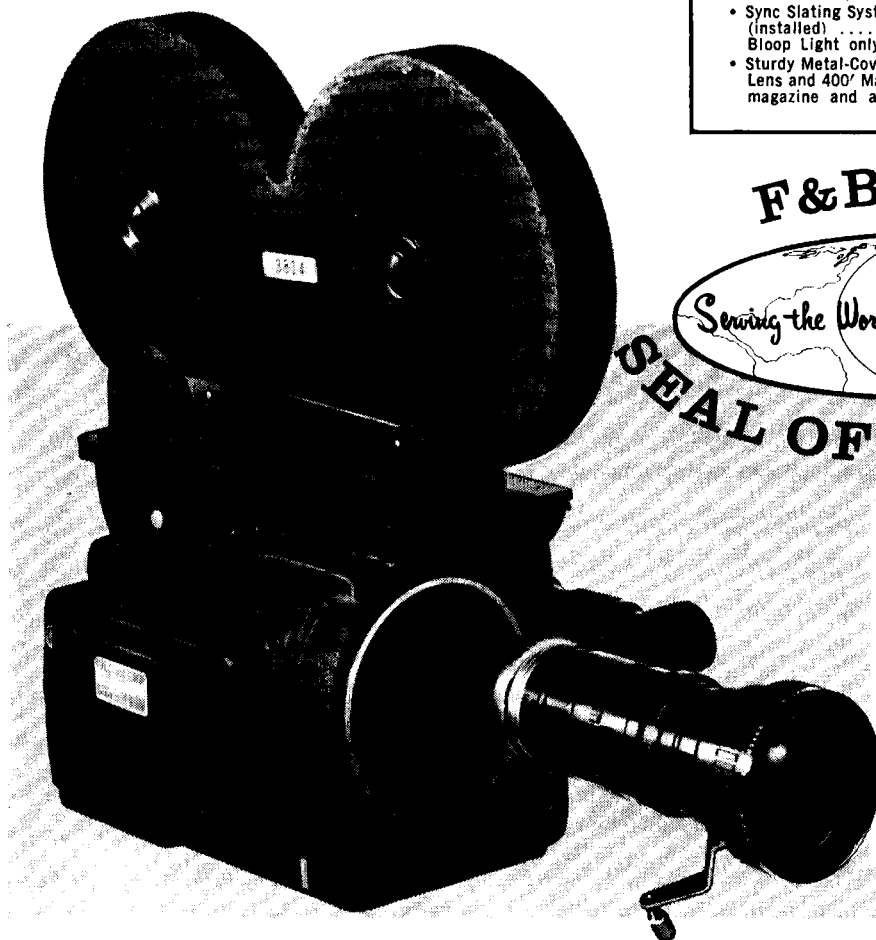
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The Information Sciences Institute has announced two seminars to be held June 21-25 and June 28-July 1 at the University of Maryland. Topics to be covered in Seminar I include Image Evaluation; Image Encoding and Approximation; Optical; Electrooptical and Digital Image Processing Techniques; Physiological and Psychological Models for Image Processing and Perception; Image Processing for Pattern Recognition. Seminar II will cover Recognition Decision Theory; Trainable and Self-Organizing Systems; Heuristics; and Neural and Brain Models for Pattern Recognition. Information is available from Division of Institutes, Center of Adult Education, University of Maryland, College Park, Md. 20742.

The 1965 ASP-ACSM Convention (American Society of Photogrammetry, 44 Leesburg Pike, Falls Church, Va. 22044, and American Congress on Surveying and Mapping, Rm. 430, Woodward Bldg., 733 15th St., N.W., Washington, D.C. 20005) will be held Mar. 28-Apr. 3 at the Shoreham Hotel, Washington, D.C. Technical sessions for the two organizations will be held concurrently with seven sessions planned for each. More than 75 papers listed in the Preliminary Program will be presented at the 14 sessions, in addition to panel discussions and committee reports. Additional papers and speakers will be listed in the final program. A combined meeting of the ASP and ACSM Property Surveys and Control Surveys Divisions

will be held April 1. An ASP panel discussion on The Human Element in Image Interpretation will be held March 31. ACSM panel discussions will include: Progress and Future of Automation in Cartography (March 31); and Digitizing Graphic Data (April 1). A three-day exhibit as well as the Ladies Activities and an extensive and varied entertainment program will be conducted jointly by the two organizations.

The ACSM Awards Presentations will be made March 30 and special commemorative events marking ACSM's 25th anniversary will be announced in the final program. The ASP Awards Presentations will be held March 31. Convention Director is Walter E. Shea.

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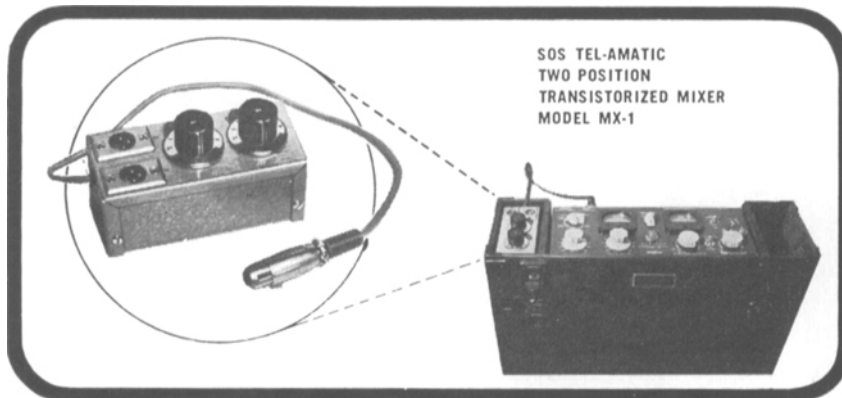
A companion item to the two-position mixer (shown below). Provides 4 low-impedance mike inputs with individual volume control, plus a stereo/monaural switch to separate mixer into two isolated mixers, and other features.

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Film Center, a division of Associated Film Industries Pvt. Ltd., Bombay, India, presented the A. J. Patel Award for Best Color Cinematography on December 6, 1964, in Bombay.

The award was presented in memory of the late Ambalal J. Patel (see *Journal*, Sept. 1961, pp. 764, 6), founder of Film Center and pioneer of photography and color processing in India.

