



The American Film Institute, 1815 H St., N.W., Washington, DC 20006, has announced the donation by United Artists Corp. of the original master negatives of the entire pre-1949 Warner Bros. library of films for inclusion in the collections of the Library of Congress. The films, representing two decades of production following the coming of sound, as well as a large selection of silent features, have been added to the American Film Institute Collection at the Library of Congress for preservation in the public interest. The AFI collection now comprises more than 8,000 motion pictures. In addition United Artists has donated the original master negatives of the entire pre-1949 Warner Bros. library of sound short subjects and animated cartoons, including *Looney Tunes* and *Merry Melodies*, a large selection of sound features produced by Monogram in the 30s and 40s and the entire library of *Popeye* cartoons released by Paramount during that time.

United Artists also donated a collection to the University of Wisconsin including 16mm reference prints, manuscripts, film scripts and still photographs.

A Film Arts Festival will be a new feature of the 14th Arts Festival to be held Apr. 8-16, 1972, in Jacksonville, Fla. Cash awards totaling \$1,000 will be presented to producers of the winning films. To be considered in the competition the films must be with optical sound or silent 16mm and must have been completed since January 1971. Preferably the films should be no more than 20 min in length. Purpose of the Film Arts Festival is to give those attending the Arts Festival an opportunity to see the best in independent, experimental films. Further information is available from Jacksonville Film Arts Festival, Jacksonville University, College of Fine Arts, Jacksonville, FL 32211.

Columbia College, 540 North Lake Shore Dr., Chicago, IL 60611, has appointed three associate deans and has added new faculty members, bringing the total to 70 part-time and 24 full-time teachers. Dr. Louis Silverstein and Dr. Timothy W. Drescher are the new Associate Deans of the College and Sheldon Siegel is Associate Dean for Student Services. Announcement of the new appointments was made by President Mirron Alexandroff. The college specializes in educating students in the areas of public information and the public arts. Charles Lyman is the Faculty Advisor of the SMPTE Student Chapter at Columbia College. Christopher Burritt is Chairman and David McAllister is Secretary-Treasurer.

An exhibition of videotape will be presented by the Whitney Museum of American Art, 945 Madison Ave. at 75 St., New York, NY 10021, in cooperation with the Videotape Production Assn. The exhibition

will be held Dec. 3-15 as part of the Museum's New American Filmmakers series. In announcing the exhibition, David Bienstock, Curator of Film, said, "It should be understood that videotape is not TV or film, but a new and unique art medium in itself, meriting a museum showcase. Independent artists have begun to use the medium...the result has been the discovery of wholly new types of images, movements, colors, visual-auditory sensations and feelings of kinetic energy peculiar to the medium. The tapes exhibited as part of the Whitney exhibition will emphasize these aspects of videotape."

Plenum Publishing Corp., 227 W. 17 St., New York, NY 10011, has begun publication of 20 journals translated from the Russian, formerly part of the Faraday Press, Inc., program. The journals will be issued in English translation by Plenum's Consultants Bureau Div. Outstanding subscriptions will be fulfilled by Plenum. The addition of the 30 journals brings the number of journals translated by Consultants Bureau to 87. The average time lag from receipt of the manuscript from the Soviet Union to the publication of a Consultants Bureau journal is about six months. The newly acquired journals cover major scientific and technical disciplines including Astrophysics, Combustion, Explosion and Shock Waves, Differential Equations, Applied Spectroscopy, Physics and Theoretical and Experimental Chemistry.

LaVeZZi Machine Works, Inc., has moved to a new facility at 900 N. Larch Ave., Elmhurst, IL 60126, a suburb of Chicago, where the firm has been since 1908. The new plant is located in a new industrial park containing light industry and commercial firms. The LaVeZZi factory is devoted exclusively to the manufacture of small machine parts. It specializes in such items as Geneva intermittent drive components, sprockets for motion-picture films, perforated tapes, etc.

RCA Corp. has opened a \$1 million manufacturing facility in Jersey Isle, England, to produce electronic equipment for European broadcasters. Patrick J. Murrin, Managing Director of RCA Jersey Ltd., which operates the new plant, announced that several units of the TR-70C videotape recorder have been assembled and shipped to customers in France and West Germany. The new facility contains about 27,000 ft<sup>2</sup> of floor space and is partly constructed of native Jersey granite. The plant is ventilated by a filtered air system. Since the island's summer temperatures range between 70° and 75°, air conditioning is not required. The plant has no external windows so that lighting as well as ventilation can be controlled.

E. I. du Pont de Nemours & Co. has been granted a U.S. patent on its thermal technology for duplication on chromium dioxide magnetic tape. The process was described by Dickens and Jordan in a paper on "Thermoremanent Duplication of Magnetic Tape Recordings" in the March 1971 issue of the *Journal*. Patents

covering the same technology have previously been granted by most West European countries. The process covered by the patents is known as "thermoremanent duplication." It is based on the particular magnetic qualities of chromium dioxide, the proprietary material of Du Pont's Crolyn magnetic tape.

Image Communications, Inc., has opened new television production studios and a TV training facility at 528 North Michigan Ave., Chicago, IL 60611. James M. Crooks has been appointed President of Image Communications. He was formerly Director of the Ampex Video Institute. Matt P. Spinello is Director of the Image Video Institute and General Manager of the Image Teleproduction Studios. He was formerly Manager, Teleproductions, Ampex Video Institute. Image Communications currently conducts a basic Teleproduction Workshop in its new location and also produces videotaped programming for a number of corporations.

