Education, Industry News

The Educational Media Council held its annual election of officers at its 15th meeting held in Washington, D.C., during October. Reelected were James D. Finn, President; William G. Harley, Vice-President; and Ben Edelman, Secretary. Emily S. Jones was elected Treasurer. Dr. Finn is Director of the NEA Instructional Technology and Media Project at the School of Education of the University of Southern California. He serves on the Council as a representative of the Department of Audiovisual Instruction of the National Education Association. Mr. Harley is President of the National Association of Educational Broadcasters. Mr. Edelman is Assistant Manager for Government-Industry Relations of the Western Electric Co. He serves on the Council as a representative of the Electronic Industries Assn. Miss Jones is Administrative Director of the Educational Film Library Assn. Directors of the Council are Harold D. Drummond of the University of New Mexico, who represents the Assn. for Supervision and Curriculum Development; Charles F. Schuller of Michigan State University; and Robert E. Slaughter, Senior Vice-President of McGraw-Hill, Inc., who represents the American Textbook Publishers Institute.

Headquarters of the Educational Media Council are located at 250 W. 57 St., New York, N.Y. 10019.

Newly elected officers of the Association of Cinema Laboratories are: President, Dudley Spruill; Vice-President, William D. Hedden; Secretary, Neal Keehn. Arthur J. Miller was reelected Treasurer, and Preston B. Bergin was reelected Executive Secretary.

Newly elected President of the Instrument Society of America (ISA) is William A. Crawford. He succeeds Allan E. Lee, who has served as ISA President-elect-Secretary since 1963. Mr. Crawford, who is Principal Instruments Engineer for E. I. du Pont de Nemours & Co., has been an active member of ISA since 1946. He is a founder of the ISA Wilmington Section and served as President and Vice-President during the early 1950s.

An exchange of educational motion pictures between the Soviet Union and the United States has been agreed upon following 14 days of meetings in Moscow between Charles Benton, President of Encyclopaedia Britannica Films, and representative educators from the United States and Soviet officials.

The meetings included the screening of 70 educational films brought to Moscow by Mr. Benton; some of the films on biology, literature and history topics were viewed by Premier Khrushchev. Arrangements, which include filming educational films in Russia, were discussed with Alexi Adzubhei, Editor of *Izvestia*. Initially, Encyclopaedia Britannica Films will produce in Russia a group of films on Russian geography. The films will be based upon scripts to be written in the United States under the supervision of the American Association of Geographers and the filming will be done by Russian film crews using American cameras and film stock and working under the supervision of an American producer. The Russians bought three films from the EFB biology series on the subjects of the sea, tropical forests and ecology. The Americans bought ten Soviet films including an analytical film on Russian education based upon a series of critical articles which appeared in *Izvestia*. The films, most of them on natural sciences, will be adapted by Encyclopaedia Britannica Films to American film production standards and the needs of American schools.

It is expected that the first films produced in the exchange program will be shown in Russian and American schools by September 1965.

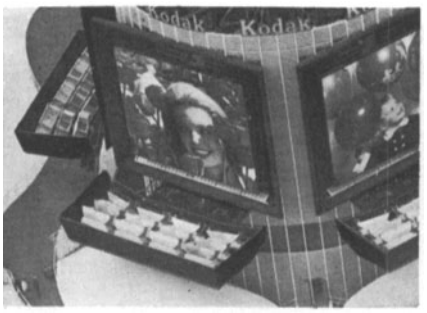
Prof. Joseph T. Tykociner, pioneer in the field of sound motion pictures, has been presented with the Award of Merit of the National Electronics Conference "in recognition of his many significant contributions, during a career that spans half a century, to education and research in electrical and electronics engineering," the citation stated. Prof. Tykociner is the third recipient of the award which was established by NEC in 1944.

Now Professor Emeritus of the University of Illinois, Prof. Tykociner held what is generally agreed to be the first public exhibition of sound-on-film on June 9, 1922, on the University campus. An exhibit in the Illini Union last spring (*Journal*, p. 420, May 1964) commemorated this historic exhibit. The work of Prof. Tykociner has been described in the *Journal*, Aug., 1958, pp. 520–523, by John B. McCullough ("Joseph T. Tykociner: Pioneer in Sound Recording") and by Joseph E. Aiken ("Technical Notes and Reminiscences on the Presentation of Tykociner's Sound Picture Contributions").

In addition to his development of sound motion pictures, Prof. Tykociner holds patents in submarine signaling, photoelectricity, cable testing piezoelectricity, techniques of radio measurements, antenna models and microwave development.

Rensselaer Polytechnic Institute, Troy, N.Y. has announced a five-day course in Principles of Color Technology to be held June 21–25, 1965. The course will be under the direction of Fred W. Billmeyer, Jr., Professor of Chemistry. Dr. Billmeyer is a noted authority in the field of industrial color measurement. The course is designed to be of particular interest to industrial personnel responsible for color matching and color control and is intended to provide both theory and practice in the description, specification and measurment of color. Laboratory sessions will be held daily for instrumental measurements, computations and problem solving. Participants in the program will have the use of typical commercial color measurement and computation equipment.

The Second New York Film Festival, presented by the Lincoln Center for the Performing Arts, in association with the British Film Institute, and with the cooperation of the Independent Film Importers and Distributors of America



ORIGINAL EQUIPMENT MANUFACTURERS

Carbons, Inc.
Boonton, New Jersey

Has approximately 50 Xetron Lamphouses tied to both motion picture and slide projection systems in use in such places as: Johnsons Wax, African Pavilion, Bell System, Greek and Eastman Kodak Pavilions, The Texas Music Hall, Greyhound Pavilion, Festival of Gas, US Army Exhibit, and United Arab Pavilion, Osram Xenon Lamps in use at these locations include the 450, 900, 1600, and 2500 watt lamps.