The awards were distributed by S. K. Patil, Union Minister for Railways, who referred to A. J. Patel as "one among few genius friends of mine." The event was marked by the publication of two special supplements by local newspapers in honor of the awards presentation. Film Center has recently become a sustaining member of SMPTE (see page 42 of this issue).

A new category of "safety motion-picture film" was established in New York City December 29 when Article 20-B was signed into law by Mayor Wagner. This means that the heavy fire doors, steel furnishings, innumerable sprinklers and explosion-proof construction required by Fire Department regulations for all buildings, offices as well as warehouses, containing film will no longer be mandatory for those containing nonflammable safety film. Strict Fire Department controls will continue for all types of nitrate film. In effect, the new law recognizes the difference between inflammable nitrate film and nonflammable safety film.

Lifting the more stringent controls from premises housing safety film will enable film users to redecorate and modernize their offices, relocate storage rooms for convenience and efficiency, and install fluorescent lighting and other conveniences previously prohibited. The new law can also benefit film producers economically by removing the necessity for maintaining costly (and ugly) explosion-proof surroundings.

Present at the signing ceremonies in City Hall was Harold Klein, Executive Director of the Film Producers Assn. of New York. Speaking in behalf of the organization, Mr. Klein expressed approval of the new law, pointing out that city administrators, safety officers and industry can now cooperate to create intelligent controls.

Ascor Electronic Flash Units are now equipped with blue bulbs instead of the previously used white incandescent modeling lamps, according to an announcement from Ascor-American Speedlight Corp.,



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Marketing Dept., 2035 N.E., 151 St., North Miami Beach, Fla. 33162. The switch in color was made as the result of tests by the company which indicated that white modeling bulbs often cause a shift in color undesirable in critical color photography, the announcement stated. The blue bulbs, now standard equipment on the units, have been specially treated and coated for compatibility with the color temperature of electronic flash.

The firm also announced that it had reduced the size of its Super Master Power Supply from 355 lb to 95 lb and the price from \$3,500 to less than \$1,500. The company claims that through the use of solid state materials and transistors this cut in

bulk and cost was made without any loss of power, performance or dependability.

Research into the psychophysical phenomena of color and subliminal effects is now underway at the Newark College of Engineering, 323 High St., Newark, N.J. 07102, under the direction of Mauro H. Zambuto. Dr. Zambuto is a Professor in the NCE Department of Electrical Engineering. Essentially the NCE project consists of a series of experiments designed to test the validity of formulas devised by Dr. Zambuto which represent mathematically the psychological behavior of the eye in color vision. These formulas predict that the eye

can be deceived in many ways, some known for some time and some heretofore unobserved. Under certain conditions a black-and-white projection may appear to be colored.

The eye-brain-consciousness relationship of vision is a combination of chemical, electrical and psychological phenomena, so closely linked that the precise role of each and their interdependence have not been determined. It is hoped that some basic knowledge concerning these phenomena will result from this research.

Dr. Zambuto's early experiments included projecting three black-and-white images through a prism arrangement to obtain a full color response. He has since, among other results, been able to use a single image to produce a large range of colors from a white light. He expects, in the near future, to use lasers to generate color images by direct projection on the retinas of volunteers. By intermittently flashing a light through the laser ruby, Dr. Zambuto will be able to "tire" certain color-sensitive areas and make the recipient see colors and forms that are contrary to the existing scene. The subliminal approach, i.e., the flashing of the light at a rate to which the eye cannot adjust, is the key to future experimentation and application.

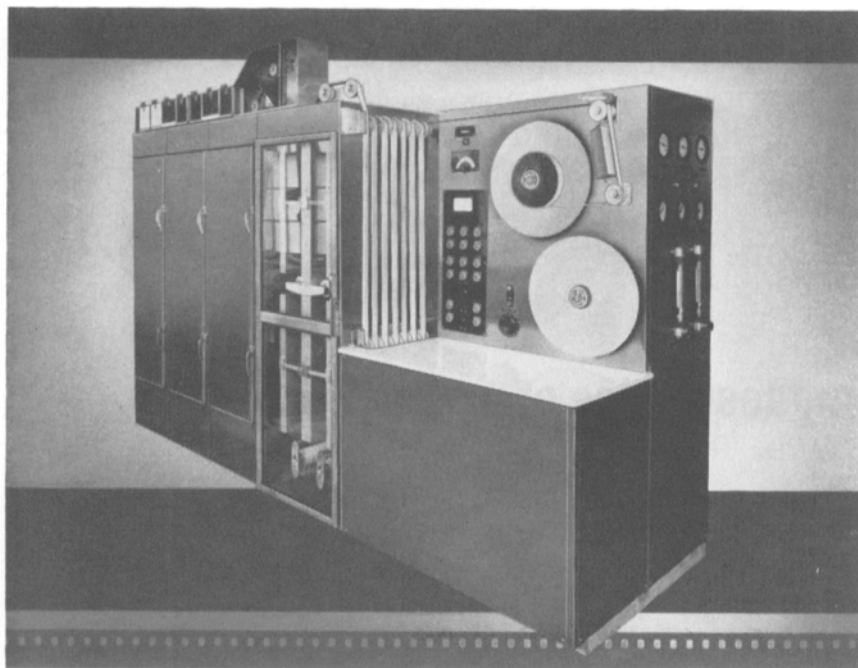
Continued success of the experiments may mean that in the future, motion-picture and television companies may film all their productions in black-and-white and rely upon the theater or the television set to reproduce the shows in color. Other applications may possibly include the military and the rapidly expanding field of medical engineering, according to Dr. Zambuto, who recently gave a formal presentation of his work before a meeting of UNIATEC in Milan. "We still know very little about lasers and almost nothing about why the eye works as it does to give us vision," he said.

Subscription Television, Inc. (STV), 1455 19th St., Santa Monica, Calif., has announced that it is suspending operations in California pending outcome of a suit filed with the California Supreme Court to nullify a law (Proposition 15) passed November 3 which outlaws subscription television within the State of California. The STV petition claims that Proposition 15 violates freedom of speech and equal protection clauses of the U.S. Constitution and that it "discriminates against one means of communication in favor of competing media and arbitrarily discriminates against subscription television in favor of commercial TV and theatre pay-TV."