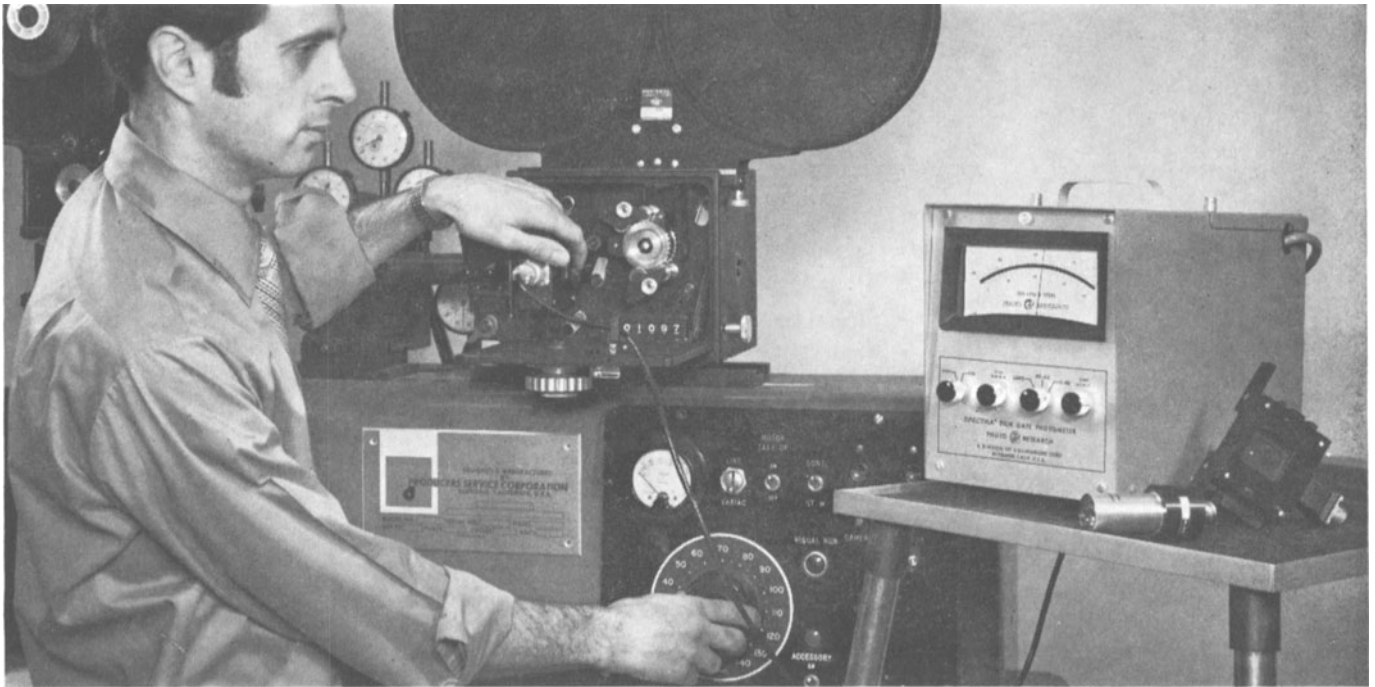
Landy Associates, 12 Buxton Rd., Cherry Hill, NJ 08034, is a newly organized manufacturers representative organization for broadcast and television equipments. Among firms whose products are represented in the New England and Middle Atlantic States are CBS Laboratories, Datatek Corp., Datavision, Inc., Central Dynamics Corp., and Time & Frequency Technology, Inc. Landy Associates also represents Leitch Video Ltd. of Toronto exclusively in the United States.

The Huertier xenon sound projector for super-8 films was demonstrated in Paris on October 9 by N. V. Kinotechniek, Dominesiaan 81, Zwanenburg, Netherlands, for a selected international audience. The projector uses 730-ft reels. The film is threaded automatically and after the film is threaded the light is switched on. The new projector uses a 500-W xenon lamp. The light is regulated so that the film can be projected on screens between 3.50 and 8 m within normal standards. Projection on screens up to 11 m is possible. The projector was designed especially for showing super-8 films to audiences of some 100 or more persons.

Bell & Howell will install projection equipment for the conversion of existing 35mm land-based theaters, maintained by the U.S. Navy, to a 16mm format. More than 130 of the larger land-based Navy theaters in the United States are involved in the conversion. The new projectors contain a new light/optics system developed by the Bell & Howell Avicom Div. The system is a basic modification of the 16mm 566T unit and is designed for showing 16mm presentations of a quality comparable to showings in commercial theaters.

Sony Corp., Tokyo, Japan, and 3M Company, St. Paul, Minn., have entered into a cross patent license agreement involving the manufacture and sale of magnetic tape and recording equipment. The agreement will permit Sony to manufacture and sell the new 3M High Energy magnetic tape and 3M to manufacture and sell the Sony ¾-in U-Matic video cassette equip-

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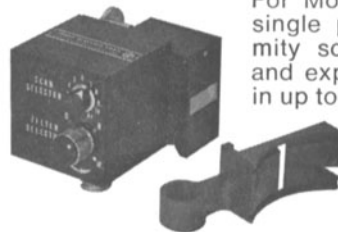