The Strong Electric Corporation
Toledo, Ohio

Has installations in the U.S. Government, Spanish, Better Living, I.B.M., Mormon and DuPont Pavilions using both 1600 and 2500 watt Osram Xenon lamps.

Cine Electronic Systems, Inc.
New York, New York

Has audio visual equipment tied to Osram Xenon light sources in such major areas as: Shea Stadium (for both motion and slide projection), Eastman Kodak, Bell Telephone, Traveler's Insurance, State of New Jersey, City of Berlin.

AUDIO VISUAL SERVICES

Reevesound Company, Inc.
Long Island City, New York

Has motion picture and sound systems tied to Osram Xenon light sources in: The Bell System Pavilion: Eastman Kodak Pavilion's, Dome and Tower Theaters, Astronaut Bubble, Recordak Area: Johnsons Wax Golden Roundelle Theater, Traveler's Insurance Pavilion.

Lang Audio
New York, New York

Has a Kalart-Victor Projector incorporated into a Telpro System and using an Osram Xenon 450 watt light source at the Egyptian Pavilion.

Ralke Company
Los Angeles, California

Designed and built special projection equipment based on 10 Kodak Model 25 projectors, tied into Osram Light sources for use at the Port of New York Authority Pavilion.

Visual Enterprises
New York, New York

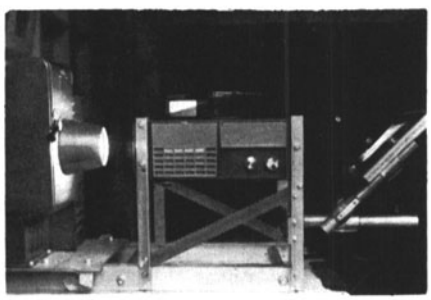
Has 8 modified Carousel Projection units in operation at the Spanish Pavilion projecting brilliant color on a 13'x20' screen.

KODAK'S WORLD'S FAIR PAVILION PICTURE TOWER INCORPORATES FIVE 30′x35′ COLOR PRINTS, LIGHTED BY A BATTERY OF OSRAM XENON LAMPS.

One of the largest industrial exhibits at the Fair, the Kodak Pavilion houses over 15 different show areas... One of its principal attractions is a giant circular "picture tower" rising eight stories above the Fair grounds. Around the tower five giant outdoor color prints, each measuring 30′x35′, are front-lighted by Osram Xenon Lamps to a brilliance which makes them appear to be transparencies.

Color Projection at Shea Stadium

Baseball fans attending the night games at Shea Stadium have no difficulty telling who's up at bat. They can see a color photograph of the batter projected on a 24′x18′ screen above the scoreboard. Rear projection system designed by Cine Electronic Systems of New York, uses 2500 watt Osram Xenon lamps. A 3¼″x4″ slide is used and selection is remote controlled from press box 600 feet away.



Eastman Kodak Carousel Slide Projector

...modified for use with the Osram Xenon 450 watt point source lamp is used in conjunction with two front surface mirrors and a rear projection screen for the continuous projection of color slides in a Kiosk at the Eastman Kodak Pavilion.

First at the Fair...

MACBETH OSRAM / XENON LAMPS

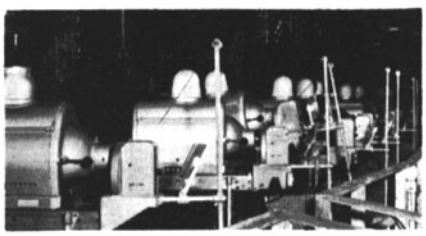
One of the vivid memories most people will take away from the New York World's Fair is that of the spectacular lighting and projection systems exhibitors are using, to attract visitors to their exhibits, and because of the individual and cooperative effort of such progressive original equipment manufacturers and audio visual firms as those mentioned in the text THE LIGHT SOURCE BEHIND THE BEST OF BOTH IS OSRAM XENON.

First in quality...

Here are some of the reasons behind the choice of Osram Xenon:

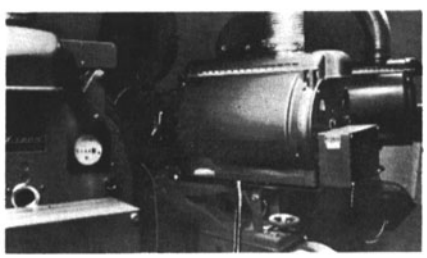
- It offers an efficient color correct source, similar to sunlight.
- Color remains unchanged, even when input is varied over a wide range.
- Light output may be held constant over the rated life of the lamp.
- There is no messy collection of residue from combustion.
- Months of continuous operation from a single lamp.
- Immediate starting.
- No burning in or heating up required.
- Point source.

Macbeth Sales Corporation, the exclusive representative in the United States for Osram Xenon Lamps, stocks an extensive inventory of the various lamp types and accessories to assure fast uninterrupted delivery. For complete specifications, prices, and recommendations as to your specific needs, please address correspondence to Macbeth Sales Corporation at the address shown below.



Battery of 16 MM Norelco Projectors

...equipped with 1600 watt Osram Xenon light sources line the cavernous route along which visitors to the Bell System Pavilion ride. Front and rear projections of still and motion pictures by Reevesound Company, Inc. are a part of this unique theatrical presentation.



Johnson Wax

18 minute film "TO BE ALIVE" is shown on three screens using Xetron lamp housing incorporating 2500 watt Xenon light sources. At times the film is presented as a simple wide image and at times as a rapidly changing series of multiple images. This system was designed by Reevesound Company, Inc. of New York.