Also pending is a \$117 million suit filed by STV in Superior Court in Los Angeles against theater owners and others who supported the passage of Proposition 15.

Dimension-150, a new filming and projection process, was recently demonstrated before an audience of about 100 members of the American Society of Cinematographers in Hollywood. The process is being used for the filming of the Dino De Laurentiis production, *The Bible*. The demonstration was arranged exclusively for members of the ASC by officials of D-150 Inc.

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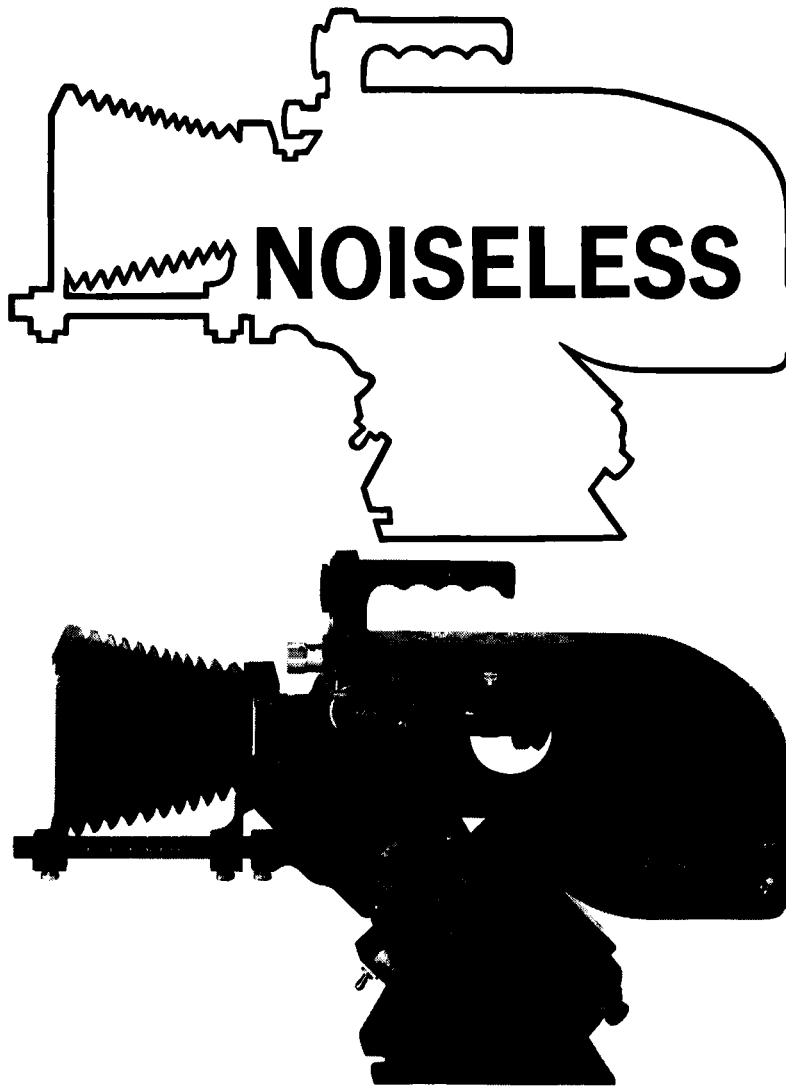


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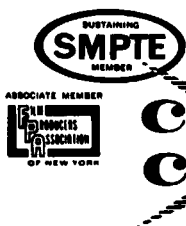
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and ASC President Hal Mohr and Walter Beyer, Chairman of the ASC Educational and Scientific Committee.

Sir Ambrose Fleming is recalled in a recent release from Marconi Company, Ltd., Chelmsford, Essex, England, as the inventor of the Fleming Oscillation Valve, forerunner of today's wide variety of specialized valves. The invention of what is believed to be the first thermionic valve is described in the release as "perhaps one of the most important electronic discoveries of the century [heralding] the birth of the electronics industry." It is pointed out that today the transistor is fast replacing this early discovery but that "it will be many

years before the high-power valves, handling many megawatts and using the same basic principle of cathode emission as Fleming's valve, are replaced by solid state devices."

Sir Ambrose, who died in 1945 at the age of 96, was closely associated with Marconi. He played a leading part in the design of the transmitting equipment at Poldhu in Cornwall with which Marconi made his first wireless transmission across the Atlantic in 1901.

A new type of structure for semiconductor devices and circuits has been devised at Bell Telephone Laboratories. The structure uses strong electrical leads,

called beam leads, to provide mechanical support for the semiconductor and to make electrical connections. Beam leads are integral parts of devices and circuits and extend out from the structure like cantilever beams to form both the electrical and mechanical connection to a header or substrate. For integrated circuits, they also form the electrical intraconnections between components. The beam leads are made of gold and are approximately 10 microns thick.

Diodes, moderate- and ultrahigh-speed transistors and ultrahigh-speed logic circuits have been built and tested by Bell Telephone Laboratories. These beam-lead devices and circuits have indicated their physical ruggedness by successfully passing tests which include thermal aging in 360 C steam and centrifuging to greater than 100,000 times the force of gravity, the announcement stated.

Two new appointments in the Photo & Repro Division, Binghamton, N.Y., have been announced by General Aniline & Film Corp., 140 W. 51 St., New York, N.Y. 10020. Fritz R. Krum has been appointed Technical Assistant to the Vice-President of the Division and I. Glenn Stevenson has been appointed to the new position of Plant Manager of the manufacturing operations of the Division's Ansco photographic products. Mr. Krum was formerly Executive Staff Engineer for the Lummus Co. of New York. Dr. Stevenson has been associated with General Aniline and Film Corp. for 22 years and has held various managerial positions. Prior to his present appointment he was Film Plant Manager for the Photo and Repro Division.

Edwin C. Tracy has been appointed to the newly created post of Division Vice-President, Broadcast, Technical and Scientific Sales Dept. of the RCA Broadcast and Communications Products Division, it was announced by Charles H. Colledge, Division Vice-President and General Manager. Mr. Tracy joined RCA in 1939 and has held various managerial posts throughout the organization. For the past 14 months he has been Manager of Sales for the Broadcast and Communications Products Division. In his new post he will continue to have overall responsibility for Division sales of radio-TV broadcast equipment, closed-circuit TV systems, the electron microscope and related items.