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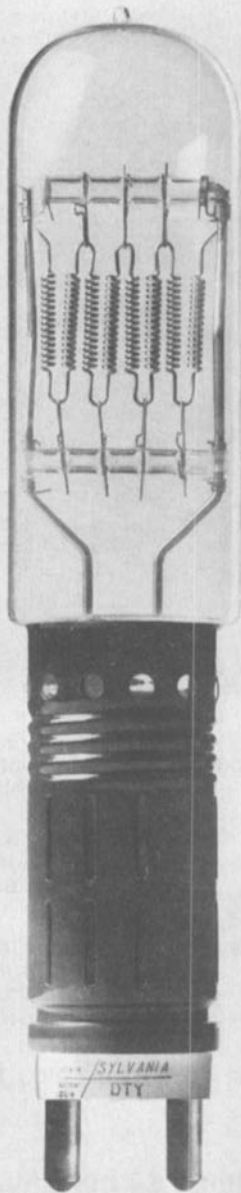
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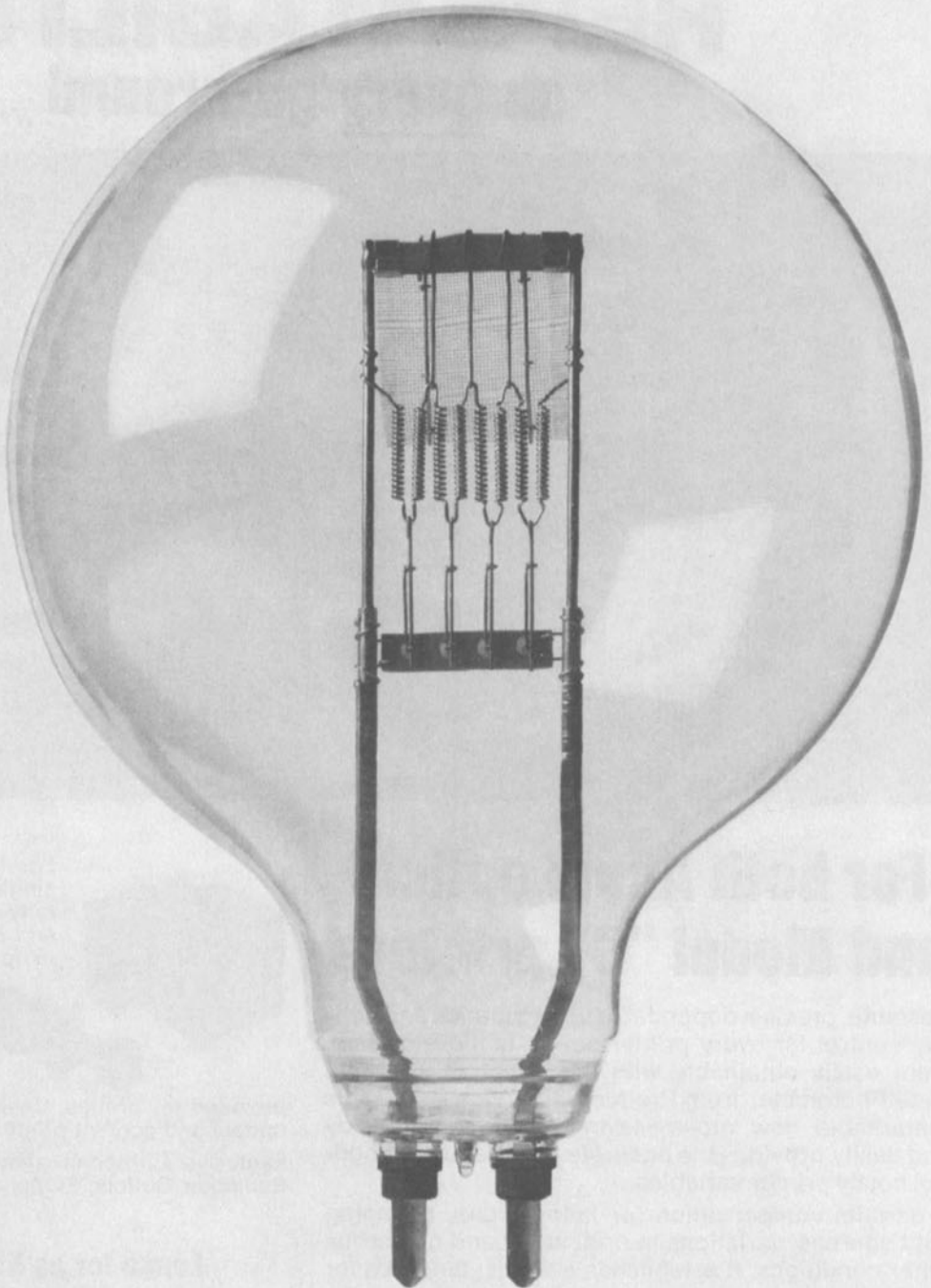
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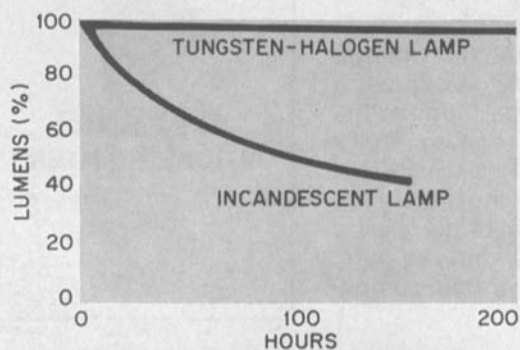
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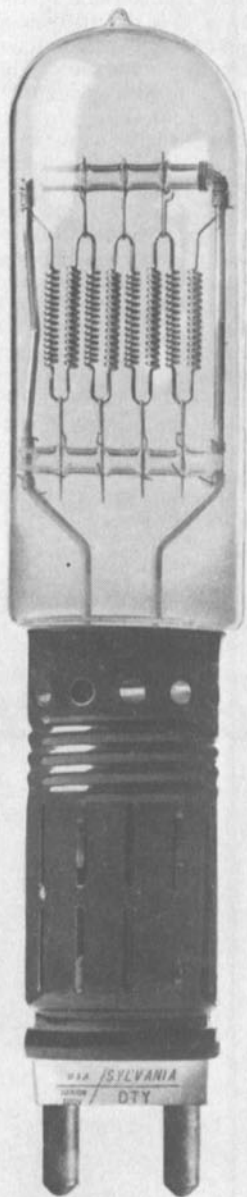
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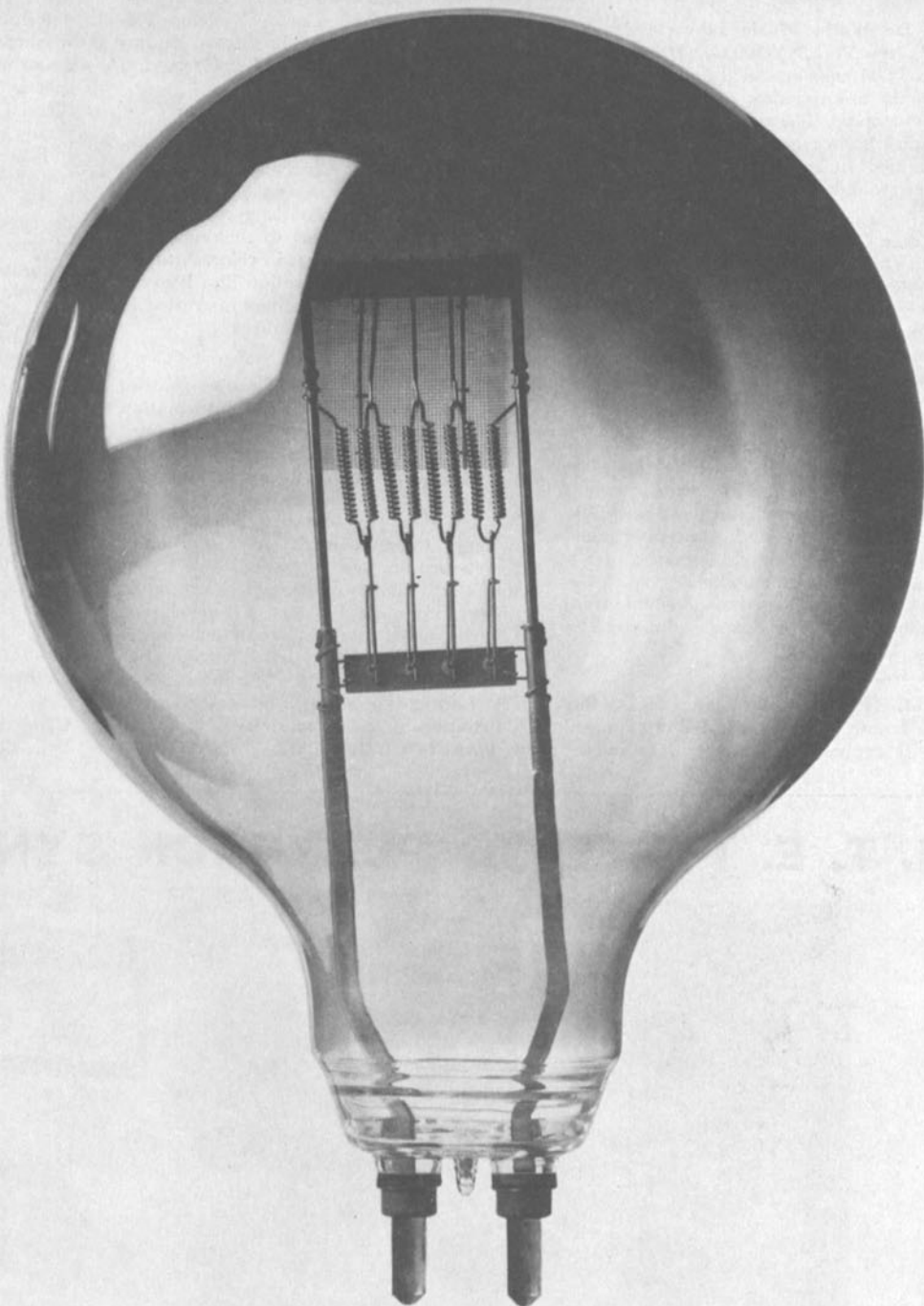
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ment. High Energy tape, manufactured by 3M's Magnetic Products Div., utilizes a cobalt-energized ferric oxide formulation.

