

Biographical Notes

Frank Capra Receives SMPTE Award



Frank Capra receiving SMPTE Certificate of Special Recognition from Past-President Wilton R. Holm, with Daniel Taradash (left) and Robert Wise, speakers at the Award Luncheon.

Frank Capra, motion-picture producer and director since 1921 and member of the SMPTE exchange group that visited the motion-picture industry in the USSR in October 1963 (*Journal*, pp. 177-194, March 1964), was presented with a Certificate of Special Recognition from the Society in Los Angeles on 21 February 1973. The citation had been planned for the opening luncheon of the 112th SMPTE Conference on 23 October 1972 at Los Angeles, but Mr. Capra had been unable to attend. Hence SMPTE Past-President Wilton R. Holm presented the award at a luncheon at the Century Plaza Hotel, attended by Officers and Governors of the SMPTE, by Mrs. Capra, and by special guests Daniel Taradash, President of the Academy of Motion Picture Arts and Sciences, and Robert Wise, President of the Directors Guild of America. Mrs. Holm, Mrs. Kenneth Mason, wife of the SMPTE Executive Vice-President, and Mrs. Harry Teitelbaum, wife of the SMPTE Conference Vice-President, also attended.

Mr. Capra's citation reads: "The Society of Motion Picture and Television Engineers has awarded Frank Capra this Certificate of Special Recognition in appreciation of his many outstanding contributions to the motion-picture industry." It is dated 9 October 1972 and signed by Wilton R. Holm, President.

Mr. Capra was born in Palermo, Italy, in 1897, and was brought to this country at the age of six. He was graduated as a chemical engineer from the California Institute of Technology, where he was among the top three students in all his classes. But when, with his fresh sheepskin, he could find no openings in chemical engineering, he teamed up with a veteran actor who was trying to break into the movie business,

made his first film (a one-reel version of a Kipling ballad) and thereupon began a very different career.

Among the Capra films that are now regarded as "classics" are *It Happened One Night*, *Lost Horizon*, *Mr. Deeds Goes to Town*, *Mr. Smith Goes to Washington*, *You Can't Take It With You*, *Arsenic and Old Lace* and *State of the Union*. Mr. Capra received the Motion Picture Academy's Oscar three times for direction, and two films produced by him were adjudged Best Film of the Year by the Academy. Mr. Capra is a member of the Board of Directors of Cal Tech, has been President of the Academy of Motion Picture Arts and Sciences four times and President of the Screen Directors Guild three times.

At the luncheon, Mr. Taradash told how the Academy was once heading for oblivion and how Mr. Capra's strong leadership reversed that trend. Mr. Wise spoke warmly of the outstanding leadership Mr. Capra had given the Screen Directors Guild and of how his great ability had helped to establish the importance of the director in the motion-picture production team.

Mr. Holm told of some of Frank Capra's other accomplishments, especially during the time he spent serving his country. Mr. Capra joined the Army in both world wars. During World War I he taught ballistics to artillery officers. During World War II he made top-notch morale-building films, such as the much-heralded *Why We Fight* series, for which he was awarded the Distinguished Service Medal. At the time of his discharge in 1945 he had attained the rank of Colonel. He also is recipient of the Legion of Merit and the Order of the British Empire.

Referring to Mr. Capra's technical talents, Mr. Holm told how Mr. Capra, who

has several inventions to his credit, had devised an automated prompter. When General George C. Marshall was to be filmed addressing the troops regarding their release from service, it was undesirable to show him reading a manuscript. So Mr. Capra had the speech typed out in large capital letters on a roll of paper supported by means of two toilet-paper holders. This made it possible for General Marshall to read his speech while not seeming to be doing so; he appeared to be looking directly into the eyes of the front-row audience.

Mr. Holm closed his remarks by saying that the SMPTE Special Recognition Award was the Society's Distinguished Service Medal, and he thanked Mr. Capra once again for having served the SMPTE as a member of one of the Society's technological exchange teams that visited the Soviet Union under State Department sponsorship.

Mr. Capra, in his reply, stressed how helpful his engineering background had been to him as a motion-picture director and producer. He related several instances when this special knowledge had been extremely valuable, particularly when sound motion pictures were becoming a commercial reality and technological problems appeared at times to be insurmountable.

It is noteworthy that Frank Capra is now devoting a great part of his time to students of the cinema. Recognition of the importance of students to the future of the motion-picture industry is another bond between Frank Capra and the SMPTE.



Paul W. Vittum

Dr. Paul Wendall Vittum, an international authority on the chemistry of color photography, retired from the Kodak Research Laboratories, Rochester, N.Y., on April 1, 1973, where he had been head of the color photography division since 1961. Dr. Vittum joined the Laboratories in September 1933, at about the time that very active experimentation was in progress on the Kodachrome process which was introduced in 1935.

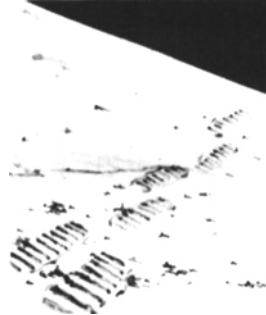
From 1933 to 1937, he worked as a research chemist in the photographic chemistry department of the Kodak Laboratories under John I. Crabtree, where he specialized in the chemistry of fine-grain development. In April 1937 he was transferred to the color research division and in October 1940 he became a supervisor of the color photographic chemistry department. In January 1954, Dr. Vittum was appointed



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The Dolby System

An important advance in audio technology permits better motion picture sound tracks to be made.

Optical sound: the strong link in the old chain.

Sound was introduced to motion pictures at a time when techniques for electronic reproduction of sound were relatively inaccurate. Modern electrodynamic loudspeakers had been introduced only a few years before, and their frequency response was severely limited by modern standards. The microphones used were also comparatively crude, in terms of their sensitivity, frequency range, and distortion. The newly developed optical sound track was therefore at least as good as any of the other components with which it was associated in the recording and reproducing chain.

1940: the case against progress.

By 1940, the electronic reproduction of sound had progressed considerably, so that the deficiencies of the optical sound track became clearly audible. Equalization applied to overcome intelligibility problems caused by the limited range of earlier equipment now produced unnatural dialogue quality. Shutter-type ground noise reduction, although effective during silent periods, was decreasingly useful as film wear added the noise of dust and abrasion to grain noise. Distortion introduced by waveform clipping, due to overload, equipment limitations and dialogue equalization could be heard clearly, and unpleasantly, through the newest loudspeaker systems.

The great Academy compromise.

Because compatibility was then, as it is now, justifiably a primary concern of the motion picture industry, the practice commonly used, and finally sanctioned as the 'Academy' standard was to define the performance of new theatre sound systems so as to best suit the presentation of existing product. Since this product, in turn, had been made for use with average theatre sound equipment then in use, the effect of the standard has been to withhold from application to motion picture theatres much of the progress which has been made in the science of sound reproduction. The same decision also meant that studio practice in mixing and dubbing would

continue as before, since little or no change was to be expected in theatre sound system characteristics.

Optical tracks: the sound of the future.

Modern technology, particularly the introduction of magnetic recording, permits the production of optical sound tracks considerably superior to those offered to audiences today. Recording, editing and mixing can readily be carried out in the film studio, as in the music recording studio, to produce magnetic master recordings with extremely low noise and distortion content, and frequency bandwidth which exceeds the hearing ability of most listeners. If care is taken in the transfer of the track from magnetic to optical, and the best available technology applied, optical tracks can be produced which are very similar in sound to magnetic tracks.

Dolby equipment can reduce the noise of production masters.

During film production, Dolby 361 noise reduction units can substantially reduce the build-up of magnetic tape and film noise which ordinarily accompanies successive stages of transfer, pre-mixing and dubbing. During the preparation of the sound track for Stanley Kubrick's 'A Clockwork Orange', the Dolby system contributed importantly to the unusually quiet track on the release prints of this film. As the number of film studios equipped with Dolby units increases, this application is becoming common.

How the Dolby system improves optical sound tracks.

The Dolby system works by increasing the level of low-level signals during recording, before the noise of the tape or film is present, and then reducing the level of these same signals during playback to restore exactly the original sound. When the Dolby system is used to record and play an optical sound track, the result is unusual background silence, even when the Academy characteristic is not used. Moreover, without the Academy characteristic extended high-frequency response and lower

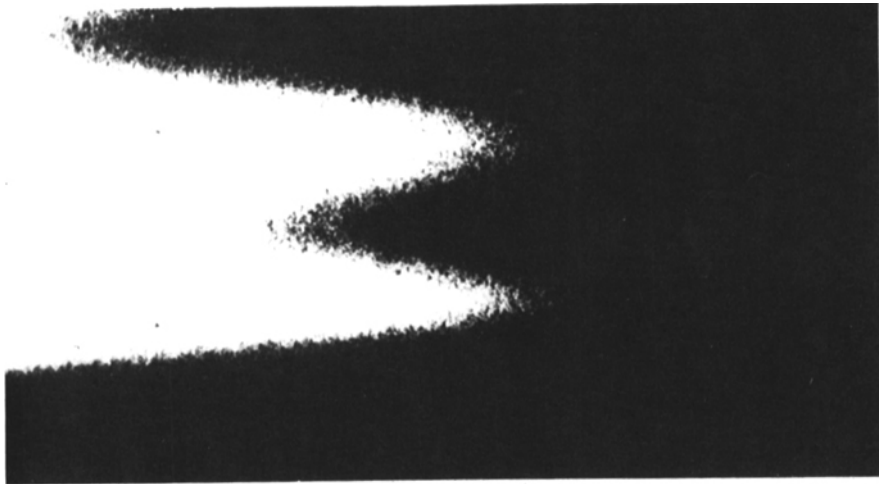
distortion are also obtained, the latter because dialogue equalization and the overload of the optical track which it usually causes can be substantially eliminated. Instead of Academy playback conditions, theatre sound systems with flat frequency response can be used. When a Dolby-encoded sound track is played through a typical Academy sound system in a theatre, the result is quite satisfactory because the increased brightness of sound of the Dolby-encoded signal is subjectively compensated by the high-frequency attenuation of the Academy characteristic.

Principles of Dolby noise reduction.

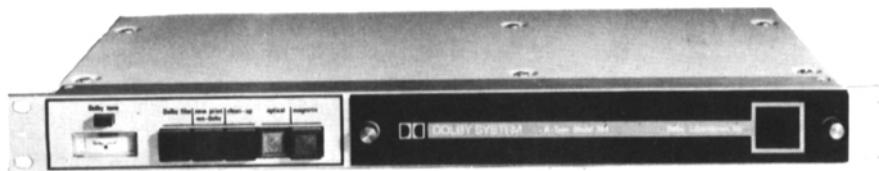
Four signal processing techniques used in the Dolby noise reduction system insure effective suppression of noise without signal degradation, so that the system is used in even the most critical recording applications. First, the system is symmetrical, ie, complementary processing is applied during recording and playback, with particular attention to the complete restoration of the original signal. Second, the system operates independently in four spectral bands, eliminating noise modulation and other effects which accompany the action of noise reduction circuits actuated by level variations alone, however sophisticated. Third, the compression and expansion of signals upon which the action of the Dolby system is based is accomplished by simple in-phase or out-of-phase addition of voltages, a technique which cannot, in itself, introduce distortion. Fourth, the system acts only upon signals at levels too low to mask the presence of noise; during high-level passages, when a listener might detect level fluctuation, the system is inoperative.

The key to achieving superior optical sound track performance is the Dolby noise reduction system, already an internationally recognized method of maintaining highest professional standards throughout the music recording and communications industry. More than 8000 channels of professional (Type A) Dolby noise reduction are in use.