Peter Krause has been appointed to the newly created position of Manager of Product Services, Marketing Dept. of the Photo & Repro Div. of General Aniline & Film Corp. He was formerly Director of Quality Control for the Division. Mr. Krause joined the company in 1938. Following service in World War II, he returned in 1953 and was appointed Director of Quality Control in 1962.

William F. Garmon has been appointed to the newly created post of Chief Manufacturing Engineer of Altec Lansing Corp., a subsidiary of Ling-Temco-Vought, Inc., 1515 S. Manchester Ave., Anaheim, Calif. Prior to his present appointment, Mr. Garmon was Director of Manufacturing at Interstate Electronics Corp. in Anaheim.



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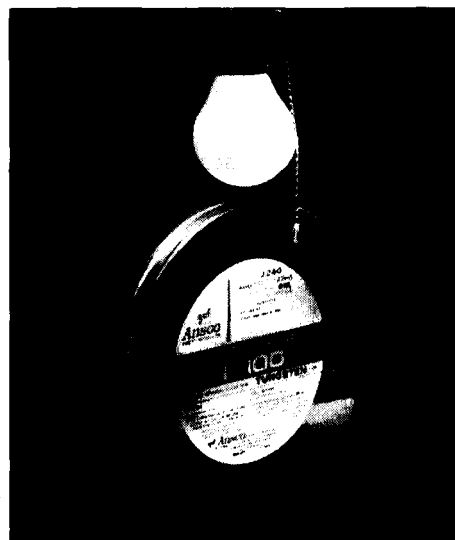
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Joe Munisteri has been appointed Sales Manager of the Broadcast Sales and Manufacturing Div. of TelePro Industries, Inc., Cherry Hill, N.J., a division of De-fiance Industries. He had been Service Manager of the Broadcast and Sales Division since 1955. The division handles the firm's line of twin doublers, rear-screen projectors, cuing systems and other equipment for the broadcast industry.

CBS Laboratories, a division of Columbia Broadcasting System, Inc., has announced acquisition of the Microdupe Corp. of Bethesda, Md., a firm which specializes in the field of high-resolution diazo printing

equipment and in the development of diazo film for microfilm reproduction. The acquisition will enable CBS Laboratories to add a line of microfilm duplicating equipment to its list of professional products, the announcement stated. Ronald N. Davis, President of Microdupe, will join CBS Laboratories as Manager of Diazo Systems within its professional Products Dept.

Gene Levy, former President of Camera Equipment Co., has announced the formation of a new firm, Motion Picture Camera Supply, Inc., located at 630 Ninth Ave., New York, N.Y. 10036. The

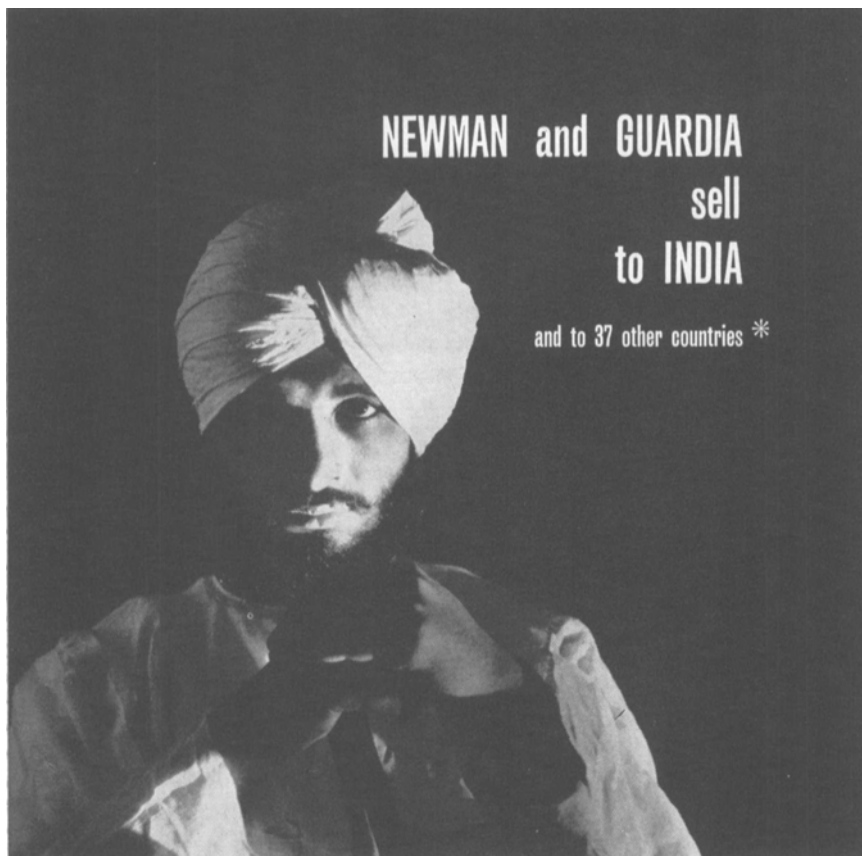
new company has been appointed to represent outstanding manufacturers in the field, including such firms as Birns & Sawyer Cine Equipment Co. of Hollywood. Services and products of the new firm will include custom design engineering and sound recording equipment for standard and special applications. Rental and leasing of a variety of professional motion-picture equipments will be under the personal supervision of Mr. Levy.

The Arriflex Story, 16mm color sound film (running time 32 min) shows how Arriflex cameras are manufactured and also shows some scenes taken with the cameras. The film, directed by Kenneth Richter with music by E. Robert Velazco, is available without charge to groups of professional film-makers and educational institutions from Arriflex Corp. of America, 257 Park Ave. South, New York, N.Y. 10010. Requests should be made on organization letterhead. Among other steps in the manufacture of the camera, the film shows the production of the Arriflex 16 pulldown cam, a process which involves precision tracing and 200,000 rpm air-turbine grinding. Segments of films taken with the cameras shown in the *Arriflex Story* include ones in the tropics and in arctic regions; underwater; in a supersonic jet plane and on top of a construction framework. The audience also watches the camera film a surgical operation; shoot through a microscope; make x-ray motion pictures; record a time-lapse sequence and track a space satellite.