**The De Wolfe Music Library**, 25 W. 45 St., New York, NY 10036, has announced that its 500-page classified music catalog is available to producers of films, slidefilms and videotape. The music library is available on LP discs and 1/4-in tape. The library has added 10 hours of new recordings of modern sounds, including electronic music.

**Spindler & Sauppe**, 13034 Saticoy St., North Hollywood, CA 91605, has changed the address of its eastern office to Suite 1403, 5101 River Rd., Washington, DC 20016. The office continues under the direction of Carroll B. Sager. A multi-image demonstration area has been designed into the new location. The firm also announced the production of a multimedia, three-screen audio-visual program package for public distribution. Entitled *Of Lemmings and Kings*, the program integrates 7 min of 16mm color motion-picture film, some 300 35mm color slides and a preprogrammed audiotape. The program, intended for teenage and young adult audiences, is on the subject of drug abuse. It is available from Spindler & Sauppe dealers at a price of \$150.

**H. M. [Holzberg Associates**, P.O. Box 322, Totowa, NJ 07512, has announced that it represents manufacturers in the

broadcast, closed-circuit, CATV and radio fields. Among leading manufacturers represented by the firm are Ball Brothers, American Data Corp., Marti Electronics, Sparta Electronics Corp., Systems Resources Corp., Philips Broadcast Equipment Corp., Sierra Scientific Corp. and Coastcom Communications.

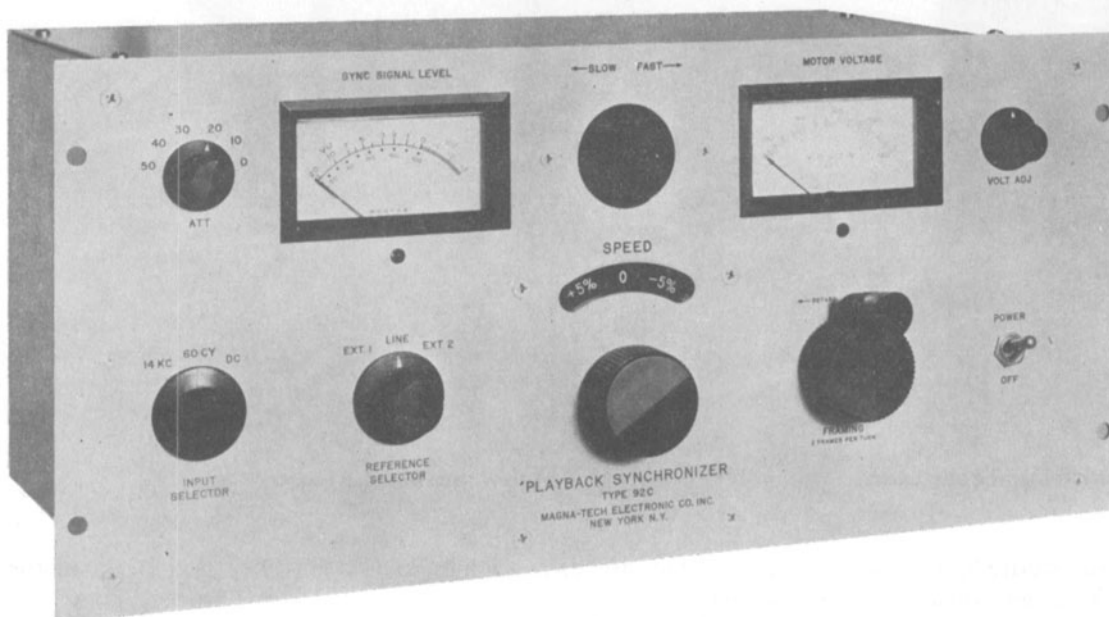
**Frank Gudaitis Enterprises** has been established at 25 Riverside Av., Mastic Beach, NY 11951, with a range of activities from producing automatic gyro-stabilized motion-picture cameras to making documentary motion pictures in color. A three-minute 16mm demonstration film is available for operators and others interested in the firm's Mark 3 Gyro Camera.