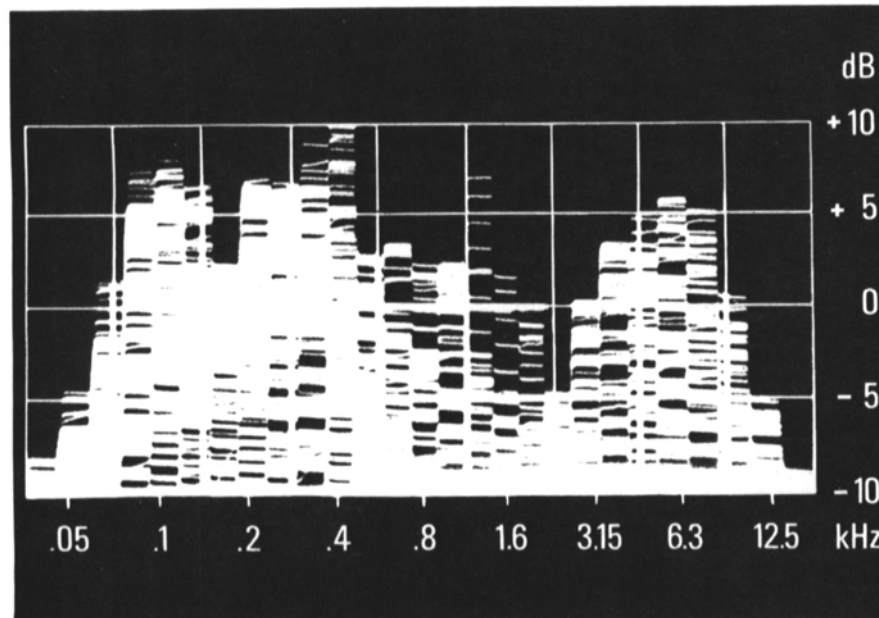
News Report: In recent months, more than 150 cinemas, mainly in the U.K., have been equipped with Dolby units and equalized to take advantage of forthcoming Dolby optical release prints, expected at the end of 1973. On the production front, more and more films are being made with the Dolby system used during production to reduce magnetic film noise — "Cabaret" is one of the best-known recent examples.



Photomicrograph of a section of an optical sound track. Simpler to duplicate and lower in cost than magnetic tracks, the optical track has not been used to its full potential during the forty years since its introduction.



Dolby 364 Cinema Noise Reduction Unit, for use in theatres during playback of Dolby-encoded optical and magnetic sound tracks. The 364 unit also provides optimum equalization for sound tracks in current releases, and a newly developed 'clean-up' circuit for use with conventional tracks which are worn or noisy.



Audio spectrum of a five-second sample from a wide-range recording of male speech. The section chosen contains vowels, consonants and sibilants. The level of the high-frequency components indicates a high probability of overmodulation distortion even with only moderate application of typical speech pre-emphasis. When Dolby-encoded and decoded optical sound tracks are used, the pre-emphasis is unnecessary, yet superior intelligibility is obtained. Moreover, Dolby-encoded optical sound tracks provide fully satisfactory sound with conventional 'Academy'-equalized playback systems, retaining compatibility.



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The model 364 is distributed throughout the world (except USA) by Rank Film Equipment, England.

A special film presentation, 'A Quiet Revolution', has been prepared which explains and demonstrates the application of the Dolby system to film production and exhibition, and includes demonstration sequences from current and forthcoming productions. Either of the Dolby offices listed below can arrange a showing, or supply further information, including technical papers containing relevant data.

assistant division head of the color photograph division; in 1955 he was made associate head; and in 1961 he was appointed head of the division.

His initial projects were concerned with the mechanism of dye formation in color photographic systems. He studied the relationship between chemical structure of color image dyes and (a) their absorption characteristics and (b) their stability under a wide variety of ambient conditions. This work led directly to improved dye images in Kodachrome materials.

The chemistry of the color-forming developers, in which derivatives of p-phenylenediamine are employed, has been the subject of a number of investigations by Dr. Vittum and his associates. He also investigated various methods of incorporating color-forming couplers in color coatings in order to make it possible to simplify processing of color films. This work led to the discovery of a means for using hydrophobic couplers in aqueous substrates which, in turn, led to the development of a series of Ektachrome and Kodacolor films.

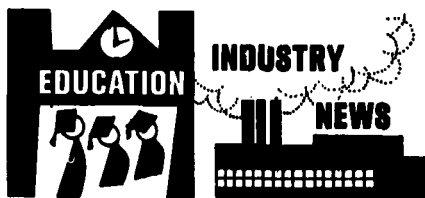
In collaboration with Dr. W. T. Hanson, Jr., Dr. Vittum discovered radically new types of colored couplers which could be used with remarkable effectiveness to improve the ability of color photographic systems to give accurate reproduction of colors with no added complications in processing. This discovery was used as a basis for an improved line of Kodacolor films and made possible the development of the family of Eastman color films now widely used in the motion-picture industry.

More recently as head of the color photography division of the Kodak Research Laboratories, Dr. Vittum was responsible for all research and development work on color systems and with early work on new systems having very wide possible future applications.

A native of Reinbeck, Iowa, Paul Vittum received an A.B. degree from Cornell College, Iowa, in 1929 and was granted a Ph.D. in 1933 by Cornell University, Ithaca, N.Y. During 1935 and 1936 he did extensive work in photography at the Institute of Optics of the University of Rochester.

Dr. Vittum has published extensively and has approximately 75 United States patents in the field of color photography. He is a member of long standing in the American Chemical Society where he has served on various committees and as a Councilor and Chairman of the Rochester Section. He joined the Society of Motion Picture and Television Engineers in 1952 and was made a Fellow in 1959. In 1962 he received the Herbert T. Kalmus Gold Medal Award in recognition of his research for more than 25 years in the field of color photography. He is a member of Phi Beta Kappa and Sigma Xi. Dr. Vittum is a Fellow of the Society of Photographic Scientists and Engineers.

In civic affairs, Dr. Vittum has served as a member of the Board of Education of Irondequoit School District No. 3 and was President of that Board for eight years. He also served on the Board of the Irondequoit Library. He has several hobbies including gardening, boating and fishing and has an extensive interest in ecology and conservation.—*Glenn E. Matthews*, 55 Stoneham Rd., Rochester, NY 14625



Film '73 to be held 25-29 June at the Royal Lancaster Hotel in London (*Journal*, p. 226, March 1973) has announced a number of post-conference tours of the United Kingdom and a number of European cities available to delegates and others attending Film '73. The tours have been arranged by Rankin, Kuhn & Co. Ltd., 19 Queen St., Mayfair, London W1X 8AL, England, official travel agents for the British Kinematograph Sound and Television Soc. (BKSTS) who are sponsoring the conference. Twelve tours have been announced, including a four-day coach tour of English Stately Homes and Gardens, a five-day coach tour of the Historic Pageant of Wales, an eight-day coach tour of Bonnie Scotland and tours to Berlin, Paris, Amsterdam and Brussels. Further information is available from Paul D. McGurk, Organizer, Film '73, British Kinematograph, Sound and Television Soc., 110-112 Victoria House, Vernon Pl., London WC1B 4DJ, England.

New York University's School of Continuing Education is offering two five-week Film Production Workshops 25 June-28 July and 30 July-1 Sept. The sessions will cover all aspects of 16mm filmmaking, including cinematography, editing, sound animation and script writing. Students shoot their first assignment on the second day of the workshop. Throughout the workshop, which is guided by a faculty of professional filmmakers, filmmaking theory is combined with hands-on experience. Workshop participants form production crews that determine the film concept, establish schedules and deadlines, write the script and produce the finished film project. Students work with modern professional equipment. A certificate in film is

awarded to those who successfully complete the workshop. Further information is available from New York University, School of Continuing Education, Div. of Liberal Studies, 2 University Pl., Room 21, New York, NY 10003.

The Rochester Institute of Technology has announced the 1973 Photography Summer Session Program beginning 25 June and continuing through 31 Aug. Twenty-two college credit courses are offered. The program includes workshops, lectures and laboratory courses in motion picture and television, photo-journalism, photographic and machine printing and processing and photographic science and instrumentation. A European Photographic Study-Travel Workshop will be offered during June and July with a two-week session at RIT from 25 June to 6 July to be followed by three weeks in Europe 9-30 July. A Photographic Workshop in Southern France will be given 25 June to 25 July. Further information is available from Dr. David E. Hooten, Director, Summer Session Program, Rochester Institute of Technology, One Lomb Memorial Dr., Rochester, NY 14623.

The University of Wisconsin has announced a five-day short course on Cathode-Ray Tube and Matrix Display Systems to be held 13-17 August. The course will cover important aspects of modern cathode-ray tube and matrix display systems technology and design. Topics to be discussed include fundamentals of display systems, human factors, parameters and measurements, cathode-ray devices, circuit design techniques, comparison of direct view CRT techniques, data conversion systems, data conversion techniques, matrix display systems and applications. Information is available from Donald E. Baxa, Program Director, Dept. of Engineering, University of Wisconsin—Extension, 432 North Lake St., Madison, WI 53706.

Photo-Electronic Imaging Devices, a concentrated course provided by the Uni-

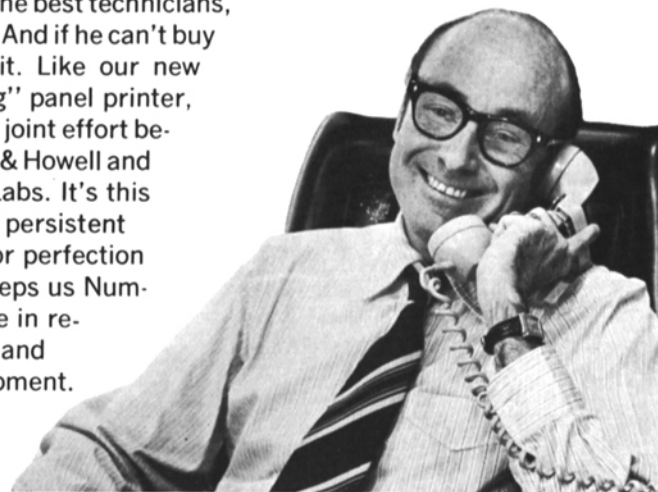
versity of Rhode Island will be held immediately preceding the 17th Annual Technical meeting of the Society of Photo-Optical Instrumentation Engineers, 27-29 August in San Diego, Calif. The SPIE meeting will include a two-day seminar on image intensifiers. The University of Rhode Island program is intended to provide in a concentrated course the material of a two-semester graduate course on photoelectronics with emphasis on imaging sensors, including image intensifiers; television camera tubes; image display devices; and systems considerations which determine the effectiveness of information transfer from the scene to the observer. Additional information is available from Dr. S. Nudelman, Photoelectronic Imaging Devices, Dept. of Electrical Engineering, University of Rhode Island, Kingston, RI 02881.

Optics in Diagnostic Medicine, a meeting co-sponsored by the Optical Soc. of America and the Optical Sciences Center at the University of Arizona, will be held 9-11 Jan. 1974 at the College of Medicine, University of Arizona, in Tucson, Ariz. Purpose of the meeting is to bring together experts in an interdisciplinary environment for the discussion of such topics as imaging in diagnostic radiology, medical holography, microscopy, thermography, image processing, information extraction, imaging in nuclear medicine and image recording and storage. Joint participation by medical and optical scientists is planned to encourage communication in areas of problem and solution. Further information is available from M. Paul Capp, M.D., Professor and Chairman, Arizona Medical Center, University of Arizona, Tucson, AZ 85724.

The 1973 Public Television Seminar will be held 4-10 Aug. at Arden House in Harriman, N.Y. Attendance at the Seminar is by invitation only. The 60 participants will be members of public television stations engaged in programing activities. The seminar will bring together international film and television programs currently produced and demonstrating a wide

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“I thought it should work; after all, I’d done a similar shot with Kodak film as a still photographer.

“Anyway we did it both ways, his and mine. After viewing the dailies, he said, ‘You win.’ I told him, ‘You had me worried. If there was that much difference between still and movie photography, I’d be in big trouble.’

“Having the confidence that I can handle the visual aspects of a picture lets me spend more time working with the actors. I like to work fast, so when the actors are right and the cameraman is happy, we print. I love one-takes. The Kodak quality I take for granted.”

Gordon Parks. Director, photographer, composer, author.