MACBETH
SALES
CORPORATION

NEWBURGH, N. Y. • 12553

(IFIDA) and the Motion Picture Association of America (MPAA), was held September 14–26. Amos Vogel was Festival Director and Richard Roud of the British Film Institute was Program Director. Twenty-five feature-length films were presented as well as the short subjects selected as the best of those produced during the year. Although films of commercial interest were shown the emphasis was on artistic merit.

The World's Fair documentary, *To Be Alive*, produced by Francis Thompson and Alexander Hammid for Johnson Wax Co., which achieved critical acclaim for its artistic content, is also noted for its sensitive use of new cinematographic techniques. The producers gave special credit to Movielab, Inc., for its help in solving the complicated technical problems involved in handling the audio and visual elements. Movielab technicians assisted the producers during every stage of the filming while the Johnson Wax pavilion was being built and continued their assistance through the final screenings.

A report on films for television released by Donald E. Hyndman, Assistant Vice-President of Eastman Kodak Co. and Manager of the Professional Motion-Picture Film Dept., shows that more than 80% of the television shows that appear during prime TV time (7:30 to 11 :00 P.M.) are produced on motion-picture film. During 1963, 8% of Kodak's sales of $1,107 million resulted from the company's business in the professional motion-picture film field, the report stated. Between 57 and 60 television shows are currently produced on 35mm film for weekly showing and from 5 to 7 on 16mm film. About 25 of these programs are an hour long.

Products of Edgerton, Germeshausen & Grier, Inc., 170 Brookline Ave., Boston, Mass. 02115, will be represented in Alabama and Mississippi by J. P. Smith Associates, 2109 West Clinton Bldg., Huntsville, Ala., and in Japan by Hakuto Company Ltd., P.O. Box 25, Tokyo Central, Japan. EG&G products include fast energy switching devices, including thyratrons, triggered spark gaps and krytrons; modulated light components, including xenon flashtubes, photodiodes and trigger transformers; a light measuring device of fast response called the Lite-Mike and Picoammeter and Joule-pac power supply.

Varied consultation and production services based on a systems approach to communication problems are offered by Alexis E. Ushakoff, Jr., 43 Lovett St., Beverly, Mass. Services now offered include production of films, visual presentations, photography, models, and exhibits; consultation in educational technology and photographic instrumentation; research and development in visual communication techniques and applications; design engineering and fabrication of electro/mechanical/optical devices systems and simulators; supply of photographic, television and optical equipment and integration of all these services for applications in industry, education, government and medical research.

Video-Medical Electronics Corp., 40th Fl., Time-Life Bldg., Rockefeller Plaza, New York, N.Y. 10020, is a new engineering and marketing company formed to exploit advanced developments in electronics and infrared technology. It distributes in the United States products of three German firms, Loewe-Opta A.G.; Fernseh GmbH; and Physikalisch-Technische Werkstatten. The first two firms specialize in television and recording equipments. Physikalisch-Technische Werkstatten, in addition to television equipments, manufactures infrared devices used in medical and military applications.

Kodak Sound Recording Tape is a new brand name for six types of magnetic sound tapes marketed by Eastman Kodak Company previously sold under various designations. In addition to consolidating the tapes under one name the tapes are also backprinted with more detailed information than formerly. The printing on the back of the tape lists the type of tape, base material and base thickness, and is spaced at 15-in. intervals to aid the user in timing and editing.

Photoinstrumentation equipment produced by Traid Corp., 17136 Ventura Blvd., Encino, Calif., is being exhibited in

Nothing Finer!

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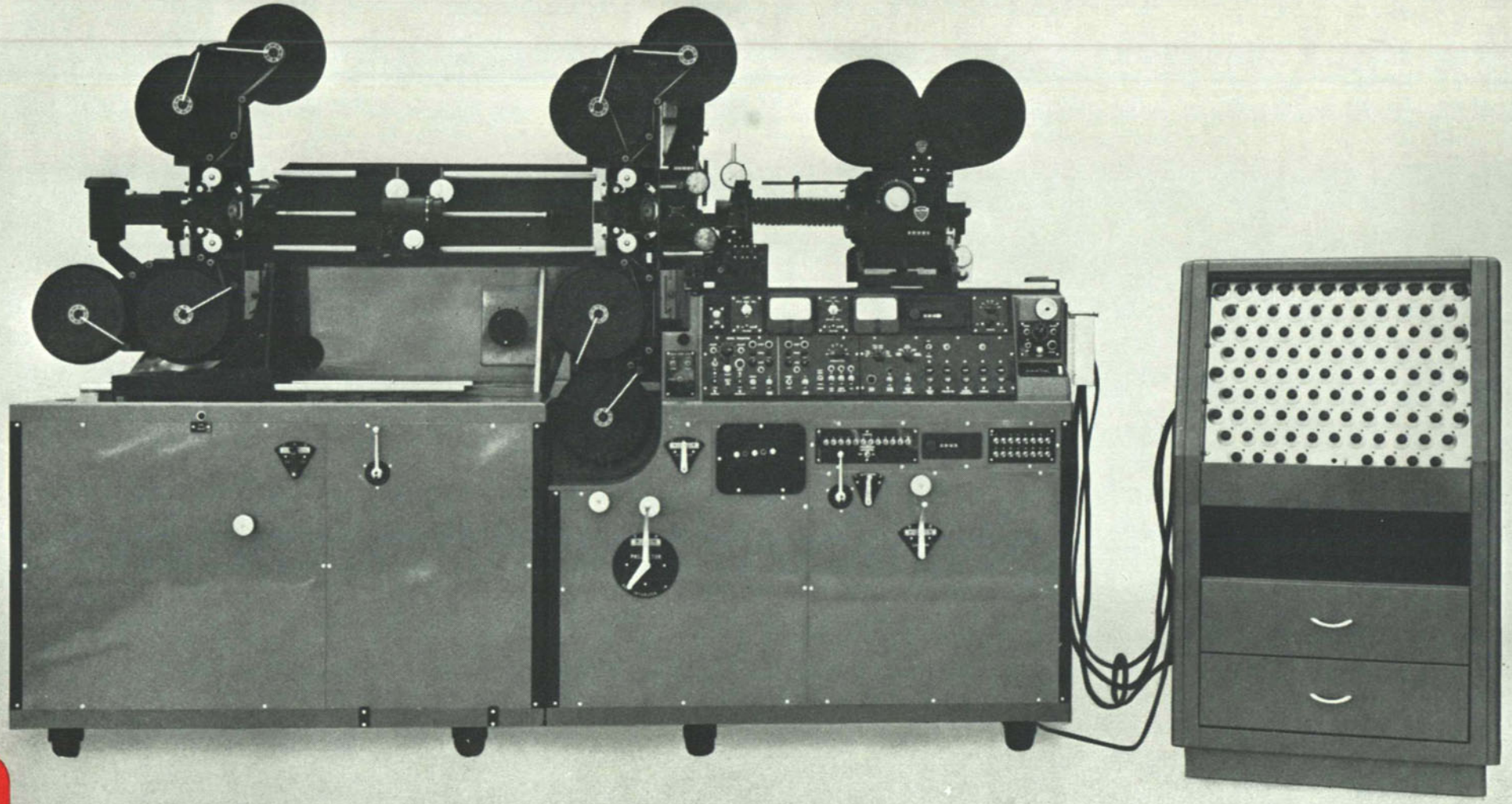