Birns & Sawyer Cine Equipment Co., 6424 Santa Monica Blvd., Hollywood, Calif. 90038, has been appointed exclusive distributor for Elgeet motion-picture lenses, including the ruggedized "HI-G" lenses, in 13 western states. The appointment as exclusive distributor is in addition to the firm's activities as national distributor of the lenses.

Maurice Levy and Associates, of Eastern Effects, Inc., 333 W. 52 St., New York, N.Y. 10019, has acquired control of K & W Film Service Corp., according to a recent announcement. The combined facilities of both firms will be available to their customers, including a newly developed live action and optical camera, the announcement stated.

A new mirror-making technique developed at Bell Telephone Laboratories has resulted in the development of nearly perfect laser mirrors, according to a recent announcement. The technique involves coating a mirror blank with many layers of optically transparent dielectric material in a way that virtually eliminates light scattering from the reflective surface. The method is comparatively simple. A flat or spherical substrate, such as ordinary quartz, is used as a mirror blank. A dielectric material in a bell jar is heated until its atoms begin to evaporate onto the mirror blank. This deposition process is monitored to make sure that the thickness of a layer is one-quarter the wavelength of the light reflected from the dielectric material being applied. Otherwise reflected light from each layer is not in phase. When the precise thickness is reached, a low-index material (such as thorium oxyfluoride or



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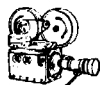
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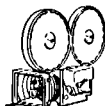
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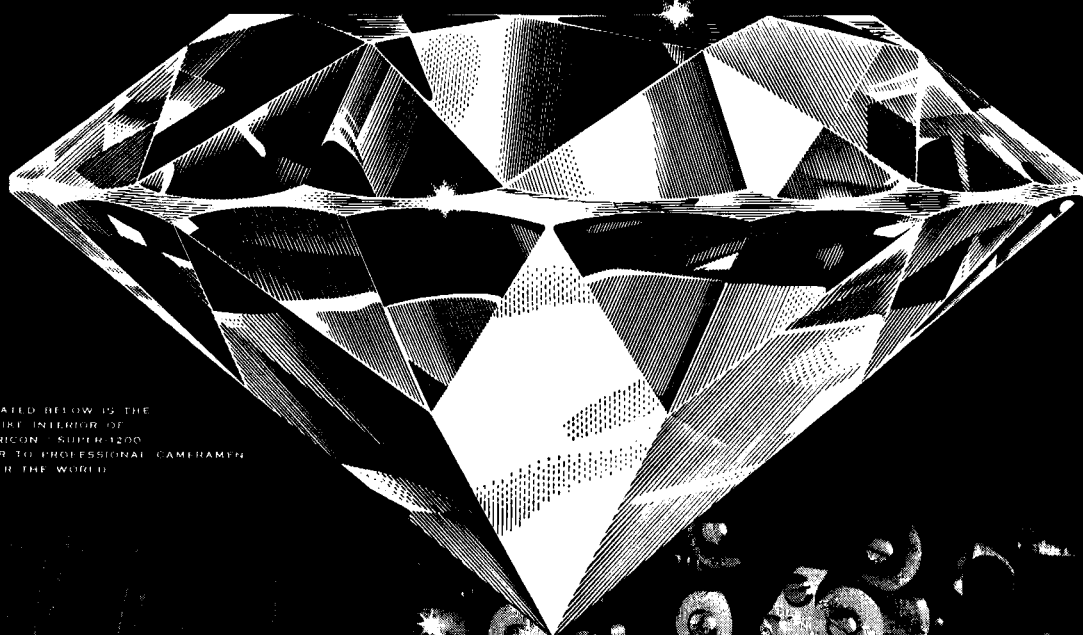
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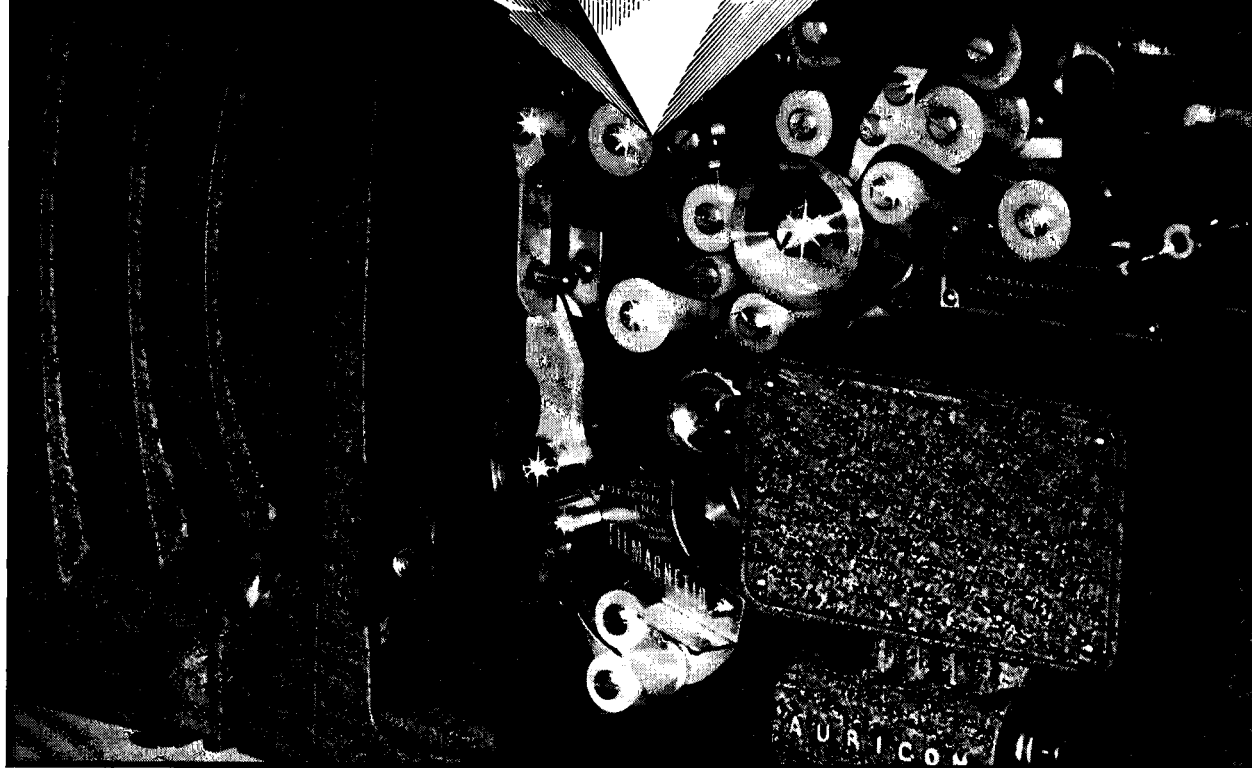
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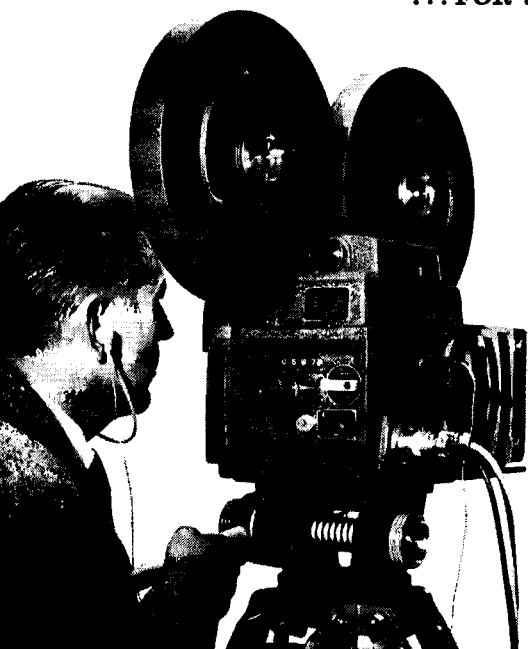