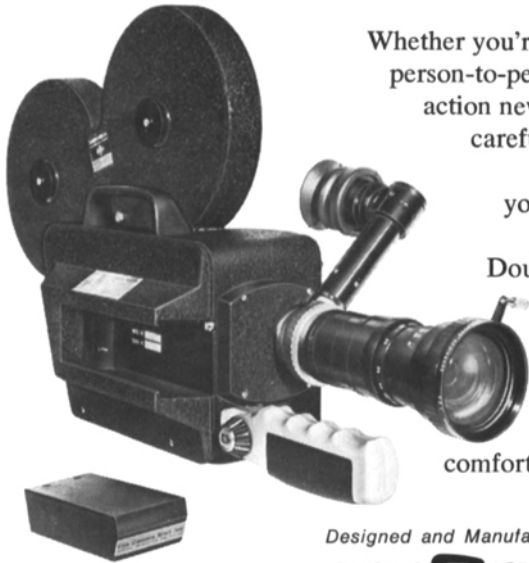


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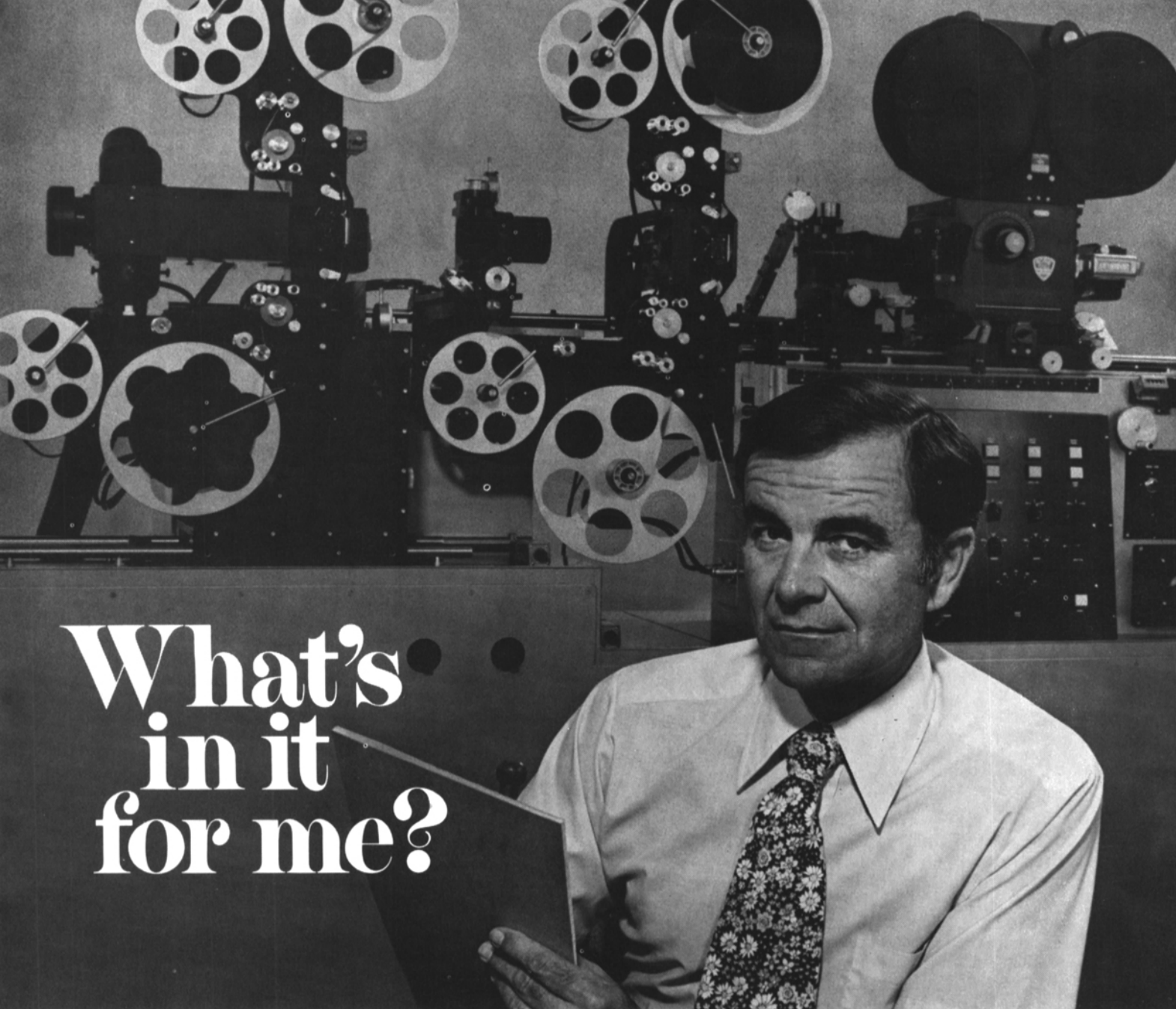
The 1973 Program in Color Technology has been announced by Rensselaer Polytechnic Institute, Troy, NY 12181. Courses will include Principles of Color Technology (16-20 July); Color Technology for Management (26-27 July) and Advances in Color Technology (30 July-3 Aug.). Principles of Color Technology is an intensive course providing both theory and practice in the description, specification and measurement of color. It is intended especially for industrial personnel responsible for color matching and color control. Color Technology for Management is intended especially for executives responsible for research, production or sales of colored products and will include descriptions of what can and what cannot be expected from programs of instrumental color measurement and control and from computer color matching. Advances in Color Technology consists of five intensive one-day seminars on the state-of-the-art in five major areas of color technology.

Motion Picture Laboratories, Inc., and the Nashville Section of the SMPTE are co-sponsors of the 15th annual MPL Motion-Picture Seminar to be held 21 July at the Memphis State University Center in Memphis, Tenn. The seminar is open to anyone interested in motion pictures. More information is available from Frank M. McGeary, President, Motion Picture Laboratories, Inc., Box 1758, Memphis, TN 38101.

Information Film Producers of America will hold its 14th annual conference 31 Oct.-4 Nov. in Palm Springs, Calif. Wilbur Blume has been appointed Chairman, it was announced by Lutz Winkler, IFPA President. Mr. Blume will be assisted by Bob Hecker, Don Adams and Bob Scott. Cliff Sawyer will be Exhibit Chairman. The conference will bring together top names in both theatrical and nontheatrical filmmaking. Further information is available from Don Magary, Motion Picture Productions, Southern Illinois Univ., Edwardsville, IL 62025.

Information Film Producers of America (IFPA) will accept entries for the 14th Annual "Cindy" competition until 1 July, according to a recent announcement. IFPA honors nontheatrical films selected from an international competition. Further information is available from IFPA Cindy Competition, Box 1470, Hollywood, CA 90028.

The American Soc. of Photogrammetry and the American Congress on Survey and Mapping will hold the 1973 ASP/ACSM fall convention 2-5 Oct. in Orlando, Fla. The convention will be held in the Contemporary Resort Hotel near Walt Disney World. In addition to the technical



What's in it for me?

Maybe we ought to start out by saying what is *not* in our new Model 2101 Aerial-Image Optical Printer.

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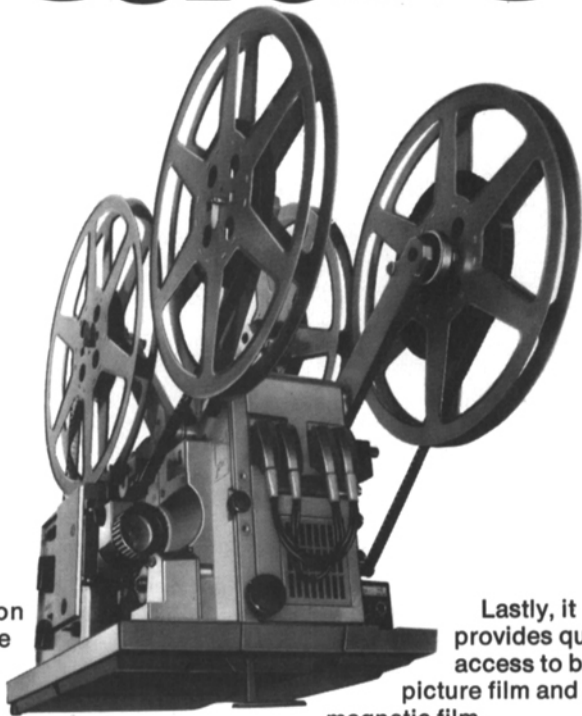
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Called (appropriately enough) the Bauer P6 Studio, our unit offers a number of advantages. It projects both optical and magnetic sound tracks. Does lip sync recording and playback of magnetic sound on 16mm full-coated magnetic film. Offers a choice of 200 mil edge and 100 mil center tracks. Transfers sound from picture film to magnetic film, or vice versa, without requiring additional equipment. Permits sound monitoring during the recording on any magnetic track. And, of course, has a synchronous motor.

And even its amplifier is studio-like, including the outputs, which match the impedances of studio equipment.

Lastly, it provides quick access to both picture film and magnetic film.

For additional information, contact your authorized Bauer dealer. Or drop us a line.

You'll get instant action.

And ask about our other professional 16mm projection equipment:

The Bauer P6 Synchron. With sync motor for critical TV work and for synchronizing with tape recorders. Manual threading. Optical playback, magnetic record-playback.

The Bauer P6 Automatic 300. Super-quiet and super-bright. Uses metal arc light (almost 4 times as bright as conventional tungsten lamps). Optional change-over device permits continuous showing of any length film.

The Bauer P6 Automatic M152. A superb A-V projector. Self-threading, with optical playback, magnetic record-playback. Sound-on-sound facilities.



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*Bauer, a Reg. TM of Robert Bosch Photokino GmbH

For details, write JS-5

sessions there will be an exhibit and a full program of interesting events. Further information is available from E. R. Brownell, Convention Registration Chairman, 3152 Coral Way, Miami, FL 33145.

RCA Global Communications, Inc., and its subsidiary, RCA Alaska Communications, have filed an application with Federal Communications Commission for authority to build and operate an interim communications satellite system to begin providing service by Aug. 1. The \$7.4 million system would utilize the Telesat Canada satellite in conjunction with five earth stations to carry voice, message and TV traffic between the east and west coasts and between both coasts and Alaska. The interim system is intended to provide early satellite communications service in the United States until RCA Corp.'s domestic satellite system proposed in 1971 is approved and begins operation. The RCA companies obtained the use of the Canadian satellite under terms of an agreement with Telesat Canada. The five earth stations in the interim system, to be owned jointly by RCA Globcom and RCA Alacom, will be initially located near New York City, San Francisco, and Juneau and Anchorage, Alaska. A fifth station, near Los Angeles, is expected to be added later.

Telecommunications Industries Ltd., 414 North Alfred St., Los Angeles, CA 90048, has announced acquisition of the "rights and interest" in the Porta-Pattern Television Test Chart System (*Journal*, p. 59, January 1973). The system consists of an anodized aluminum frame containing a resolution, registration and ball and chip chart, each recessed in a color-coded plastic frame.

Infonics, Inc., formerly of Santa Monica, Calif., has moved into the Visual Educom plant at 4333 South Ohio St., Michigan City, IN 46360. Both firms are subsidiaries of Electronic Associates, Inc. Peter H. Stanton, former President of Infonics, has resigned. Paul Lloyd, former Vice-President of Operations for Infonics was appointed a Vice-President of Visual Educom, Inc., in charge of the Infonics product line of cassette and tape duplicating equipment.

A new super-8 printer manufactured by Peterson Enterprises Inc. has been installed at Douglas Film Industries, 10 W. Kinzie, Chicago, IL 60610, to provide fully corrected automatic scene-by-scene additive color super-8 prints. The machine is an optical reduction printer that can convert 16mm internegs into quad-rank format.

Synergetic Audio Concepts (Syn-Aud-Con) is a new company established by Don Davis, an authority on sound system design and the inventor of the Acoustavoicing. The main purpose of the new organization is to conduct three-day seminars in 21 major cities throughout the United States covering an intensive program in sound system design, installation, equalization, operation and maintenance techniques. It is the intention of Syn-Aud-Con to teach students to apply advanced

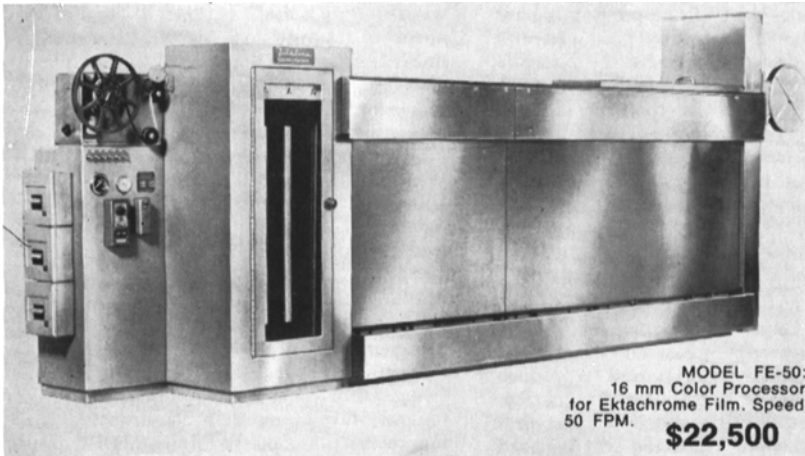
The Money-Makers

FILMLINE'S professional color film processors for motion picture laboratories.