PRODUCERS SERVICE CO. manufacturers of the ACME OPTICAL PRINTER

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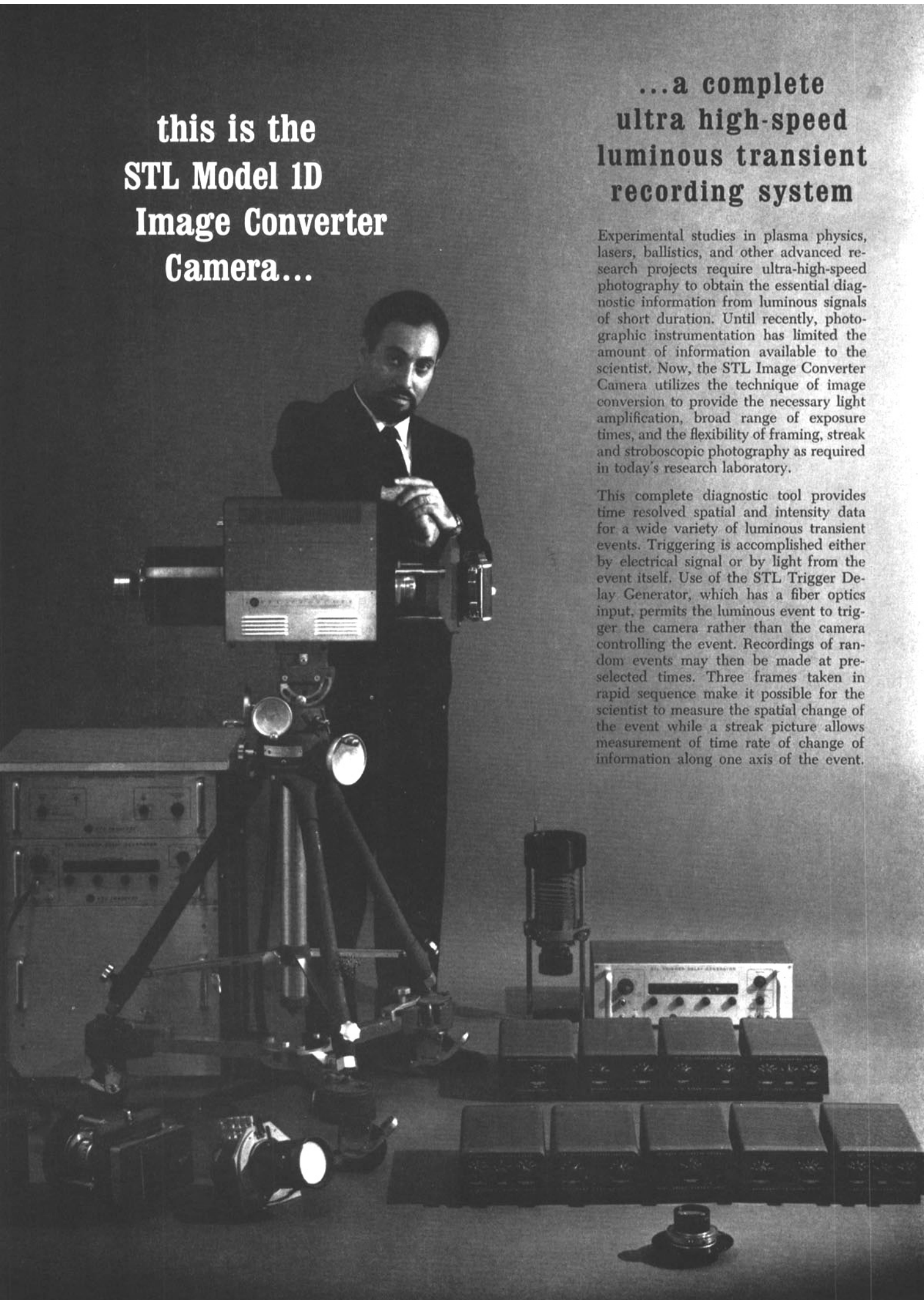
this is the STL Model 1D Image Converter Camera...