**An experimental system for transmitting and receiving handwritten information** over the same telephone lines that now carry conversations has been devised at Bell Telephone Laboratories in Holmdel, N.J. The system encodes handwriting motions on a writing surface into "bits" of information which are sent over ordinary telephone lines to a distant location. There, the information is electronically translated and recorded on a special self-developing photosensitive film for simultaneous projection on a large viewing screen. The recorded film can be stored for future viewing. Information is displayed by the receiving station in real time, or nearly, as it is written at the transmitter.

In order to transmit handwriting and graphic information, a tiny "location indicator" attached to a writing instrument (chalk, pen, pencil or stylus) is used to determine all movement performed on a writing surface. A user may write or draw in a normal manner and at his accustomed speed. The location indicator is a commercial electronic device that provides a steady series of ultrasonic pulses. The pulses indicate the exact location of the writing instrument as it is moved over a writing surface bounded by two "continuous strip" or bar-shaped microphones. The microphones are sensitive enough to detect accurately the location of the writing instrument at any point on the writing area. Lifting the location detector from the writing surface interrupts the "write" signal. Handwriting motions generate a stream of electrical pulses. The pulses are fed to a data set that converts them to signals that can be transmitted over telephone lines. At the receiving terminal, another data set translates the incoming signals back to electrical pulses to drive two galvanometers. The galvanometers are used to deflect an ultraviolet light beam to follow all the motions performed on the writing surface at the transmitting terminal. As the ultraviolet beam moves across a special photosensitive film, handwriting is reproduced and simultaneously projected onto a wall or screen.

Using a beam of laser light, scientists at Bell Telephone Laboratories have raised

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"ST. GEORGE & THE BLACK FALCONS"  
*Producer/Director - John Hynd*

**Dept. of Travel Industry, Government of British Columbia**  
"A FACE IN THE CROWD"  
*Producer/Director - W. L. Wiley*

**IBM Corporation**  
"IT'S ONLY NUMBERS"  
*Producer/Director - Gerard Lemieux*

**Jet Propulsion Laboratory**  
"MARINER MARS '69"  
*Producer/Director - Frank Bristow*

**KLM Royal Dutch Airlines**  
"SURPRISING AMSTERDAM"  
*Producer/Director - Andre de la Varre, Jr.*

**Lawrence Radiation Laboratory, University of California**  
"CONTROLLED PHOTOSYNTHESIS"  
*Producer/Director - James Halverson*



**NASA - Lewis Research Center**  
"COMPUTER-GENERATED FLOW VISUALIZATION"  
*Producer/Director - Arthur Laufman*

**Naval Undersea Research & Development Center**  
"DEEPLY SUBMERGED TERRACES"  
*Producer/Director - Max Hutto*

**The Ohio State University**  
"TRICUSPID STENOSIS"  
*Producer/Director - William Buccalo*

**Trans World Airlines**  
"IT. COULD HAPPEN TO YOU"  
*Producer/Director - Len Czernicki*

**Union Pacific Railroad Company**  
"GETTING OFF ON THE RIGHT FOOT"  
*Producer/Director - Ralph Burrell*

small transparent glass spheres off a glass surface and held them aloft for hours in a stable position. A laser beam is focused upward on a glass sphere about 20  $\mu\text{m}$  in diameter. Radiation pressure from the light not only counteracts gravity and raises the particle, but also traps the sphere in the beam and prevents it from slipping out of the beam sideways. A stable optical trap is generated which is termed an "optical bottle." The sphere is launched by lifting it off a transparent glass plate with the light beam. Initially, radiation pressure is not sufficient to overcome molecular attraction between the sphere and the glass plate. The attraction, known as the Van der Waals force, is about ten-thousand times gravity for a 20- $\mu\text{m}$  sphere. For the experiment, the Van der Waals attraction is broken acoustically by vibrating a ceramic cylinder attached to the plate. When the attraction is broken the sphere rises in the light beam and comes to rest where the upward pressure caused by the laser is balanced by the earth's gravity. In this position, it can be held aloft as long as the light is focused on it. By changing the position of the focus, the trapped sphere can be moved up and down or sideways. Among other possible applications, the laser levitation technique may be used as a research technique for suspending particles in optically induced thermonuclear fusion experiments.

Alfred C. Schroeder is the recipient of the 1971 Vladimir K. Zworykin Award presented to him by the Institute of Electrical

and Electronics Engineers for "outstanding technical contributions to television and particularly his leadership in the development of color television." Mr. Schroeder has been with RCA Corp. since 1937. He is the inventor (1946) of the shadow mask color tube and has received 65 U.S. Patents for his inventions in television and allied fields. He is a Fellow of the Society and in 1965 he received the David Sarnoff Gold Medal Award for "development and refinement of color picture tubes and of the NTSC color system." Among his publications is "A Vertical Aperture Equalizer for Television" (with W. G. Gibson) which appeared in the June 1960 issue of the *Journal*.

Richard Vetter has been elected Vice-President of Todd-AO Corp., 115 Middle-neck Rd., Great Neck, NY 11021. He will continue to make his headquarters at the Todd-AO office in Los Angeles. Dr. Vetter has been with the firm for eight years in charge of research and development. He is responsible for the new Todd-AO 35mm anamorphic lens system for motion pictures and for many innovations in the fields of projection and sound.

Bryan Hickox has been appointed President of Image Transform, Inc., a new television and motion-picture industry service company in Hollywood, Calif. The new firm utilizes patented and proprietary techniques to achieve videotape to film transformation. The process can achieve conversion quality such that the "trans-

form" will be capable of large-screen theatrical display. Mr. Hickox is also a lecturer in the Dept. of Cinema of the University of Southern California.

Bruce Jamieson has been elected President of the Association of Cinema Laboratories, Inc., Alexandria, VA 22314. Other recently elected officers are: Frank M. McGeary, Vice President; G. Carleton Hunt, Secretary; and William H. Smith, Treasurer. Preston B. Bergin was re-elected Executive Secretary.