The Filmline Models FE-30 and FE-50 are fast, foolproof, troublefree and long-lasting. They turn out consistently superior work. The design is backed by Filmline's reputation as the world's leading manufacturer of film processors for the motion picture laboratory industry.

Now enjoy the benefits of professional equipment incorporating exclusive Filmline features that have paced the state-of-the-art in commercial, industrial and defense installations at a cost lower than processors offering less.

Check the exclusive Filmline features below:



MODEL FE-50:
16 mm Color Processor
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50 FPM. **\$22,500**



MODEL FE-30:
16mm Color Processor for
Ektachrome film. Speed 30
FPM. **\$16,400**

● **"FILMLINE OVERDRIVE FILM TRANSPORT SYSTEM"**

This marvel of engineering completely eliminates film breakage, pulled perforations, scratches and operator error. The film can be deliberately stalled in the machine without film breakage or significant change of film footage in solutions. The heart of any film processor is the drive system. No other film drive system such as sprocket drive, bottom drive or simple clutch drives with floating lower assemblies can give you the performance capability of the unique Filmline Overdrive Film Transport System.

● **"TORQUE MOTOR TAKE-UP"** gives you constant film take-up and does not impose any stress or strain on the film itself. Completely independent of the film transport system. This FILMLINE feature is usually found in professional commercial processors but is incorporated on the FE-30 and

FE-50 models as standard equipment. Don't settle for less!

● **"TEMP-GUARD"** positive temperature control system. Completely transistorized circuitry insures temperature control to well within processing tolerances. Temp-Guard controls temperatures accurately and without the problems of other systems of lesser sophistication.

● **"TURBO-FLOW"** impingement dryer. Shortens dry-to-dry time, improves film results, and carefully controls humidity content of your valuable (and sometimes rare) originals. Immediate projection capability is assured because the film dries flat without the usual curl associated with other film processors.

● **"ZERO DOWN TIME"** The reputation of any film processor is only as good as its reliability. The

combination of the exclusive and special added Filmline features guarantees trouble-free operation with absolute minimum down-time and without continual operator adjustments. Recapture your original investment in 2 years on maintenance savings alone. Filmline's "Push the button and walk-away processing" allows inexperienced operators to turn out highest quality film.

● **"MATERIALS, CONSTRUCTION AND DESIGN"** All Filmline machines are constructed entirely of metal and tanks are type 316 stainless steel, heliarc welded to government specifications. The finest components available are used and rigid quality control standards are maintained. Compare Filmline features to other processors costing more money. Feature-by-feature, a careful evaluation will convince you that Filmline offers you more for your investment.

Additional Features included in price of machine (Not as extras).

Magazine load, daylight operation ■ Feed-in time delay elevator (completely accessible) ■ Take-up time delay elevator (completely accessible) ■ Red brass bleach tank, shafts, etc. Prehardener solution filter ■ Precision Filmline Venturi air squeegee prior to drybox entry ■ Air vent on prehardener ■ Solid state variable speed D.C. drive main motor ■ Bottom drains and valves on all tanks ■ Extended development time up to two additional camera stops at 50 FPM ■ Pump recirculation of all eight solutions thru spray bars ■ Temperature is sensed in the recirculation line ■ All solutions temperature controlled, no chilled water required ■ Built-in air compressor ■ Captive bottom assemblies assure you constant footage in each solution ■ Change over from standard developing to extended developing can be accomplished in a matter of seconds ■ Impingement dryer allows shorter put through time.

Partial listing of Filmline Color Installations: — NBC- New York, NBC- Washington, NBC- Cleveland, NBC- Chicago, CBS & ABC Networks, Eastman Kodak, Rochester.

Laboratories: De Luxe Labs, General Film Labs (Hollywood), Pathe-Labs, Precision Labs, Mecca Labs, Color Service Co., Capital Film Labs, Byron Film Labs, MGM, Movie Lab, Lab-TV, Technical Film Labs, Telecolor Film Labs, Guffanti Film Labs, A-One Labs, All-service Labs, NASA Cape Kennedy, Ford Motion Picture Labs.

TV Stations: WAPI-TV, WHP-TV, WMAL-TV, WXYZ-TV, WWL-TV, WMAR-TV, WJXT-TV, KETV-TV, WTOP-TV, WEAT-TV, WCKT-TV, WAVE-TV, WAVY-TV, KTVI-TV, WCPQ-TV, KTAR-TV, WSYR-TV.



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design concepts without bias toward any manufacturer. Further details and a schedule of seminars are available from Don Davis, Synergetic Audio Concepts, Box 1134, Tustin, CA 92680.

PSC Technology is the new name of the firm formerly known as Producers Service Corp. The company headquarters remain at 1200 Grand Central Ave., Glendale, CA 91201. The company has also announced appointment of Photographic Equipment Services of New Rochelle, N.Y., as the authorized dealer for Acme products in the eastern region of the United States; and Behrends, Inc., of Chicago, has been appointed authorized dealer in the central region. The Acme Products Div. of PSC Technology manufactures Acme optical printers, animation equipment, cameras and instrumentation equipments and accessories. PSC's other divisions are the Computer Peripheral Div., which produces computer tape transports, and the Photo Instrumentation Div. which produces photoinstrumentation devices and test equipment.

Camera Mart Inc., 456 W. 55 St., New York, NY 10019, has announced its latest Videotape Rental Catalog, which is available upon request. The catalog contains brief descriptions of the equipments and the rental terms. The equipments include tape recorders, videocassette recorders, cameras and accessories and monitors.

Carter Equipment Co. has moved to new and larger quarters at 1050 W. Florence Ave., Inglewood, CA 90301. The company, formerly located at 232 S. Glasgow Ave. in Inglewood, manufactures and distributes professional laboratory equipment. The new facilities contain general offices, sales and display rooms showing both new and used professional laboratory equipment and complete manufacturing facilities, including electronics laboratory, darkroom and screening room.

Color Tech Film Laboratories, 640 N. Broad St., Philadelphia, PA 19130, has announced the opening of a new sound department. The laboratory processes 16mm film in color and black-and-white. The new sound department is capable of recording narrations in a "live" studio and can mix sound to 16mm or 35mm film. The equipment includes Magna Tech and Ampex recording equipment and a custom-built console. Fred Kamiel is head of the new sound department. Color Tech is a wholly-owned subsidiary of WRS, Inc., of Pittsburgh.

National Technical Information Service (NTIS), U.S. Dept. of Commerce, Springfield, VA 22151, has announced that it now has Telex service, Western Union's world-wide direct dial teleprinter-to-teleprinter exchange service. The NTIS Telex number is 89-9405. It is usable 24 hours a day every day in the year. It can be used to order documents and to begin NTI-Searches.

Alan Gordon Enterprises, 5362 N. Cahuenga Blvd., North Hollywood, CA 91601, has announced a new editing facili-

ty which will be opened in mid-summer at 5400 Cahuenga Blvd. in North Hollywood. Editing rooms and editing equipment will be available on a rental basis. The new editing center will also offer sound transfer and dubbing and screening services in 35mm and 16mm, composite and interlock.

WSNL-TV, Channel 67 UHF, the first commercial TV station on Long Island, New York, will go on the air this fall, it was announced by Suburban Broadcasting Corp., 425 Broadhollow Rd., Melville, NY 11746. Equipment for the new station will include a 55,000-W full color transmitter and a high-performance RCA antenna. The combination will give Channel 67 about three million watts of effective radiated power. Most of the programming for Channel 67 will be locally produced and specifically designed to serve the Nassau/Suffolk community. Nassau/Suffolk comprises the great bulk of the area of Long Island and has a population of 2½ million.

Consolidated Film Industries, 959 Seward St., Hollywood, CA 90038, has acquired an Ampex AVR-1 third generation broadcast videotape recorder and an ADR-150 high-speed color broadcast videotape duplicator system for installation in the CFI videotape post-production facility, reported to be the largest in the United States. The AVR-1 will be used to produce the mirror image master for duplication, in addition to editing and other post-production work. The ADR-150 will be used to mass-produce tape duplicates of televisions stations.

Euro-Films of the Americas, a newly formed Delaware corporation with headquarters in Miami, Fla., will operate on an international basis to distribute films produced in the major capitals of the world to motion-picture theaters in all Spanish- and Portuguese-speaking countries in South and Central America and Spanish-language theaters in the United States. President and Director of the new corporation is Álvaro Martinez, formerly head of Film España, an Argentinian distributor. Members of the Board of Directors include representatives from the United States, Chile, Peru, Venezuela, Brazil and Panama. Firms initially merged in Euro-Films are Film España, Film España of Peru and Cinetel of Argentina. The main purpose of the new organization is to provide European and smaller United States film companies with "one source" distribution in Latin America.

Schneider Corp. of America, 154 Lodi St., Hackensack, NJ 07601, a wholly-owned subsidiary of Jos. Schneider Optics of Germany, has opened a west coast office at 14055 Tahiti Way in Los Angeles. Manager of the new office is Robert E. Kulesh. The company manufactures and distributes lenses for cameras, enlargers, projectors and industrial instruments and machines.

Camera Mart, Inc., 456 W. 55 St., New York, NY 10019, has conducted a series of five classes in motion-picture equipment

and technology. The classes began 23 Feb. and consisted of two sessions on 16mm cameras and one session each on editing, lighting and videotape equipments. The classes consisted of lectures and demonstrations by representatives of Arriflex, Eclair, Canon, Angenieux and other companies.

The Commission on Cable Television recently created to oversee cable television operations in the State of New York has appointed two new staff members, it was announced by C. Lynn Wickwire, Acting Chairman of the Commission. Joel Yohalem has been appointed Counsel to the Commission and Kenneth Foster has been appointed Director of the Commission's Telecommunications Div. Mr. Yohalem was formerly a staff attorney at the Federal Power Commission. Mr. Foster was formerly Assistant Director of Communications Engineering for the State University television network. The Commission is composed of four members. In addition to Mr. Wickwire, the members are Eli Wager, Edward J. Wegman and Jerry A. Danzig. The Commission's offices are in Albany, N.Y., on the 28th floor of the Alfred E. Smith State Office Building.

Richard E. Swart, Jr., has been appointed marketing operations manager for the Mincom Div. of 3M Company. He was formerly Manager, 3M Corporate Advertising. In his new post he will be responsible for developing and coordinating the marketing plans of the Mincom Div., producers of audio, digital, electron beam and video recording equipment.

David M. Stern has been appointed Production Engineer for L-W Photo, Inc., Van Nuys, Calif. He was formerly General Operations Manager for ITT's Advanced Electro-Optical Laboratories. In his new post he will be responsible for all areas of engineering production and quality control.

George Zorzoli has been appointed West Coast Service Manager for Eclair Corp. of America, 62 W. 45 St., New York, NY 10036. He has been with Eclair since 1969 as an electronics and camera technician. He was formerly with Birns & Sawyer.

C. L. Zichterman has been appointed Vice-President and Director of Marketing for Peterson Enterprises, Inc., 1840 Pickwick Ave., Glenview, IL 60025. He was formerly with Bell & Howell. Peterson Enterprises manufactures motion-picture printers and accessories.

William Sandstrom has been appointed Manufacturing Manager for Cinema Products Corp., 2044 Cotner Ave., Los Angeles, CA 90025, it was announced by Ed Di Giulio, President. Mr. Sandstrom was formerly Manager of Operations for Time-Zero Corp. in Torrance, Calif., with responsibilities relating to the NASA space program. In his new post his responsibilities encompass all phases of the company's manufacturing activities with initial emphasis on implementing the manufacturing program and establishing production control systems for the company's CP-16 and CP-16/A 16mm camera product line.