...a complete ultra high-speed luminous transient recording system

Experimental studies in plasma physics, lasers, ballistics, and other advanced research projects require ultra-high-speed photography to obtain the essential diagnostic information from luminous signals of short duration. Until recently, photographic instrumentation has limited the amount of information available to the scientist. Now, the STL Image Converter Camera utilizes the technique of image conversion to provide the necessary light amplification, broad range of exposure times, and the flexibility of framing, streak and stroboscopic photography as required in today's research laboratory.

This complete diagnostic tool provides time resolved spatial and intensity data for a wide variety of luminous transient events. Triggering is accomplished either by electrical signal or by light from the event itself. Use of the STL Trigger Delay Generator, which has a fiber optics input, permits the luminous event to trigger the camera rather than the camera controlling the event. Recordings of random events may then be made at preselected times. Three frames taken in rapid sequence make it possible for the scientist to measure the spatial change of the event while a streak picture allows measurement of time rate of change of information along one axis of the event.

One STL Image Converter Camera, with interchangeable plug-in units to provide appropriate deflection and shutter pulses, forms a system which covers the framing, streaking and stroboscopic requirements of the laboratory. Three-frame sequences can be taken of any one event because exposure times are adjustable from 5 nanoseconds to 10 microseconds and intervals are adjustable from 50 nanoseconds to 1 millisecond. Since writing times are adjustable, streak pictures can be taken from 50 nanoseconds to 200 microseconds. To change operation from frame to streak or to change from the nanosecond range to the submicrosecond or microsecond range requires only the change of a plug-in unit.

The STL Image Converter Camera is readily portable, simple to operate, and easy to set up. It can be taken to the site of the experiment and made ready to record in a matter of minutes; thus the scientist is free to concern himself with the experimental apparatus and the interpretation of data rather than with diagnostic instrumentation.

IN PLASMA RESEARCH

Through ultra-high-speed photographic observations of plasma behavior in a theta pinch, scientists determined that the plasma ring rotates about an axis perpendicular to the applied field. Prior to the development of the STL Image Converter Camera, which supplies the necessary light gain and ultra-high-speed, this rotation was impossible to detect photographically because only limited spatial information could be obtained from a streak photograph and the rotation appeared to be random and nonreproducible.

Figure 1 is a sequence of three frames showing the first part of the rotation. Exposure intervals were 2.0, 2.5, and 3.0 microseconds after the initiation of the discharge. Exposure time for each was 50 nanoseconds. Figure 2 is a 5 microsecond longitudinal streak photograph of the theta pinch.

Fig. 1

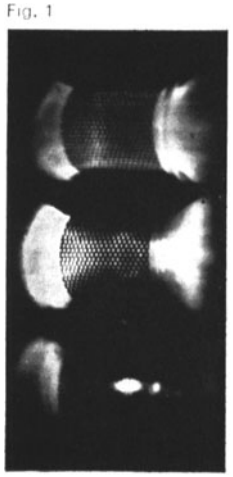
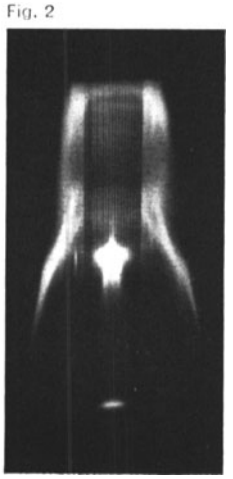


Fig. 2



IN EXPLODING WIRE STUDIES

The complete history of diverging and converging cylindrical shock waves in an exploding wire is shown in the composite streak photograph, Figure 3. Since light amplification was required to properly record the shock fronts of the initial phase, and the restrike phase was three orders of magnitude brighter, photographs were taken of each phase and correlated on a dual beam oscilloscope.

Studies made with the STL Image Converter Camera have yielded several theories which explain the behavior of the shock waves seen in this photograph. Figure 4 is a three-frame sequence of the same experiment with the frames taken at 1.5, 2.25 and 2.75 microseconds after the initiation of the electrical discharge. Exposure time of each frame was 100 nanoseconds.

IN HYPERBALLISTICS

Figure 5 is a three-frame sequence photograph taken of a cylindrical lexan plastic pellet moving at approximately 14,000 feet per second in 100 microns of air.

In the first frame the pellet is backlighted by a defocused spark to give a quasi-shadowgraph to determine if the pellet was in one piece. The light gain of the STL Image Converter Camera made it possible to record the luminous wake of the pellet in the second and third frames. Exposures were 200 nanoseconds at 10 microsecond intervals.

IN LASER RESEARCH

The STL Image Converter Camera has made possible many new discoveries in ruby laser research. Time resolved information on spatial intensity and on variations in polarization is clearly presented in the three-frame sequence photograph, Figure 6, showing the face of a ruby laser crystal in three separate spikes. Exposures are 200 nanoseconds with 10 microsecond frame separations. The importance of the STL Image Converter Camera as a diagnostic tool in ruby laser research has been established by the recording of information such as this and the streak photograph, Figure 7, which shows the self-modulation of the output intensity of a ruby laser. Writing time in this streak record was 500 nanoseconds. An important feature of the STL Image Converter Camera in laser research is the extremely fast triggering. The instrument internal delay is as low as 12 nanoseconds.