William A. Coates has been appointed General Manager of Westinghouse Electric Corp.'s Electronic Tube Div. He has been with Westinghouse since 1951. In his new post he will have administrative responsibility for the development, manufacture and sale of TV picture and camera tubes, display and storage tubes and other related electronic tubes and devices.

Kenneth Jones has been appointed Vice-President of Sales and Business Affairs for Consolidated Film Industries, 959 Seward St., Hollywood, CA 90038, it was announced by Sidney P. Solow, CFI President. Mr. Jones has been with the firm since 1964.

Ben Press has been appointed Supervisor of Printing Operations for the Motion Picture Lab Div. of Bebell Inc., 416 W. 45 St., New York, NY 10036. Mr. Press was formerly owner of B&E Film Labs.



# Special Effects in Motion Pictures

(Some Methods for  
Producing Mechanical  
Special Effects)

Frank P. Clark

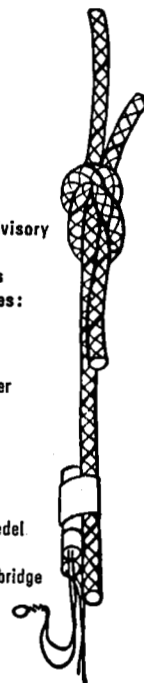
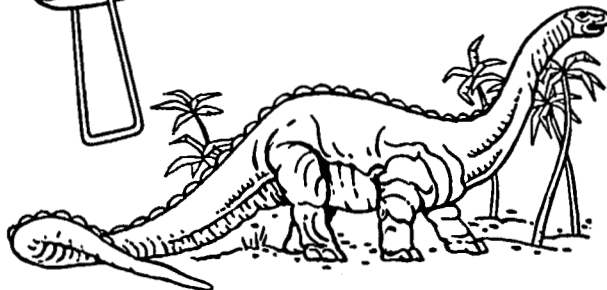
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Atmospheric Effects  
Special-Effects Props  
Optical Effects  
Sound Effects  
Miscellaneous Effects  
Shooting  
Pyrotechnics  
Sources of Special Effects (Appendix)  
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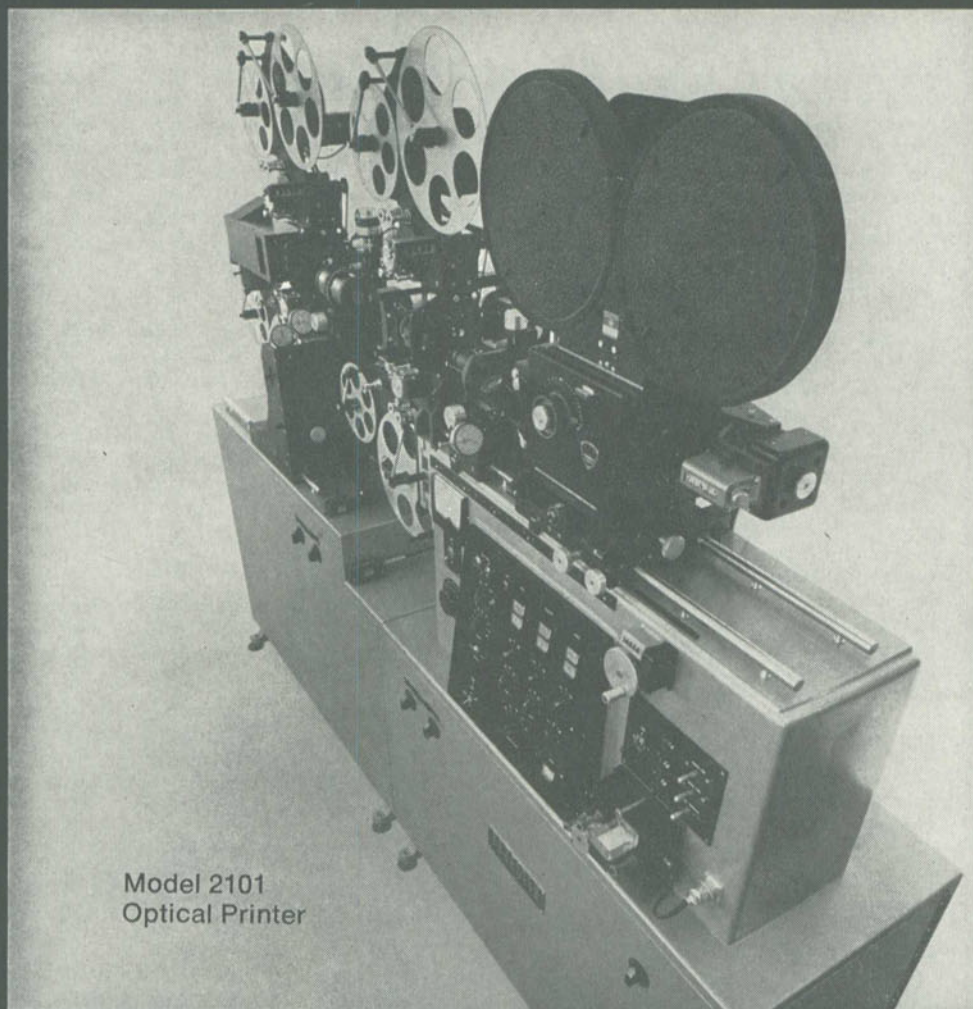


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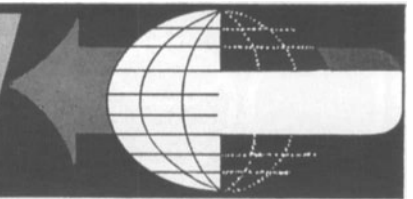
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## ABSTRACTS OF PAPERS FROM OTHER JOURNALS



Abstracts of papers appearing in other journals chosen for their importance and possible value to researchers, as well as those of timely interest, are published in the *Journal* from time to time. Many translations of abstracts from foreign journals, chiefly those of the USSR, are made available to the *Journal* by the Research Laboratories of the Eastman Kodak Company. As a rule, translations are made of the abstracts and not of the papers. The journals in which the papers appear can be consulted at some libraries. Current issues of *Tekhnika kino i Televideniya* can be consulted at, or borrowed from the Society's Headquarters Office.