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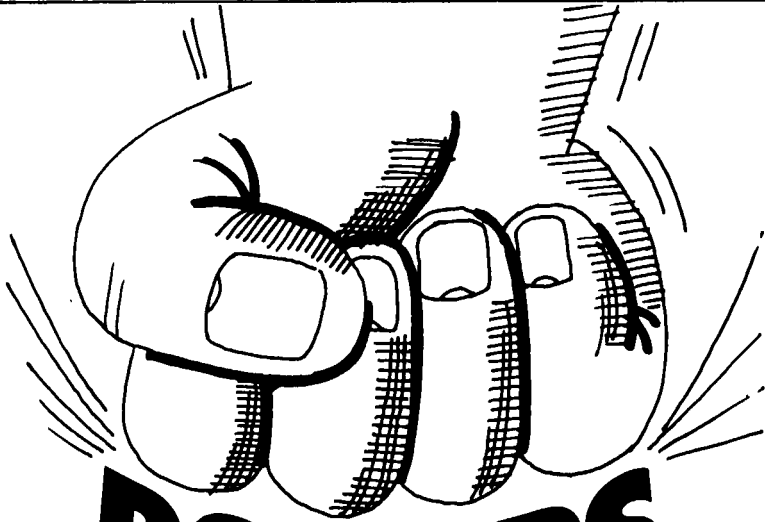
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in Canada : **Photo Importing Agencies Ltd.,
29 Gurney Crescent,
Toronto, Ontario**



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But why should you?

Our replacement rollers, bushings and bearings can take a beating better than most. They're made of the highest quality materials and engineered to precise tolerances. They also cost less than most and our price list proves it. Check it out.

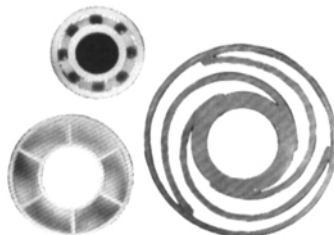
You'll find 69 different idler/drive rollers, including high-tensile polypropylene and tough ABS, 16mm and 35mm flat-bed rollers and bar tires to use with new Kodak processing equipment, Kodak spring bushings, linear polyethylene bushings and glass ball bearings.

If you don't find the size you need, let us know and we'll make it. To Plio-Magic standards. At Plio-Magic prices.

LIMITED OFFER. For the next 60 days, save 10% on Plio-Magic Idler/Drive Rollers, Bushings and Bearings. Send for detailed price list and engineering drawings today.

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The KEM Newsletter for April 1973 is a special issue on editing techniques. The 26-page Newsletter, available from KEM Electronic Mechanic Corp., 225 Park Ave. South, New York, NY 10003, contains two sections: Threadings and Their Alternatives; and Applied Techniques. Both sections are illustrated by a number of "how to" diagrams. The Newsletter also notes that KEM editing tables and equipments were shown at the Exhibit at the SMPTE Spring 1973 Conference in Chicago, including the Universal 6/8-plate editing table, the Junior 4-plate editing table, picture modules and the new KEM recording module. The Newsletter also contains the new price lists.

The Inventory of Pollution-Relevant Research in Canada: 1972 Interim Report, published by the Associate Committee on Scientific Criteria for Environmental Quality of the National Research Council of Canada, is available from the Publications Section of the National Research Council of Canada, Ottawa, Ont. K1A 0R6, Can., at a price of \$6.50. The report contains the findings of a survey conducted by the Environmental Secretariat, which serves the Associate Committee. The survey covered the entire Canadian scientific community. In conducting the survey, the Secretariat was interested in determining who in their own opinions, rather than in the opinion of the Secretariat, were engaged in pollution-relevant research and control and the nature of current projects. One of the purposes in conducting the survey was to develop scientific guidelines for defining the quality of the environment, to discover how much environmental research was being done and to identify experts who can be called upon to help with pollution problems.

The A/5 booklet on Motion Picture and TV Films describes three Gevachrome films and provides technical data. The 20-page booklet is available from Agfa-Gevaert N.V., B-2510 Mortsel, Belgium. The films described are Gevachrome Original, Normal Speed, Type 6.00; Gevachrome Original, High Speed, Type 6.05, and Gevachrome Original, Daylight HS, Type 6.15. The Agfa-Gevaert, N.V., representative in the United States is Agfa-Gevaert Inc., 275 North St., Teterboro, NJ 07608.

Index to Kodak Information, 1973 edition, is available from Dept. 412-L, Eastman Kodak Co., Rochester, NY 14650. The 1973 Index has been expanded from 34 to 38 pages and lists more than 780 Kodak publications. Subject and product lists are arranged alphabetically. The wide selection of books and pamphlets includes publications on black-and-white and color films and papers, aerial photography, medical and scientific photography, industrial photography, audio-visual applications, optical materials, and others.

Jamieson film processors because...

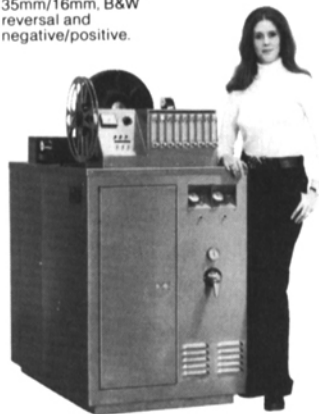
...they're lower priced, operate more economically, and have proved themselves in 100s of installations in 23 countries.

We offer three basic groups or series of processors, and our patented, small reservoir tube tank is the key to them all. It combines the transport rack and solution tank in one small unit, which results in several major advantages:



- ▶ Film advances virtually tension-free. The demand top-overdrive film transport uses no clutches, floating rollers or film sprockets.
- ▶ Smaller machines take only half the floor space.
- ▶ Solution volume is reduced 15 times over open-tank designs.
- ▶ Temperature in primary solutions is controlled to an accuracy of a few hundredths of a degree.
- ▶ The elliptical shape of the tubes protects the film and provides high induced turbulence.

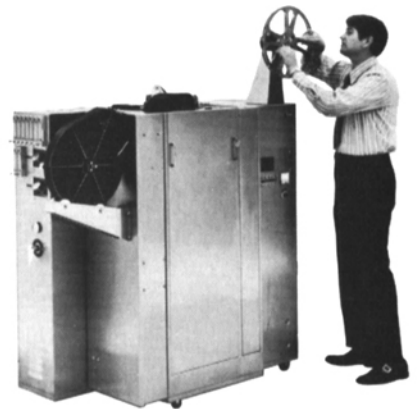
JAMIESON COMPAC 16/8
Conducts standard ME-4 at 20 FPM. Runs 16mm and 8mm interchangeably. Models available for 35mm/16mm, B&W reversal and negative/positive.



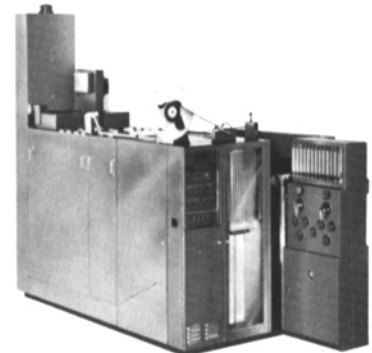
Other important features include: Lower maintenance and labor costs, and less power and water usage. The small volume of solution in the machine gives long-term stability and improved cleanliness. And film threading is both easier and faster, accomplished without removing the tank.

Because of our equipment's modularity and flexibility, we can custom design processors for combination processes or for special requirements.

Write for our new brochure and data sheets on all our models. And give us an opportunity to quote on your processor requirements.



JAMIESON MARK IV, Model A
Runs 16mm and 8mm Ektachrome at 30 FPM. Model B for ECO-3 and ME-4 with silver track. Other models for 35mm processes, including CRI.



JAMIESON MARK IX, Model B
Conducts ECO-3 and ME-4 for all 16mm, 8mm Ektachrome camera and print films at 65 to 75 FPM. Other models run Eastman Color and other processes in 16mm and 35mm.



Yes, I'd like to see your new brochure and data sheets on your color and B&W film processors for 8mm, 16mm and 35mm film.

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Firm _____ Division _____
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Videofilm Notes, a series published by the Eastman Kodak Motion Picture and Education Markets Div., Rochester, NY 14650, offers helpful hints to television station and CATV operators. A recent issue (H-40-4) discussed Television Program Assembly. Under the main heading there are sections on (1) Utilizing Telecine Facilities for Assembling Film Programs (this section contains a block diagram of the basic components of a telecine chain); (2) Utilizing Telecine Facilities for Local Program Production With Film; (3) Preparation of Films for Program Assembly; (4) A and B Roll Techniques (with a diagram); (5) Setting Up Telecines for Program Production or to Make Transfers to Videotape (with photographs of a cross step gray scale

slide and a typical video waveform); (6) Telecine Operating Practices; (7) Making Film-to-Tape Transfers; (8) The Transfer; (9) Electronic Special Effects (with a photograph of a video switcher-mixer unit at WOKR-TV in Rochester, N.Y.); (10) Assembling Videoprints by Electronic Editing; and (11) Film Prints for Program Distribution.

The 1973 (14th) edition of the SOS Book of Motion Picture, TV and AV Equipment is available from SOS Photo-Cine-Optics, Inc., 7051 Santa Monica Blvd., Hollywood, CA 90038 (or 315 W. 43 St., New York, NY 10036) at a price of \$5.00. It contains 300 pages, 881 illustrations, weighs 17 oz and lists more than 10,000

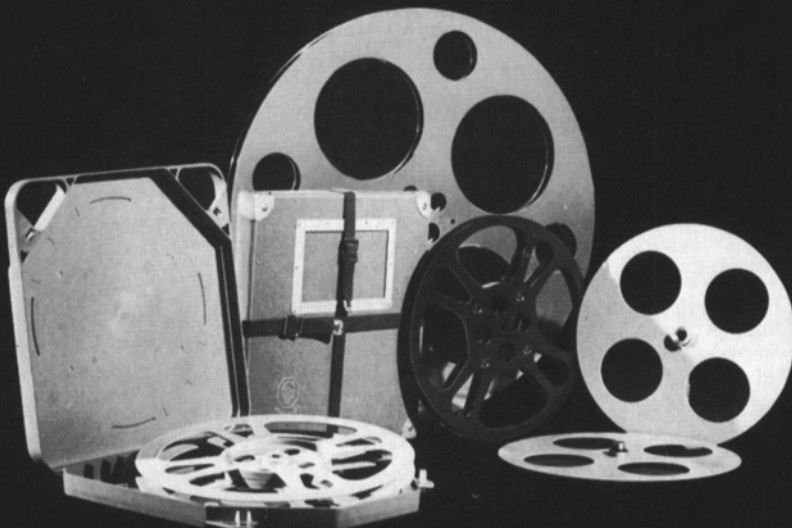
items. Items include super-8, 16mm and 35mm cameras, lenses, projectors, viewer editors, splicers, tripods, dollies, lighting equipments, grids, screens, sound recorders, microphones, booms, titlers, printers, processors, animation equipment, closed-circuit TV, books, accessories, supplies and parts. Equipments are illustrated and described and prices are given. The book is completely indexed.

The Rohde & Schwarz Short Form Catalog TV-2 lists instruments for television tests and measurements including TV Demodulator, Off-Air Receiver, Vision Test Modulator, Envelope Delay Test Assembly, CATV voltmeter and others. The catalog is available from Rohde & Schwarz Sales Co., 111 Lexington Ave., Passaic NJ 07055.

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Time Interval Averaging, Hewlett-Packard Application Note 162-1, a 16-page illustrated booklet, provides instruction in time interval averaging when measuring repetitive events. The application note explains the time interval averaging process, provides an analysis of possible errors and explains how to avoid them. The booklet is available from Hewlett-Packard Co., 1501 Page Mill Rd., Palo Alto, CA 94304.

Coordination and Protection for Emergency and Standby Power Systems, A Special Report, is a 76-page illustrated technical report, offered free of charge to consulting electrical engineers, electrical contractors, electrical design engineers, and others in the field, by Onan Div., Onan Corp., 1400 73d Ave. N.E., Minneapolis, MN 55432. Arranged in six sections, the report outlines the scope of the material, provides definitions of standard terminology, describes characteristics of emergency and standby systems, identifies the coordination or selectivity in a distribution system and spells out the protection established by National Electrical Code requirements. The Appendix deals with recommendations and selectivity and provides data on transfer switches, short circuit calculations and other items. The booklet contains a number of graphs, charts, curves and rating guides.