Fig. 3

Fig. 4

Fig. 5

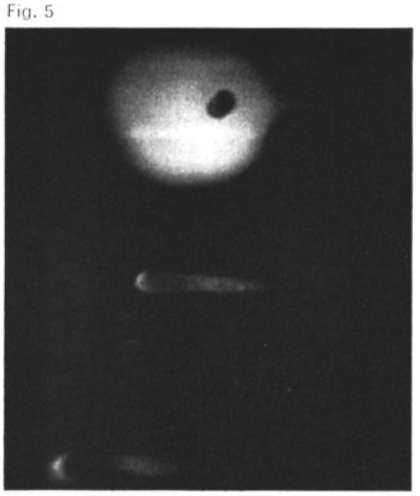


Fig. 6

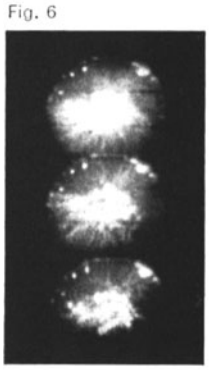
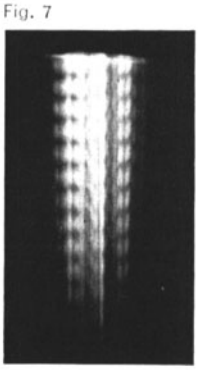


Fig. 7



REPRINTS AND CATALOG

A series of studies reprinted from scientific journals, which describe diagnostic studies carried out with the STL Image Converter Camera, and catalog on the system will be sent on request. Write:

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1711 West Irving Boulevard, Irving, Texas
254-4566 (Area Code 214)

a custom-built Clark Cortez exhibit which is calling on users of photostrumentation equipment throughout the country. Items distributed exclusively by Traid throughout the United States include the Photo-Sonics Model 1B high-speed camera; Automax 35mm pulse camera; Consolidated Systems gun cameras; and Vanguard Instrument film analyzers and projectors.

Itek Corp. of Lexington, Mass., has been awarded a contract by Canadair, Ltd., for the production of 14 small, lightweight aerial camera systems and associated equipment for use in unmanned recoverable reconnaissance aircraft. The aircraft, manufactured by Canadair for the Canadian and British governments, are designed to gather front-line combat photographic intelligence. The Itek 70mm Day/Night Camera, about the size of a cigar box, is designed to compensate automatically for image motion, enabling the "freezing" of images of troops, vehicles, etc., seen from the aircraft. At night the camera can examine enemy terrain in the bright light of 12 flash cartridges automatically ejected as the plane flies over specific areas of interest.

A continuously-operating gas laser that emits radiation at wavelengths as long as 133 microns has been developed at Bell Telephone Laboratories. The longest wavelength previously reported was 85.147 microns. The laser used in the experiment has a discharge tube 47 mm in diameter and 5 m long. Mirrors at both ends are coated with vacuum-deposited silver. The laser beam is emitted from the cavity through a 2-mm aperture at the center of one of the mirrors. Long wavelength lasers are important as sources of monochromatic radiation for laboratory spectroscopy, and they may conceivably be useful in the development of millimeter wave communications systems.

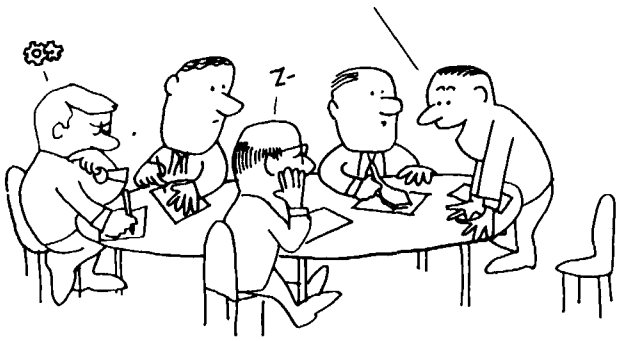
A new system for theater television, developed by Radio Corp. of America in conjunction with Electronovision, has been used for a film version of *Hamlet* shown at more than 1,000 theaters. The system includes five RCA Type TK-60 TV cameras with a 4½-in. tube which were modified for the purpose. The cameras were positioned throughout the theater auditorium and the stage. Pictures selected from the individual cameras by an electronic switching system were relayed to two TFR-1 film recorders installed in the theater basement for the recording session. The film recorder, developed at the Burbank, Calif., facility of RCA's Broadcast and Communications Products Div., is described as the intermediary between the electronic system of television and the optical system of motion pictures. It uses a synchronized motion-picture camera to photograph the pictures as they appear on a display tube. The film was produced by Electronovision and recorded directly on 35mm film exposed to electronic pictures.

An all solid state laser system which employs a semiconductor laser and semiconductor cooling has been developed by Radio Corp. of America. A semiconductor laser beam is modulated by modulating the current. The system consists of a gallium arsenide injection diode laser mounted on a 3-stage cascaded thermoelectric refrigerator and operated −130 F. The laser was reduced to this temperature from room ambient temperature of approximately 80 F. Thermoelectric cooling is accomplished by passing an electric current between a negative (N type) and a positive (P type) semiconductor. By a phenomenon called the Peltier effect the current takes up heat energy during one path between the semiconductors and gives up heat on the return path. By removing the heat from the latter path with a heat sink or heat exchanger, refrigeration is accomplished on the cold side.