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cryolite) is used instead of the high-index dielectric material (such as zinc sulfide), thus each layer is defined. The quarter wavelength thickness permits the light reflected from one layer to be "added" in phase to the light from the other layers. In this way, the addition of each layer increases reflectivity to a point, after application of about 35 layers, of nearly 100% reflectivity.

A laser using these mirrors will emit several times more light than one using conventional mirrors. These highly reflective mirrors could conceivably be used as efficient light-focusing elements in a laser communications system, the announcement stated.

The National Convention of DAVI (Department of Audio-Visual Instruction, National Education Association, 1201 Sixteenth St., N.W., Washington, D.C. 20006) will be held April 24-30 in Milwaukee, Wis. A special feature of the convention will be study trips to nearby areas of interest including the Telemation Laboratory at the University of Wisconsin; Milwaukee Public Museum Audio-Visual Center; Milwaukee Art Center; AC Sparkplug Co. (manufacturer of missile control mechanisms for missiles and outer space vehicles); Oak Creek Planetarium (a small planetarium installed by the Oak Creek Public School System); and the Milwaukee Vocational School. A four-day ex-

hibit (April 26-29) will be held at which new audio-visual equipments will be displayed. Papers on audio-visual subjects will be presented.

A new deposition technique used in making evaporated-layer cadmium sulfide transducers that produce either transverse or longitudinal waves has been developed at Bell Telephone Laboratories. In the vacuum-deposition process, cadmium sulfide in a heated "boat" is evaporated and deposited on a metal-plated surface. When the cadmium sulfide strikes the metal surfaces from an oblique angle, transducers are formed that generate predominantly longitudinal waves. This effect arises from an alignment of the cadmium sulfide with the vapor beam. Previously, it has been necessary to suppress unwanted modes by using acoustic filters or other polarization techniques, but with the new technique this can now be accomplished with the transducers. The frequency of these transducers ranges from 100 to 1800 mc. The thinner the evaporated layer, the higher the frequency. Film thickness is controlled by regulating the evaporation time. The transducers can be used for high-frequency delay lines and in memory units for computers.

An animation device described as the "poor man's animator" has been invented by Kingdom S. Tyler at Vitro Laboratories, 14000 Georgia Ave., Silver Spring, Md. 20910. The device uses belts, or tapes, carrying designs, ornamentation, symbols, or various data, stretched across a background picture or model set in a special holding device. A conventional motion-picture camera is used for filming as the belts are moved across the scene. The devices for moving the belts are constructed and arranged so that the belts may be simultaneously driven in different directions and at angles to produce various effects required by the script. The device was invented in connection with training programs conducted by the Laboratories for the U.S. Navy. The inventors purpose, the announcement indicated, was to save time and money by doing away with the necessity for the frame-by-frame process of animation.

Extensive expansion plans have been announced by Traid Corp., 17136 Ventura Blvd., Encino, Calif., including the addition of new product lines and a second Mobile Showroom Van. The firm also announced the appointment of John Kessinger to the sales staff. Mr. Kessinger recently retired from the Air Force with rank of Major. His Air Force assignments covered a broad range of instrumentation, laboratory work and motion-picture production.

Seven films made by teenagers were awarded prizes in the second Kodak Teen-Age Movie Contest sponsored by Eastman Kodak Co. with the co-operation of Cine and the University Film Producers Association. Prize-winning films in the senior category are: First, *The Ham Bones*; Second, *Its an Out-of-its Mind World*; and Third, *Fantasy*. In the junior category, prize winners are: First, *Diamonds of Forever* (made by a 14-year-old who also won a

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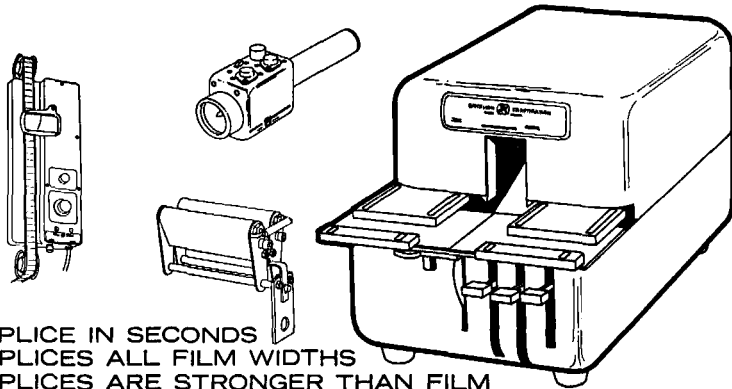