The National Bureau of Standards has announced five items relating to the International System of Units (metric system). (1) *The Modernized Metric System* (wall chart in color), NBS Spec. Publ. 304, price 55 cents; (2) *Brief History of Measurement Systems* (includes smaller metric chart in color), NBS Spec. Publ. 304A, price 25 cents; (3) *For Good Measure* (plastic ruler), simplified basics of metric system, NBS Spec. Publ. 376, price 10 cents; (4) *Metric Conversion Card* (wallet card — shows how to convert to and from the metric system for commonly used measurements), NBS Spec. Pub. 368, price, 10 cents; (5) *Electrical Engineering Units and Constants* (wallet card), NBS Spec. Publ. 368, price 10 cents. These items are all available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Free Shorts for Theatres, a brochure listing 35mm short subjects available to theaters on free loan, is available from

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about theatre automation

Only the EPRAD Modular SWORD* System offers "add-on" flexibility

Seems we're not alone in the theatre automation equipment business. You have a lot of choices when you decide to boost your theatre's automation capabilities. And how wisely you choose can affect profitability and quality of your operations for years to come. So it's important for you to know that *only* Eprad's modular SWORD System offers *add-on* flexibility.

Our add-on concept means that your theatre's automation capabilities can

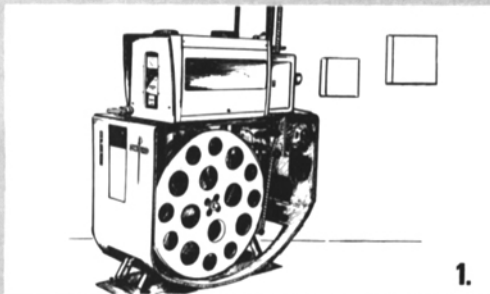
grow as your needs grow. For example: team a single SWORD unit with one of your present projectors and enjoy more than three hours continuous projection. As your needs grow, add other sophisticated Eprad modular automation components until you have the ultimate — *total* theatre automation.

Because Eprad Modular SWORD System components are designed to work together, no major equipment modification is necessary as you add

automation functions. No booth remodeling, either. And function for function, top quality Eprad SWORD System components *cost a whole lot less* than any other automation equipment you can buy.

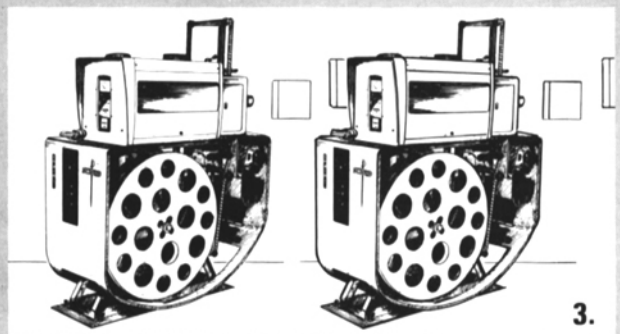
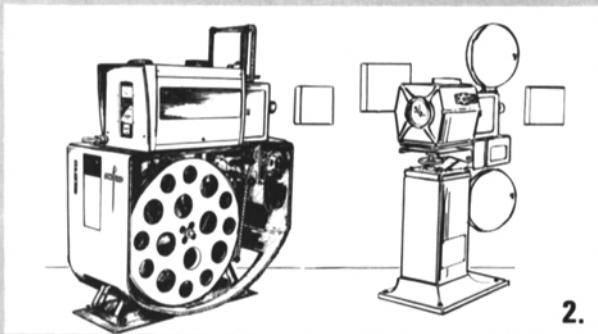
Your Eprad dealer is eager to give you the full picture on Eprad add-on theatre automation with the modular SWORD System. Ask him about it soon, or write to us for complete information.

**Show-With-Out-Rethreading-Device*



UPGRADE YOUR OPERATIONS WITH ONE OF THESE THREE BASIC SWORD AUTOMATION SYSTEMS

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Bruce Thomas, Modern Talking Picture Service, 4 Nevada Dr., Lake Success, NY 11040. The films, sponsored by various business and professional organizations, deal with such subjects as travel, sports, ecology, human relations, social affairs and others. All of the films are in color and range from 7½ to 27 min in length.

Modern Talking Picture Service has announced a new 48-page catalog listing more than 500 16mm films available on free loan to television stations. The films are sponsored by business firms, trade associations, government units, professional societies and other organizations. In addition to public service messages, the films include documentaries, sports, travel shorts and how-to-do-it features. Program lengths include half-hour, quarter-hour and short shorts of one to nine minutes. Most of the films are in color. Copies of the catalog are available free to television stations from Modern TV, 2323 New Hyde Park Rd., New Hyde Park, NY 11040.

The **Ailtech F200** series of waveform generators are described in an 8-page illustrated brochure; the F280A programable waveform generator is described in a 4-page illustrated brochure. Both brochures are available from Ailtech, City of Industry, CA 91748. The brochures include complete specifications of the units as well as how-to-do-it information for generating a variety of waveforms.

The **Ailtech F300** series of oscillators are described in an 8-page illustrated catalog available from Ailtech, City of Industry, CA 91748. Complete specifications and application data are included. The F300 instruments contain internal metering. They are used for production testing, proof testing and general laboratory use.

The **OCLI** 10-page color-illustrated brochure describes the facilities and capabilities of Optical Coating Laboratory, Inc., 2789 Giffen Ave., P.O. Box 1599, Santa Rosa, CA 95403. Working in the 0.1- μ m to 50- μ m spectral range, OCLI designs, develops and produces sophisticated thin film optical coatings and related products for commercial and aerospace applications. The booklet is available from OCLI upon request.

The **Japan EBG Electronic Buyers Guide 1971/72**, a 1200-page directory, is available from Dempa Publications, Inc., Higashigotanda 1-chome, Shinagawa-ku, Tokyo, Japan, at a price of \$25 (surface mail). More than 1200 manufacturers of electric and electronic products are listed alphabetically. The information includes company names, addresses, telephone and telex numbers, cable addresses, capital, annual sales, number of employees and other relevant items. The *Guide* also contains an alphabetical listing of trading firms handling electric and electronic products, registered trade names, organizations, foreign firms' representatives in Japan and other items of interest.

The **Trompeter Electronics** 64-page catalog is available from Trompeter Electronics, Inc., 8936 Comanche Ave., Chatsworth, CA 91311. The catalog lists interface equipment including coaxial patching, switching, cables and connectors as used in television, computer, video digital transmission and similar applications. The catalog also contains a technical paper on the proper methods of interconnecting equipment with particular emphasis on the avoidance of interference due to both radiated fields and common mode voltages.

The new **Gitzo** 8-page illustrated booklet describing some 30 heavy-duty tripods of European manufacture is available from Karl Heitz, Inc., 979 Third Ave., New York, NY 10022. The tripods are made for all types of cameras including heavy motion-picture and TV cameras.

The **Jensen Model 505** Multisync Crystal Sync Control for Arriflex 16BL cameras is described and illustrated in a catalog sheet available from Image Devices Inc., 811 NW 111 St., Miami, FL 33168, the sole importer of Jensen cinematographic electronic apparatus. The illustration shows how the unit mounts directly on the standard drive motor of the camera and interconnects with the regular plugs and receptacles.

Color Burst, a series of leaflets illustrated in color showing professional applications of IVC products throughout the world, is available from International Video Corp., 675 Almanor Ave., Sunnyvale, CA 94086.

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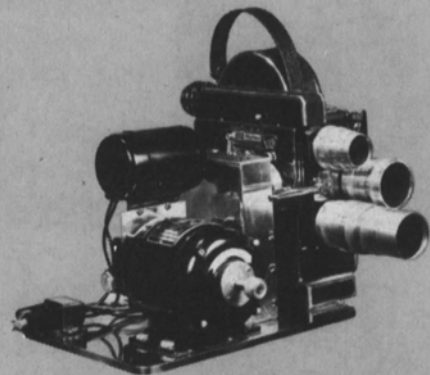


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Color Burst No. 4 is on Video Techniques in Medicine. It describes how video techniques are used in the Samuel Merritt Hospital School of Nursing and at the University of Toronto for education in medical techniques and how video is used at Uppsala Hospital to assist the surgeon to make a diagnosis. *Color Burst No. 5* is entitled "Cable Television Turns to Origination." It discusses programs broadcast on Theta Cable in Santa Monica, Calgary Cable, in Canada, Southwestern Cable in San Diego, cable television at Anderson, Ind., and Palm Desert, Calif., and Clear-view TV Cable, in Enumclaw, Wash.

A systems approach to accurate light measurements is described in an illustrated

leaflet (Catalog SF73) available from Gamma Scientific, Inc., 3777 Ruffin Rd., San Diego, CA 92123. The building blocks for light measurement systems illustrated in the catalog include receptors, couplers, spectral selectors and attenuators, adaptors, photomultiplier detectors and signal conditioners, and photometers.

Gamma Scientific has also made available Bulletin #1000 containing descriptions and illustrations of Series 2009 and IC 2000 telephotometers.

Sylvania lamps used in studio, theater and television lighting applications are listed in a 36-page catalog available from Sylvania Lighting Center, Danvers, MA 01923. Illustrations of the lamps and light-

ing equipments are included and specifications are given.

The Photo-Sonics Actionmaster/500 sports and documentation camera is described and illustrated in an 8-page brochure available from Instrumentation Marketing Corp., 820 S. Mariposa St., Burbank, CA 91506. Each of the camera's parts is illustrated and explained separately.

Dual Magnet phonograph cartridges are described in a leaflet illustrated in color available from Audio-Technica U.S., Inc., 1655 West Market St., Fairlawn, OH 44313. Three of the cartridges have been designed to play the JVC-RCA 4-channel discrete disc as well as matrix and conventional stereo recordings. Features include extended frequency response to over 45 kHz, ultra-low mass moving system and a nude-mounted Shibata stylus.

Iatron direct-view storage tubes are described and illustrated in a brochure available from ITT Electron Tube Div., 7635 Plantation Rd., Roanoke, VA 24019. The storage cathode-ray tubes have a variety of screen diameters, including rectangular shapes. Other features of the Iatrons include storage times of a few seconds to several minutes, writing speeds to 500,000 in/s, resolutions to 125 lines/in and fast erasure times.

Trygon Power Supplies are described in a 16-page illustrated catalog available from Trygon Electronics, a subsidiary of Systron-Donner Corp., 1200 Shames Dr., Westbury, NY 11790. The catalog lists dc power supplies of low and medium voltage. Also included is a section devoted to power supply application notes explaining uses and circuit configurations of the power supplies.

The Photon Counting Microphotometer (Model 6000M) and the Photon Counting Telephotometer (Model 6000T) are described in Brochure #105 available from Gamma Scientific, Inc., 3777 Ruffin Rd., San Diego, CA 92123. The instruments are said to be up to 1000 times more sensitive than dc photomultiplier systems.

The Video Products Brochure, published by Matthey Printed Products Ltd., contains illustrations and descriptions of the firm's products including fixed and variable video delay lines, pulse delay lines, gaussian filters, low-pass video filters and video equipments. The brochure is available from Television Equipment Associates, Box 1391, Bayville, NY 11709, the United States representative of Matthey Printed Products.

Health's Animation Catalog No. 104 is a 16-page illustrated catalog listing animation equipments ranging from an Oxberry 16mm animation camera stand to such items as Cel Vinyl ink, field guides, drawing discs and many others. The catalog is available from Robert P. Heath Productions, Inc., 1627 Scott Ave., West Islip, NY 11795.