Those requiring definitive and thorough searches of current literature and patents are referred to *Abstracts of Photographic Science & Engineering Literature (APSE)*, produced by the Graphic Arts Research Center, College of Graphic Arts and Photography, Rochester Institute of Technology, Rochester, NY 14623, with the editorial cooperation of the Society of Photographic Scientists & Engineers.

The subject areas are grouped below:

- Aerial Photography
- Cameras
- Cinematography
- Film and Its Properties
- General

### AERIAL PHOTOGRAPHY

**Ocean outfall dispersion**, Wesley James and Prof. Fred J. Burgess, *Photogrammetric Eng.*, 36: 1241-1250, Dec. 1970.

Aerial photography may provide a method of analyzing dispersion of wastes that are discharged into the ocean. A procedure for determining waste concentrations from aerial photography is described. This technique may yield more comprehensive results than conventional boat sampling in dispersion studies. Discrepancies between boat concentrations and photo concentrations appear to be due primarily to the changing and shifting of the waste in this dynamic environment. The photographic technique is a method of study that may provide information on diffusion which has been impossible to measure by conventional sampling methods.

### CAMERAS

**The crystamatic and its application to double system filming**, N. C. H. Druce, *British Kinemat. Sound and TV*, 52: 98-99, 100, 101 and 104, April 1970.

The paper describes a new equipment which provides a means of driving motion-picture cameras of various types phase locked to a crystal oscillator. The equipment incorporates a digital sequential marking system which applies a simple coded signal to the picture and soundtrack

at the start and end of each film sequence. The marker signal for the soundtrack is transmitted by radio and the cameraman may use the transmitter to record supplementary verbal identification on the soundtrack. The digital marker system is entirely automatic, and the tape recorder may also be stopped and started automatically in synchronism with the camera.

**A magazine with a timer for the AKS-2 camera** (in Russian), O. V. Melenkov and V. P. Dvoretzkiy, *Tekh. Kino i Televideniya*, 14: 73-74, July 1970.

The AKS-2 is a Russian motion-picture camera often used for scientific purposes. The magazine now designed for it is capable of putting time marks on the film.—S.C.G.

### CINEMATOGRAPHY

**Rapid pulldown mechanisms for 35mm motion-picture film** (in Russian), N. I. Shcherbakova, *Tekh. Kino i Televideniya*, 14: 29-33, Sept. 1970.

The value of pulldown mechanisms for high-speed cinematography is discussed and a mathematical analysis is given of some modern rapid pulldown mechanisms with a 19-mm pitch.—S.C.G.

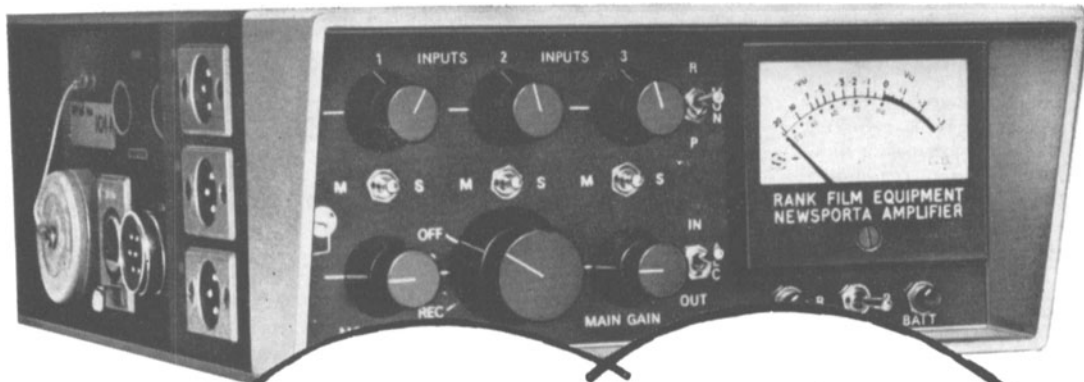
**Photography and cinematography in free fall** (in German), P. Haggemiller *Di. Aero-kurier*, 14: 262-263, No. 4, 1970; *Ref. Zh., Fotokinetekhnika*, Abstract No. 7.46.81, 1970.

Different methods of fixing, controlling and adjusting still and motion-picture cameras for use in free fall are discussed.—S.C.G. (Translated from *Ref. Zh. Fotokinetekhnika*)

**A method and apparatus for the determination of image sharpness in cinematography** (in Czech) F. Mraček, *Jemná mechanika a optika*, 15: 5-8, No. 1, 1970.

A simple and reliable method is described for the evaluation of image sharpness with the aid of a special test object and apparatus which includes a microdensitometer and automatic recording. A description is given of the manufacture of a test object having groups of white lines on a background with frequencies of 15 to 150 lines/mm through each five lines. The concept of "sharpness number" is introduced, making it possible to give a quantitative expression of the sharpness from the frequency characteristic so obtained. The method allows the determination of the influence of the objective, the photographic material, the processing, and the printer on image sharpness.—S.C.G. (Translated from *Tekh. Kino i Televideniya*, 14: 86, July 1970)

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## FILM AND ITS PROPERTIES

**Methods for the evaluation of photographic films for microfilming** (in Russian), P. Kh. Pruss. *Zh. Nauch. i Prikl. Fotogr. i Kinematogr.* 15: 321-328, No. 5, Sept./Oct. 1970.

In the development of new high-resolution films for microfilming it is necessary to investigate whether these materials show any correspondence between readability and resolving power. For this purpose determination of readability and resolving power of films were made under uniform conditions. Readability was determined by means of an absolute contrast test object, and resolving powers with a standard line chart. Results on modern high-resolution materials for microfilm showed a correlation between these characteristics, i.e. the suitability of resolving power for evaluating the quality of materials for microfilm was confirmed.—S.C.G. (Translated from *Zh. Nauch. i Prikl. Fotogr. i Kinematogr.*)

**Variations of exposure in continuous narrow-slit printing** (in Russian), B. V. Valuyskiy, D. T. Shibaev, L. Ya. Pronin and P. M. Zal'tsman, *Tekh. Kino i Televideniya*, 14: 24-28, Sept. 1970.

An experimental study has been made of the lack of uniformity in density given by a uniform exposure along a film in continuous sprocket printing.—S.C.G.