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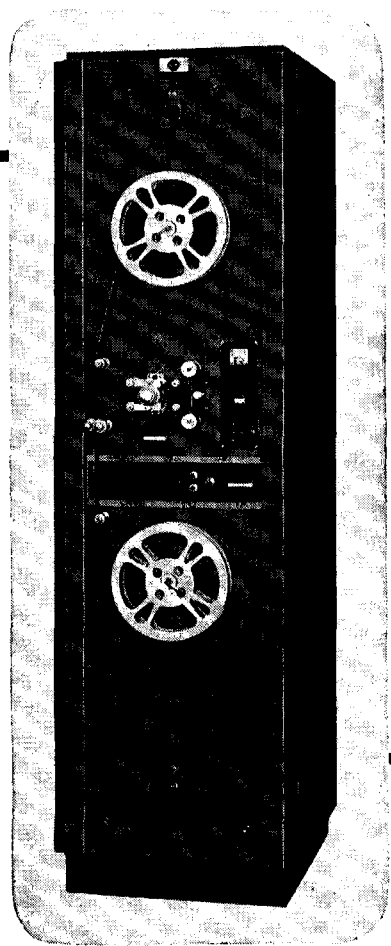
prize in last year's contest); Second, *Destination Moon* (four minutes of animation by a 12-year-old); and Third, *The Inside Story* (a science project film made by a 15-year-old girl). A special award was made for a senior film, *The Weird World of John C.*

A multimillion dollar contract for 13 tiny TV cameras especially designed for the first "live" broadcasts from the moon has been awarded to Westinghouse Corp. by NASA's Manned Spacecraft Center, Houston, Tex. The cameras, which weigh only 5½ lb (earth weight), are specially designed for ease of handling, since they will be used by an astronaut in a pressure suit. The cameras will be completely automatic, maintenance-free, and 99.9% reliable for 14 consecutive days. Requiring only 6 w of power, the cameras can operate in near-darkness through the use of the highly sensitive low-light level SEC vidicon imaging tube developed by the Westinghouse Research Laboratories. Designed to operate in a complete vacuum during both the lunar day and the lunar night, the cameras are constructed to withstand the effects of sand, radiation, and other harsh environmental conditions expected on the moon. The lunar broadcast is expected to include views of astronauts at work, views of the moon's landscape and of the earth as seen from the moon. The scenes will be broadcast "live" over commercial television networks. The transmission from the moon will be at 10 frames/sec with 320 lines resolution. The signal will be converted to commercial frame and scan rates at the earth receiving station for immediate rebroadcast. Although the camera will be required to operate within a temperature extreme of -300F to +250 F, no active cooling or heating equipment will be needed because of the use of a technique of special surface finishing on the cameras.

Eastman Kodak Co. has rearranged its photographic marketing organization into five divisions, or "responsibility centers," it was recently announced. Each center will operate as a complete unit and will conduct selling, product planning, marketing analysis and information, and budgeting and will initiate its own advertising and promotion. Heads of the new centers are: Donald E. Hyndman, Motion Picture and Education Markets; Wylie S. Robson, Consumer Markets; Alvin W. Streitmatter, Professional, Commercial and Industrial Markets; and George R. Struck, Radiography Markets. Recordak Corp., the company marketing unit serving the micro-filming and business systems fields, will continue to operate under the direction of its President, James M. Arnold.

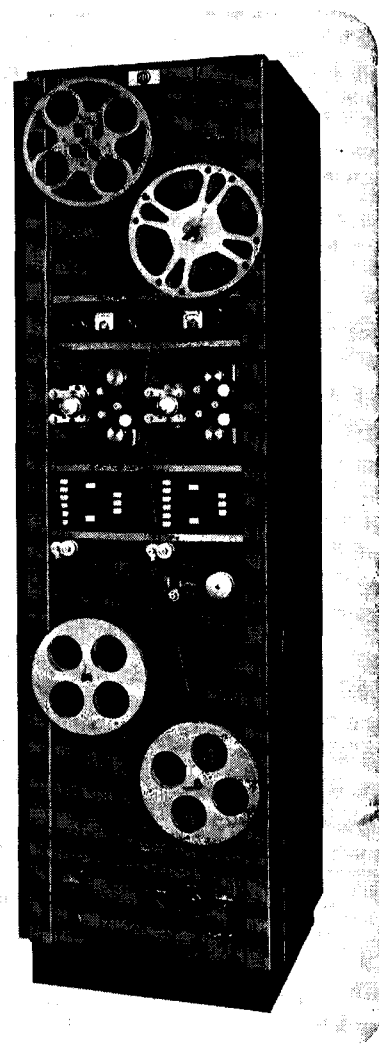
Four related appointments have also been announced. Charles L. Resler, former Director of Sales, Apparatus and Optical Div., has been appointed Sales Manager, Consumer Markets Div.; William A. Sawyer, former General Manager, Northeastern Sales Div., has been appointed Sales Manager, Professional, Commercial and Industrial Markets Div.; Norwood L. Simmons, former General Manager, West Coast Div. of Motion Picture Product Sales, has been appointed General Manager, Northeastern Sales Div., succeeding Mr.