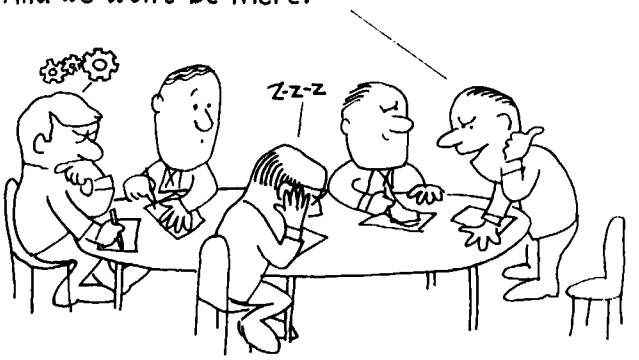
An ultra-sensitive TV camera is under development by RCA's Astro-Electronics Division, Princeton, N.J., for NASA's Project TIGRIS (Televised Image of Gaseous Regions in Interplanetary Space).

Purpose of the camera in space exploration will be the possible detection of "invisible" lights believed to mark gaseous regions in space. Discovery of these gaseous regions would support the theory of Thomas Gold of Cornell University. Dr. Gold, who is Chairman of Cornell's Astronomy Department, believes that gaseous clouds come from the gas and

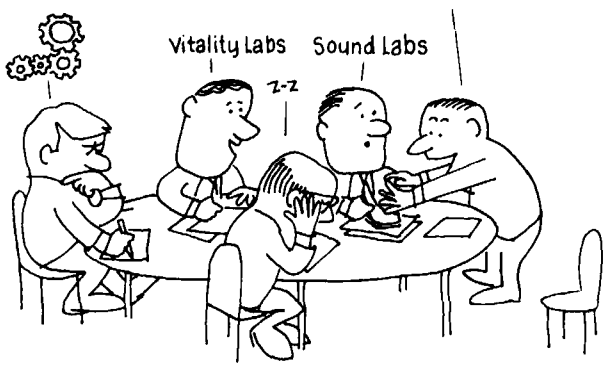
1. Now, gentlemen! Let's get to it. Business is fine, but it's been brought to my attention that there is a lack of recognition of Tri Art as the name of Du Art's color lab, and I propose to do something about it!



2. I'm going to change the name of Tri Art! It will confuse the hell out of anybody who tries to appease us by learning that name tomorrow. They'll wake up and start screaming Tri Art!... And we won't be there.



3. Now, I want you to come up with a brand new name for our color operations that will convey our new image. It's got to reflect the vitality of our young management and the soundness of our 40 years of experience. The new name must make clear that we have made a tremendous investment in new equipment in the last 10 years.



4. You're not getting the idea! It must have wham-o! Why with our new editing rooms for our customers, our new fiber optics color printing, our tightened inspection and absolute quality control, we can beat anybody for service, quality and facilities! Let's try some more!

5. I've got it! I just thought of it! Just the name to say everything! It reeks of speed, our fantastic equipment, personalized, sensational service, and dynamic follow-up combined with the knowledge based on our unsurpassed 40 years of experience! Brace yourselves... Here it comes! **"Du Art Color Corporation."**

6.

DU ART FILM LABS FOR BLACK & WHITE/DU ART COLOR CORP. FOR COLOR—245 W. 55 ST., NEW YORK 10019, PL 7-4580

IN CANADA ASSOCIATED SCREEN INDUSTRIES, LTD., 2000 NORTHCLIFFE AVE., MONTREAL

magnetic fields that ring the sun and are pushed adrift by magnetic bulges billowing out from the solar surface. Magnetohydrodynamical shockwaves associated with this phenomenon could, he believes, be responsible for the suddenness of magnetic storms on Earth.

On its mission the camera will be looking for gaseous clouds with a luminosity of only 0.0000005 ft-c, or less than one-millionth of the brightness of a normally lighted room. The system, which will use an ultra-sensitive, highly ruggedized 3-in. image orthicon, will provide 500 scanning lines, a frame time of 2 sec, will operate with a horizontal scanning rate of 250 lines/sec, a video bandwidth of 65 kc and an aspect ratio of 1:1.

Four instructional films on golf and one on skiing are available for free showings from Modern Talking Picture Service, Inc., 3 W. 54 St., New York, N.Y. 10022. The films are 16mm in sound and color. The golf films run 28 min and the ski film runs 16 min. Slow motion sequences are shown of four golf champions in action, Lema, Boros, Collins and Burke. Featured in the instructional ski film is ski champion Stein Eriksen.

Logistical services for the New York Film Festival were handled by Bonded Film Storage, 630 Ninth Ave., New York, N.Y. 10036, according to a recent announcement. Services included examining and storing the prints entered in the competition and holding preliminary screenings and also preparing and delivering screen prints selected for the final competition. At the close of the Festival the firm then returned the films to the producers.

Elie C. Katz, 42–65 Kissena Blvd., Flushing 55, N.Y., has announced his availability as a consultant in electronics, sound and film production. Mr. Katz, an independent film producer, specializes in the development of electronic systems applicable to motion-picture and film production techniques. Mr. Katz was formerly Chief Electronics Engineer for Camera Equipment Co. (The firm was later merged with Florman & Babb to become F&B/CECO, Inc.)

Thomas J. Healy has been appointed to the newly created post of Sales Manager Photo-Electronic Instruments, Beckman & Whitley, Inc., San Carlos, Calif. Mr. Healy, who was formerly Sales Manager at Electro Optical Instruments, Monrovia, Calif., will be primarily responsible for sales and applications of the company's line of image-converter cameras. The company recently acquired the complete line of Abtronics image-converter cameras and accessories. A subsidiary of Technical Operations, Inc., Burlington, Mass., Beckman & Whitley also manufactures meteorological instruments and ordnance devices.

Allan S. Kaplan has been appointed General Manager of Cinex Distributing Corp., 729 Seventh Ave., New York, N.Y. 10019. Mr. Kaplan, who has been

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with the company for the past year, was formerly Vice-President of Data Time Corp.