**The determination of the maximum permissible angle of inclination of stereo-projection** (in Russian), A. N. Shatskaya,

*Tekh. Kino i Televideniya*, 14: 30-33, August 1970.

Formulae are obtained for calculating the limiting angle of stereo projection, which are simpler than formulae suggested earlier by the author and do not require the method of approximation. They are recommended for use in cinemas.—S.C.G.

**The technology of the viscous processing of film** (in Russian), A. Kailer, *Tekh. Kino i Televideniya*, 14: 20-26, August 1970.

A review is given of viscous processing as carried out in the German Democratic Republic, and in particular the processing of ORWO motion-picture films.—S.C.G.

**A method of increasing the speed of TsP-8R film in processing** (in Russian), S. E. Tikhonovich *Tekh. Kino i Televideniya*, 41-46, July 1970.

It has been found possible to increase the emulsion speed of the Russian color negative film TsP-8R by adding 30-40g/l of potassium chloride to the developer. An editorial note states that an improved version of the film is to be made available and the method described will not be necessary.—S.C.G.

## GENERAL

**Some aids to retrospective searches of the literature of photographic science**, M. D. Gauntlett, *Jour. Photo. Sci.*, 19: 21-22, Jan./Feb. 1971.

The choice of secondary sources for a

systematic search of the photographic literature depends on the timespan of the search. A chart indicates sources appropriate to various periods during the past 130 years. The present lack of progress report is noted.

**Environmental and contamination control**, R. N. Haig, *Brit. Kinemat. Sound and TV.*, 53: 122-126 and 131, Apr. 1971.

During the past two years a great amount of discussion has taken place in connection with environmental contamination. This term, which is of great concern to all of us, embraces our rivers which are affected by untreated effluent discharged into them, the food we consume is occasionally contaminated due to a variety of causes, and the air we breathe is polluted by all manner of impurities. One can find numerous examples of attempts made by man to control the contamination of his environment. From very early times the control of contamination was more for the sake of appearance, such as the filtration of wine, the pure whiteness of clothing and careful washing of utensils. As more complicated machinery and intricate apparatus was produced, there was an obvious demand for the development of improved operating conditions where both liquid and gases used in the processes should be of a high order of purity. This paper will, however, be restricted to the contamination and filtration of air.

**Talkback TV at Southern Methodist University: four years of experience**, Charles R. Vail and Stuart A. Bush, *Proceedings of the IEEE*, 59: 954-968, June 1971.

During the past four years several thousand professional employees of industries within a 60-mi radius of the Southern Methodist University (SMU) campus at Dallas, Tex., have participated fully as degree-seeking students in SMU's on-campus engineering graduate courses without leaving their places of employment. The "talkback TV" system through which this is accomplished is described and evaluated from the standpoint of the students, the professor, the educational administrator, and the industrial employer. Inclusion of neighboring liberal arts colleges among course recipients and originators offers a further dimension of program enrichment at the undergraduate level.

**Technical and economic factors in university instructional television systems**, Charles A. Martin-Vegue, Jr., Albert J. Morris, Jerome M. Rosenberg and Gene E. Tallmadge, *Proc. IEEE*, 59: 946-953, June 1971.

An overview of technical and economic factors which need to be considered in university ITV systems is presented. Cost data are presented which should be useful in planning and decision making. The data can be extrapolated for at least three to five years by adding about five per cent per year to all costs.

**The federal government and graduate education in engineering**, Hubert Hefner and Carl York, *Proc. IEEE*, 59: 839-842, June 1971.

The shift in national goals that this country has undergone in the past few

# DATAMETRICS

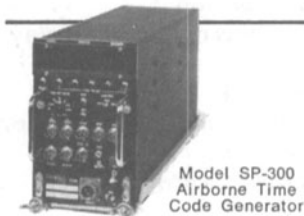
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years is described. Recommendations of how best to modify our engineering curricula to accommodate to these shifts are made. Finally some federal programs which encourage this shift in emphasis are described.

**Metrication in the motion picture industry, *Brit. Kinemat. Sound and TV*, 53: 90-91, Mar. 1971.**

An interim report on the work of the BKSTS Metrication Committee, which is recommending a starting date of January 1972 with completion two years later for metrication in the motion-picture industry. This report indicates the scope of the work undertaken so far and summarizes recommendations which the Committee is making on various aspects of metrication.

**If you are a concerned engineer . . .**, Harry C. Simrall, *IEEE Spectrum*, 8: 69-71, Feb. 1971.

The engineering profession must go beyond the purely technical realm if it is to assume a leadership role in the issues of our time. For the National Society of Professional Engineers, the challenges posed by the problems of social change, the economy, and the environment have provided the impetus for developing programs for the engineer who seeks "involvement."

**Colour Centres in sodalites and their use in storage displays**, M. J. Taylor, D. J. Marshall, P. A. Forrester and S. D. McLaughlan, *Radio and Electronic Eng.*, 40: 17-25, July 1970.

Members of the sodalite group of minerals show considerable promise as the screen material in dark-trace storage tubes. The dark-trace is due to the creation of color centers in the material by the electron beam, and the color gradually fades at a rate which is governed by the level of light incident on the tube. In this paper recent work on the coloration process is presented and device performance discussed.

**Problems in the construction of register-pin mechanisms (in Russian)**, E. N. Fridman. *Tekh. Kino i Televideniya*, 14: 27-29, Aug. 1970.

The construction of register-pin mechanisms for motion-picture cameras and projectors is discussed, and suggestions are put forward for a new design.—S.C.G.

## New Members

The following members have been added to the Society's rolls since the October 1971 *Journal*. Also listed are those regretfully reported as deceased since then. The designations of grade are the same as those used in the July 1970 Directory. An up-to-date list of the Sustaining Members appears on the outside back cover of each month's *Journal*. The members listed below complete the Society's roll as of October 20.

The Directory for Members, Part II of the July 1970 *Journal*, shows the geographic membership distribution by states included in the Sections.

Honorary (H)	Life Fellow (LF)	Life Member (LM)	Fellow (F)
Active (M)	Associate (A)	Junior Associate (JA)	Student (S)

### Deceased:

John H. Alsdurf (M)	Leo Gelb (LM)	Emerson Yorke (LF)
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### ATLANTA SECTION

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