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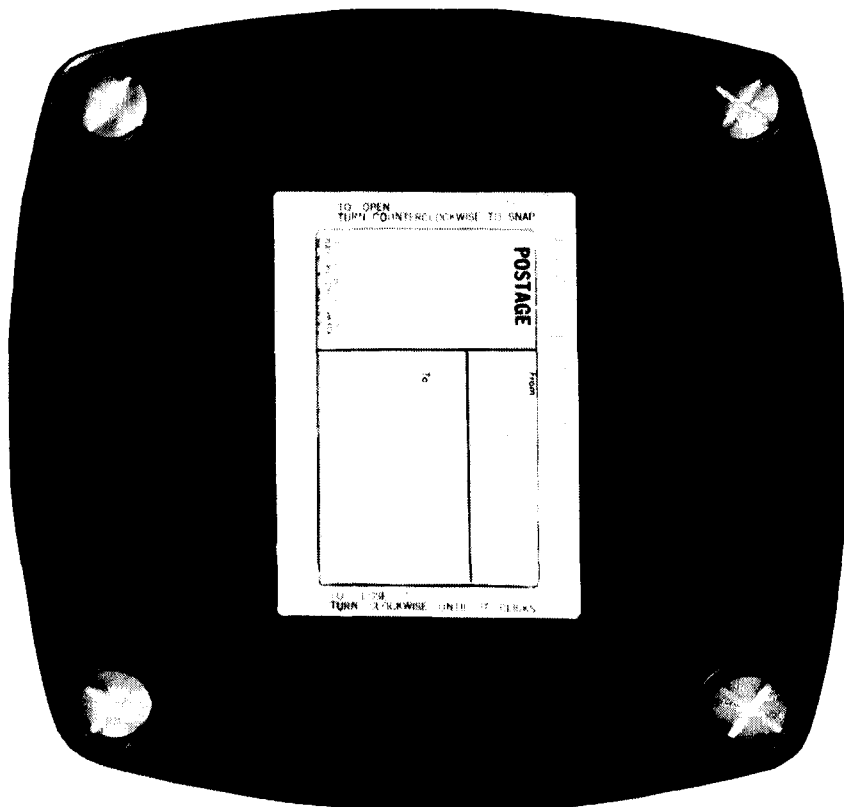
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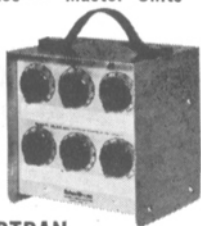
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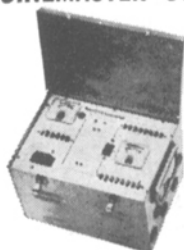
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The William C. Allen Corp. offers consulting services in manufacturing, information processing, and economic progress. It operates a branch office at 527 Madison Ave. in New York.

Samuel C. Hooker Ltd. has been appointed to represent in Canada standard products of Edgerton, Germeshausen & Grier, Inc. of Boston. The firm is located at 2425 Grand Boulevard, Montreal 28, P.Q., Can. The principal contact is M. Moroney in Montreal. EG&G products include fast-energy switching devices, such as thyatrions, triggered spark gaps and krytrons; modulated light components including xenon flashtubes, photodiodes and trigger transformers; and the Lite-Mike, a light measuring device, Picoammeters and Joule-Pac power supply.

Applied Electronics, Ltd., 23 Canmotor Ave., Toronto, Ont., Can., has been appointed sales representative in Canada for Reeves Soundcraft Division of Reeves Industries, Inc., covering the broadcast industry for Micro-Plate video-tape products. The firm will maintain a warehouse inventory of Reeves video-tape reels to ensure immediate availability to users throughout Canada.

Thomas T. Hill, a Consultant in Photographic Science, Technology and Engineering, is located at 995 Highland Ave., Rochester, N.Y. 14620, it was recently announced. Mr. Hill, who has had 25 years experience working with various types of photographic materials, stated that he emphasizes the "generalist" or "systems" approach to photographic problems, since the whole process is dependent on each link in a long chain.

George Gill has been appointed Eastern Manager of ColorTran Industries, Burbank, Calif. He will be in charge of the firm's newly opened New York office and will coordinate all of the firm's East Coast activities. In addition to assisting the firm's area representatives, Mr. Gill will work directly with television and motion-picture studios on special installations and applications.

Bernard F. Gregoire, Production Supervisor of Magna Film Productions, Inc., 49 Berkeley St., Boston, Mass. 02116, has been made a Vice-President of the firm, it was announced by Robert Berman, President. Mr. Gregoire has been with the firm for four years in the position of Television Technician and Production Supervisor.

Ernest T. Larson, Jr., has been appointed Manager of X-Ray Products and Applied Physics Research and Development in the Photo & Repro Div. of General Aniline & Film Corp. His headquarters will be in Binghamton, N.Y. Mr. Larson has been with the firm since 1945. Since 1961 he has held the post of Section Leader of the X-Ray Products Group, Research and Development.

A course in Procedures in Motion Picture Production, cosponsored by the University of Southern California and the Society is offered for the Spring semester. Evening classes will be held each week beginning February 8 and extending through May 24. Lecturers and their subjects are:

Neal Keehn — Pre-Production Considerations (audience and objectives, human factors in planning and producing films)

Roy L. Deets — Script design and development (methods of research, analysis of film content, formats, relation of script to production)

O. E. Patterson — Production Planning and Budgeting (budget breakdowns, location vs. studio costs, types of crews)

Alan Stensvold — Camera Equipment and Photography (cameras and accessories, getting the picture on film, the camera crew, lighting crew and grips)

Edward P. Ancona, Jr. — Films, Filters and Color (photographic emulsions, speed, color sensitivity, color temperature, black-and-white and color)

Max A. Hankins — Light Equipment (various types of lighting equipment, associated accessories and power equipment)

Herbert Meyer — Set Construction: Chemical and Mechanical Effects (materials and processes for set construction, special effects created "live")

Melvin Shapiro — Film Editing (creative aspects of making footage into film, unity, dramatic effect)

K. K. Miura and D. H. Wiegand — Production Sound Recording (equipment and techniques, recording sound on the stage and on location)

Jack Meakin, K. K. Miura and D. H. Wiegand — Music, Sound Effects and Dubbing (original and library scores, sound effects, and dubbing procedures)

Ted Fogelman — Laboratory Services (production services, negative cutting opticals, A-B printing, reduction printing, color reversal and negative/positive)

Herbert Kosower — Animation and Titles (preparation of artwork, camera techniques)

Walter Beyer — Optical Effects and New Techniques (current optical techniques and a look at the engineering future of the industry)

A special meeting of the class will take place on March 29 when arrangements will be made for registrants to attend the 97th SMPTE Technical Conference. The May 10 meeting of the class will consist of guided tours of Consolidated Film Industries and General Film Laboratories.

The course, designated Cinema 040, will be conducted under the auspices of the USC Department of Cinema. Registration is limited to 75.

The Fourth Annual Independent Film-Makers Festival established at Foothill College, 12345 El Monte Rd., Los Altos Hills, Calif., will be held May 8-9. Competition is limited to 16mm films completed between January 1963 and March 1965. Cash prizes totalling \$900 will be awarded. Films will be judged on originality of idea, esthetic merit, effective use of film medium and technical competence. Purpose of the Festival is to "encourage individual expression and experimentation . . . and to provide Foothill College students and the community with an opportunity to see and

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