M. M. Rand has been appointed Director of Marketing for the Carbon Products Division of Union Carbide Corp., 270 Park Ave., New York, N.Y. 10017. He has been associated with Union Carbide since 1948. Robert D. Kennedy is his successor to the post of Marketing Manager for Electrode and Metallurgical Products.

Two new regional divisions have been established by the Carbon Products Division of Union Carbide Corp. P. H. Freeman has been appointed Manager of the Eastern Division with headquarters in New York. Western Division Manager is W. T. Brenner with headquarters in Chicago. Establishment of the new divisions is part of a general expansion program, the announcement indicated.

Delano Ames III has been appointed Washington, D.C., Marketing Representative for the Bell & Howell Photo Products Group's Military and Special Products Division. Mr. Ames, who was formerly with Robertshaw Controls Co., will occupy a new Bell & Howell office at 4820 Fairmont Ave., Bethesda, Md.

Robert J. Gilson has been appointed Vice-President of Engineering of Subscription TeleVision, Inc. He was formerly General Manager of the Military Products Division and Director of Systems Management of General Dynamics in Rochester, N.Y. In his present post Mr. Gilson will coordinate technical phases between STV and Lear Siegler, Inc., the Pacific Telephone and Telegraph Co. of California and the data processing of these operations executed by Reuben H. Donnelley, as well as studio operations in Los Angeles and San Francisco and activities between STV and National Television Services, Inc.

Leslie S. Wayman has been appointed Vice-President and General Manager of Magnasync Corp., a subsidiary of Monogram Industries, Inc., of Culver City, Calif. Before joining Magnasync, Mr. Wayman was Assistant Corporate Secretary and Controller of the Electronics Systems Division of Ling-Temco-Vought in Culver City and, before that, Manager of Financial Operations for RCA's West Coast Electronics Products Div.

Magnasync Corp. manufactures commerical and military sound recording systems. Currently, the company is producing a full line of recording equipment for professional use and is also manufacturing multichannel communications systems.

Glenn M. Berggren has been appointed to the newly created position of Manager, Theatre Equipment Sales for Kollmorgen Corp., Northampton, Mass. He will take over duties formerly the responsibility of Louis F. Salig, who recently joined Pembrex Theater Supply Corp. in Los Angeles. In his new post Mr. Berggren will be responsible for the sale of standard and special purpose lenses, including 35mm Snaplite Projection Lenses.

Ralph Sogge has been appointed Director of Quality Control and Applications Engineering for Behrend's, Inc., 161 E. Grand Ave., Chicago 11, and Frank M. McGeary has been made head of a new office in Memphis, Tenn., according to an announcement by Jack Behrend, President of Behrend's, Inc. Mr. Sogge was formerly Manager of Marketing for Magnasync Corp., North Hollywood, Calif.

The Memphis office will specialize in the sale and rental of professional motion-picture equipment, including cameras, light and editing equipment.

Frank H. Riffle has been elected President by the Board of Directors of Carbons, Inc., Boonton, N.J., and Pierre Demoreuille has been elected Executive Vice-President. Mr. Riffle was formerly Technical Director and General Manager of the firm's XeTRON Divison. Mr. Demoreuille, who has been with the firm since 1950, was Associate and Engineering Advisor to the late Edward Lachman, former president. In the last few years Mr. Demoreuille has participated in the design of special carbons for use in solar simulation in connection with outer-space equipment testing.

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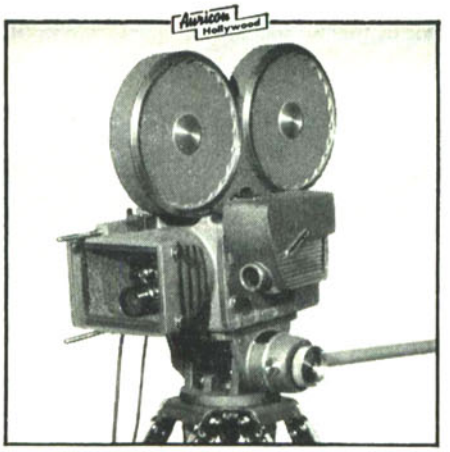

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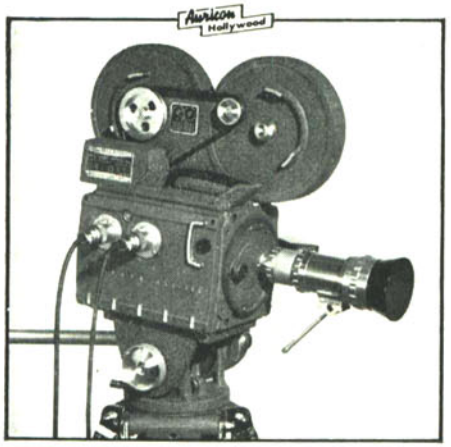

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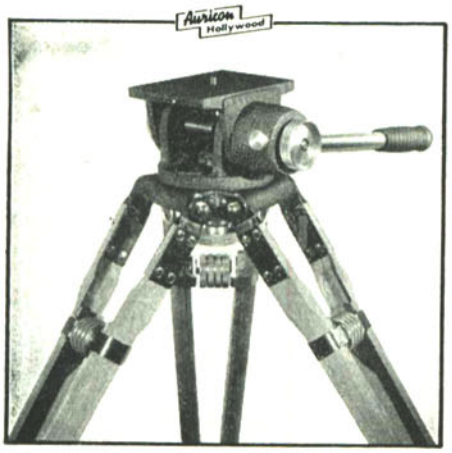

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