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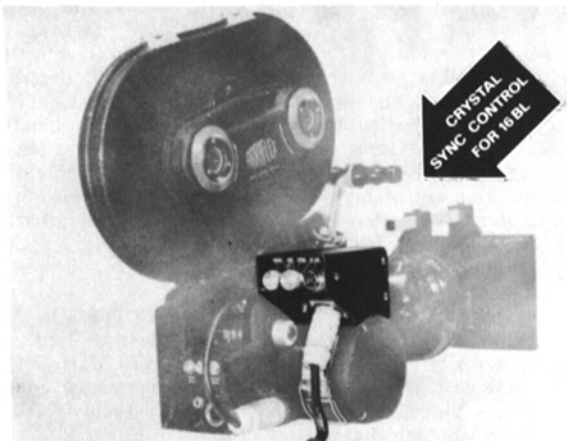
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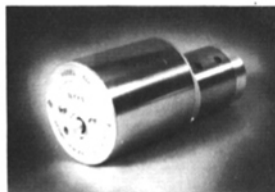
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NEW YORK, 13 Feb. — The meeting was held at the United Engineering Center in New York City with an attendance of 63 members and guests. The speakers were Daan Zwick, Senior Research Associate, Kodak Research Laboratories, Rochester, N.Y., and William F. Mason, Technical Director of Systems Development, The Mitre Corp., McLean, Va. Mr. Zwick presented a survey of telecine practices from a report of the Subcommittee of the Ad Hoc Committee for Color Television. Visual aids including 16mm color film and slides, graphs and waveforms were used to clarify the findings (to date) of the subcommittee's study of the causes of variability of the color of television pictures when viewed on home sets. The study is being conducted by the Ad Hoc Committee for Color Television at the request of the Joint Committee for Intersociety Coordination.

Mr. Mason used a 20-min demonstration film to explain interactive television as it is being used in the test city of Reston, Va., a peculiar area in that it is 100% wired for cable. Using a large grant from the government for the experiment, it is expected that this new means of commu-

nication may be made widely available in large cities as well as for international use. This new system can enable people to request specific information to be sent to their own home television set. "Interactive" means that the home viewer can send information out of his house as well as receive it on the screen. — William L. Cooper, Jr. (Publicity Chairman), 34 Kramer Dr., Paramus, NJ 07653.

TORONTO, 15 Feb. — The meeting was held in Studio A of the Ryerson Polytechnical Institute with an attendance of 84. It opened with a videotape, *Well Here We All Are*, shown through the courtesy of the Ontario Educational Communications Authority which produced it. Extensive use was made of electronic production effects.

The first speaker was Chester Beachell, Senior Research Officer of the National Film Board of Canada, who has worked on the filming of the so-called killer whales (Orca). He presented a paper, entitled "Diving With Orchinus Orca," which described the development of a hydrophone system to track the killer whales by their vocalization (singing). Experiences in re-

cording the songs of the Orca, diving with them and filming them for the NFB production, *We Call Them Killers*, were described. Examples of underwater recordings were played and a number of underwater photographs were shown.

The second speaker was Reino Kokkila, Sales Engineer, assisted by Harold Atkinson, Assistant Chief Engineer, both with Applied Electronics Ltd. of Toronto. Mr. Kokkila described the design concepts and practical applications of the Fernseh KCR-40 handheld color TV camera. A demonstration of the camera was included in the presentation. — Ted Litwin (Secretary-Treasurer), Canadian Kodak Co. Ltd., 3000 Eglinton Ave. West, Toronto, Ont., Canada.

CHICAGO, 20 Feb. — The meeting was held at NBC, Studio D. in the Merchandise Mart, with an attendance of 50 members and guests. Robert Rozencranz, of Sargent-Welch Scientific, Inc., spoke on "Practical Densitometry and Sensitometry." Starting with a slide presentation of the history of the development of densitometry and sensitometry, he went on to outline the practical applications to all phases of photography. Included in the interesting presentation were such subjects as color temperature, ASA ratings, applications with ultraviolet and various filtering techniques. — Byron L. Friend (Secretary-Treasurer), Telecine Film Studios, Inc., 100 S. Northwest Hwy., Park Ridge, IL 60068.

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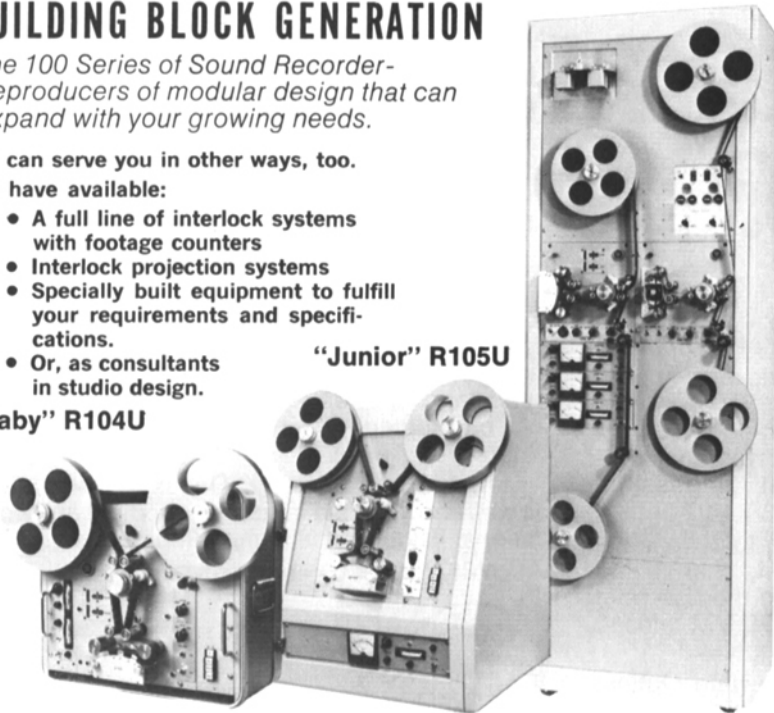
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HOLLYWOOD, 20 Feb.—The meeting was held in the Olin Auditorium of the University of Southern California. The auditorium was designed to accommodate the interactive instructional television classes. The system, which gives an opportunity to off-campus students to gain college credits, was explained by J. Munushian and Patrick Loughboro. Mr. Munushian discussed the reasons for installing this particular kind of TV system. Mr. Loughboro described the physical setup of the classroom. There are now four separate classrooms in the system, each one with a TV monitor for every two students. Also, each off-campus facility has a special receiver and microphone. The students, both on and off campus, are enabled to get a closer look at the instructional material and to ask questions of the teacher.

The meeting was preceded by a dinner at the USC Faculty Center. Herbert Farmer was the host. — Robert D. Gustafson (Secretary-Treasurer), Consolidated Film Industries, 959 Seward St., Hollywood, CA 90038.

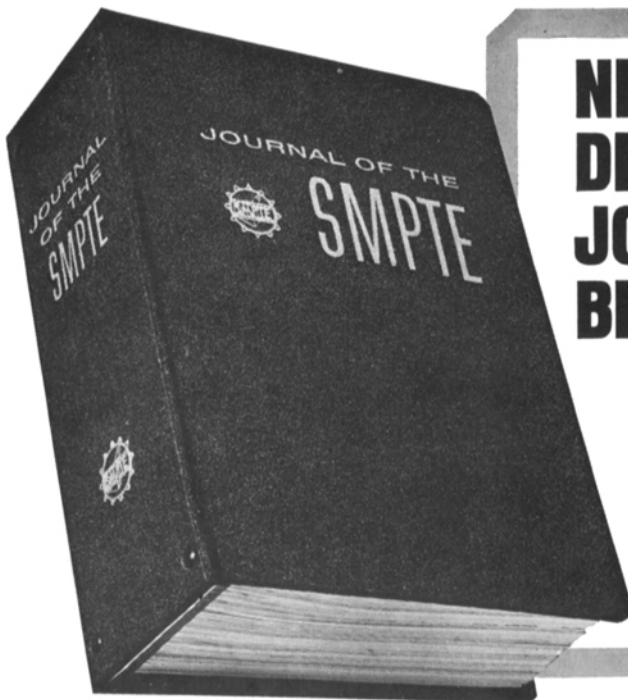
DETROIT, 22 Feb.—The meeting, held jointly with the Computer and Communications Activity Committee, was held in the Rackham Memorial Building, Engineering Society of Detroit Theatre, with an attendance of 35. The speaker was John F. X. Browne, Jr., of Browne Renaud Associates, Bloomfield Hills, Mich., who spoke on "Cable Television Systems for the Urban Area." He reported on the complex broadband cable systems that are being planned for the "wired city." The presentation took up basic system design concepts and hardware for television and computer-related applications as well as regulatory and economic considerations for urban cable systems. The program was illustrated by slides.—Leonard W. Eden (Secretary-Treasurer), 29828 Spring Hill Dr., Southfield, MI 48075.

DALLAS/FORT WORTH, 1 Mar.—The meeting, which took the form of a film production seminar to benefit film students in the North Texas area, was attended by more than 175 members, guests and students. It was held in the television studio in the Meadows Fine Arts Building at Southern Methodist University. Seven film executives presented detailed discussions of various aspects of film production. Speakers and their topics were: Bruce Jamieson, of Jamieson Film Co., "Major Studio Production"; Larry Herndon, Keitz & Herndon, "Animation"; David Orr, David Orr Productions, "Independent Film Production"; Olin Terry, Glenn Advertising Co., "Commercial Production"; Frank Reinking, Eastman Kodak Co., "Laboratory Facilities"; Gary Jones, WFAA Productions, "Film/Videotape Facilities"; and Jack Bennett, Creative Imagination, "Special Effects." The meeting closed with a very spirited question-and-answer session which lasted more than an hour. This meeting was one of the most successful and informative that has been held in the Dallas/Fort Worth area.—William R. Schock (Secretary-Treasurer), KDTV Doubleday Broadcasting Co., Dallas, TX 75240.

MONTREAL/OTTAWA, 1 Mar.—The meeting was held at Radio-Québec's new studios with an attendance of 60 in spite

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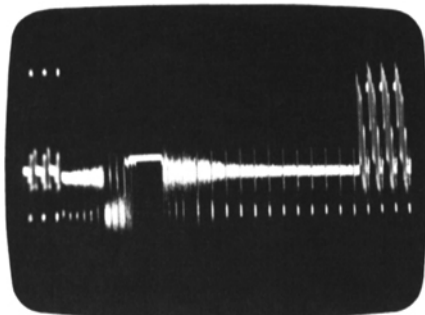
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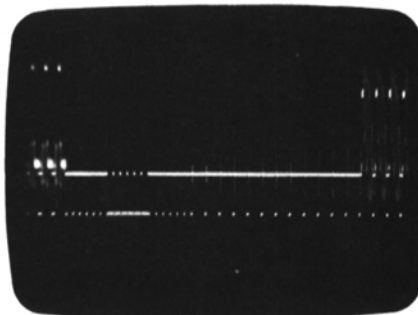
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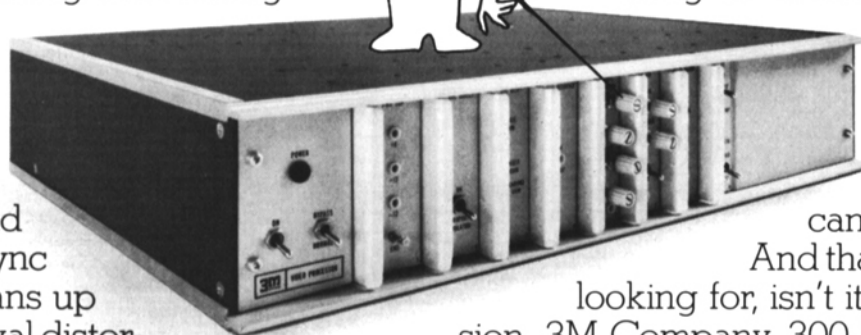
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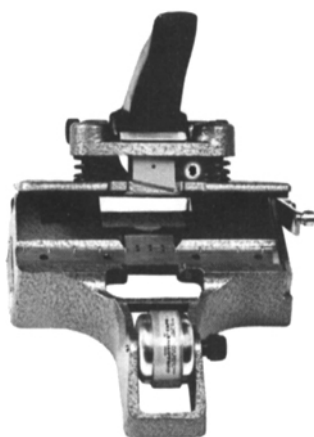
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of the inclement weather. It would seem that if you want a snowstorm in Montreal, simply call an SMPTE meeting and the snowstorm can be guaranteed. This meeting had been postponed once because of a blizzard, but in spite of the snowstorm, the attendance was much better than might have been expected. The meeting was opened with a welcoming address by Yves Labonté, President of Radio-Québec, followed by a conducted tour of all Radio-Québec facilities.

Following the tour, refreshments were served through the courtesy of Ampex Corp. Eugène Prévost, Manager of Technical Services, Radio-Québec presented a paper on "Video Editing Using Ampex HS 200 and MM 100," followed by a demonstration of video editing using the Ampex equipment. The demonstration concluded with a short video film, produced by Radio-Québec, demonstrating the versatility of the equipment.—A. Dunstan Russell (Chairman), Alex L. Clark Co., Ltd., 1070 Bleury St., Suite 805, Montreal, P.Q., Canada.

ATLANTA, 6 Mar. — The meeting was held at the Eastman Kodak facilities with an attendance of 35 members and guests. The meeting centered around the Eastman Kodak Video Film Express and its equipments. Eugene Myler, William Reddick and Geoffrey Burrows, all of Eastman Kodak, discussed the Video Film Express and its significance in producing films for television.—Hugo A. Bondy (Secretary-Treasurer), WAGA-TV, P.O. Box 4207, Atlanta, GA 30302.

ROCHESTER, 8 Mar. — The meeting was held in Dryden Theater in George Eastman House, where 35 members and guests saw a motion-picture, *The Battle of the Rails*, dealing with French sabotage activities during World War II. James Card, Curator of George Eastman House, explained the significance of the film and discussed its origination.—Hugh R. McNair (Secretary-Treasurer), Eastman Kodak Co., 343 State St., Rochester, NY 14650.

NEW YORK, 13 Mar. — The meeting was held at NBC Studio 6 B in Rockefeller Plaza in New York. More than 290 members and guests were present. Theme of the program was Film Editing Today and three of the new horizontal-bed editing machines were demonstrated. The Steenbeck editing table was demonstrated by William A. Engstler, President of General Enterprises, Inc.; Leo Rosenberg of Camera Mart demonstrated the Moviola editing table; and Robert Rowen, Vice-President of KEM Electronic Mechanic Corp., demonstrated the KEM editing table. Mr. Rowen's demonstration was supplemented by a slide presentation. Following the demonstrations, a panel of film editors who use these machines gave their own views of the machines and discussed their advantages and disadvantages. Kent McKenny discussed the Steenbeck; Edward Tiss commented on the Moviola; and Hy Goldman discussed the KEM. A lively question-and-answer period followed. It became evident that new developments in editing machines are a matter of concern to everyone in film production, processing and distribution as well as to producers in television.—William L. Cooper, Jr. (Publicity



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tools and provides maximum isolation from shock and the new 626GE Power Supply, a lightweight power supply for Sennheiser condenser microphones which mounts to the 625GE Shock Mount.

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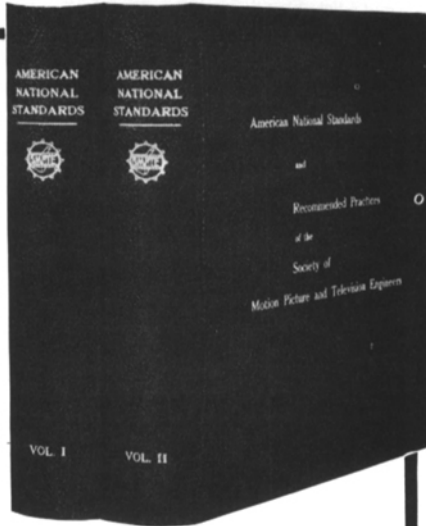
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Chairman), 34 Kramer Dr., Paramus, NJ 07653.

HOLLYWOOD, 20 Mar.—The meeting was held at Studio 31 in CBS Television City. Some 300 members and guests attended. Edward G. Stein presented a paper on "How We See Color: The Exotic World of Infrared Color." He used 3-slide projectors to show examples of how the visual perception of the eye can be deceived by the different colors of the spectrum. A series of slides was shown, varying the exposures from one slide to another. To prove that the eye can accommodate to any given situation, various slides were used showing the use of additive and subtractive timing in motion-picture and still photography. A fascinating series of slides using infrared film was shown. The art of infrared photography was explained and it was shown how, by using different colored filters, interesting results could be obtained. The meeting was preceded by a dinner at the Kings Four-in-Hand restaurant. — Robert D. Gustafson (Secretary-Treasurer), Consolidated Film Industries, 959 Seward St., Hollywood, CA 90038.

OHIO, 21 Mar.—The meeting was held at the Motion Picture Sound Film Exchange Building in Cleveland with 38 members and guests. W. D. Hedden, of Calvin Communications, Inc., presented a paper entitled, "A Tutorial Approach to Optical Printers, Optical Effects and Formats." The paper was enhanced by the use of visuals and sound. A lively question-and-answer session followed the presentation. Tom Peterson, President of Motion Picture Sound, Inc., gave a talk on "The Teledyne Video-Film Transfer System." He also described the Ampex Film-loc system which synchronizes 16-track audio, film and videotape; then he and his staff demonstrated the Film-loc system, the Teledyne Model DM64B system and the Ampex AVR-1 Television Videotape Recorder. — Matthew M. Bracic (Secretary-Treasurer), WKYC-TV NBC, 1403 E. 6 St., Cleveland, OH 44114.

MONTREAL/OTTAWA, 27 Mar.—The meeting was held at the National Film Board of Canada in Montreal; a busload of Ottawa members arrived for the meeting and more than 110 members and guests attended. The speakers were Leonard Green, Director of the NFB Sound and Projection Div.; and Ron Piggott, President of Ronzen Design Inc., assisted by Rodney Wayne, Engineer.

Mr. Green presented an illustrated history of NFB's experimental work in sound. Some filmclips illustrated work in 3-D and the use of NFB's new 6-track mixing console. A tour of the NFB sound facilities followed Mr. Green's talk.

Following the tour, refreshments were served through the courtesy of the Mount-Royal Laboratories. The second part of the technical program consisted of a presentation of the Redacto Mark II, a new horizontal editing table made in Canada. Mr. Piggott outlined the history of the development of the machine and Mr. Wayne demonstrated one of the new machines with an explanation of the engineering aspects. — A. Dunstan Russell (Chairman), Alex L. Clark Co., Ltd., 1070 Bleury St., Suite 805, Montreal, P.Q., Canada.

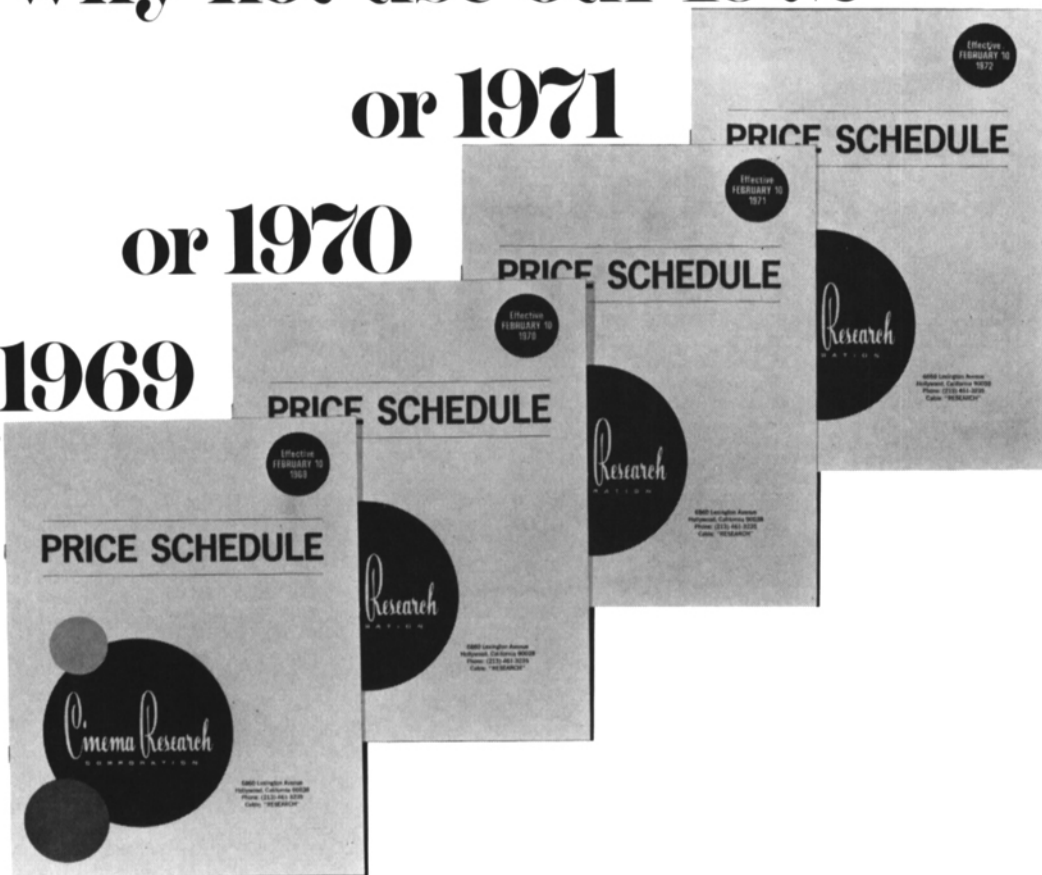
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Errata: Directory for Members

Following are the addresses that were listed incorrectly in the *Directory for Members*, published November 1972.

Brackett, Frank P., Jr., Consulting Engineer—Photochemistry. Mail: 11044 Kling St., No. Hollywood, CA 91602 (F).

Friman, Elmer, Director, Medical Educational Resources Program, Indiana University School of Medicine, 1100 West Michigan St., Indianapolis, IN 46202 (M).

Gioga, Peter, Retired. Mail: 1155 Del Mar Blvd. #115, Pasadena, CA 91106 (LM)

Hogan, Chester L., Jr., Production Supervisor, DeLuxe General Inc. Mail: 7859 Hillside Ave., Los Angeles, CA 90046 (A).

Patton, Billy L., Dir. of Engrg., WJAR-TV. Mail: 36 Acacia Rd., Bristol, RI 02809 (A).

Thompson, Richard, D., Senior Consultant, George T. Howard & Assoc. Mail: 525 No. Sycamore Ave., Apt. 320, Hollywood, CA 90036 (M).

New Members

The following members have been added to the Society's rolls since the November 1972 *Journal*. Also listed are those regretfully reported as deceased since then. The designations of grade are the same as those used in the November 1972 *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 March 23.

The *Directory for Members*, November 1972, shows the geographic membership distribution by states included in the Section.

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

Deceased:

Robert J. Allen(M)	Ralph W. Armstrong(A)	Victor C. Bankowski(A)
Maurice E. Barr(M)	Murray Briskin(M)	John E. Burks (M)
James L. Caddigan(M)	George W. Colburn(F)	William H. Hadley, Jr.(M)
J. H. Hansbrough(A)	A. G. Jensen(LF)	Ned A. Johnston(A)
R. D. J. Leslie(M)	Michael Marinelli(A)	Russell H. McCullough(F)
George H. Merhoff(A)	William E. Ploeger(A)	H. P. Stark(M)
German Troconis(M)	Mervin J. Updegraff(A)	Jean Vivie(A)
Richard V. Vosburgh(A)	Harry L. Wingfield(M)	

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Jones, Gerald F., Pres., Cine Matrix. Mail: 204 16 St., N. W., Atlanta, GA 30318 (JA)

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Edwards, John S., Prodn. Supvr. & Assoc. Dir., Crawford Productions. Mail: 94 Grange Rd., Toorak, Vic. 3142, Australia (M)

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Ostap, Eugene M., Sr. Staff Engr., International Digisonics, Inc. Mail: 119 Stanley, Park Ridge, IL 60068 (M)

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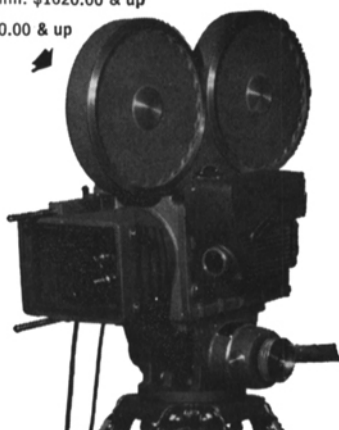


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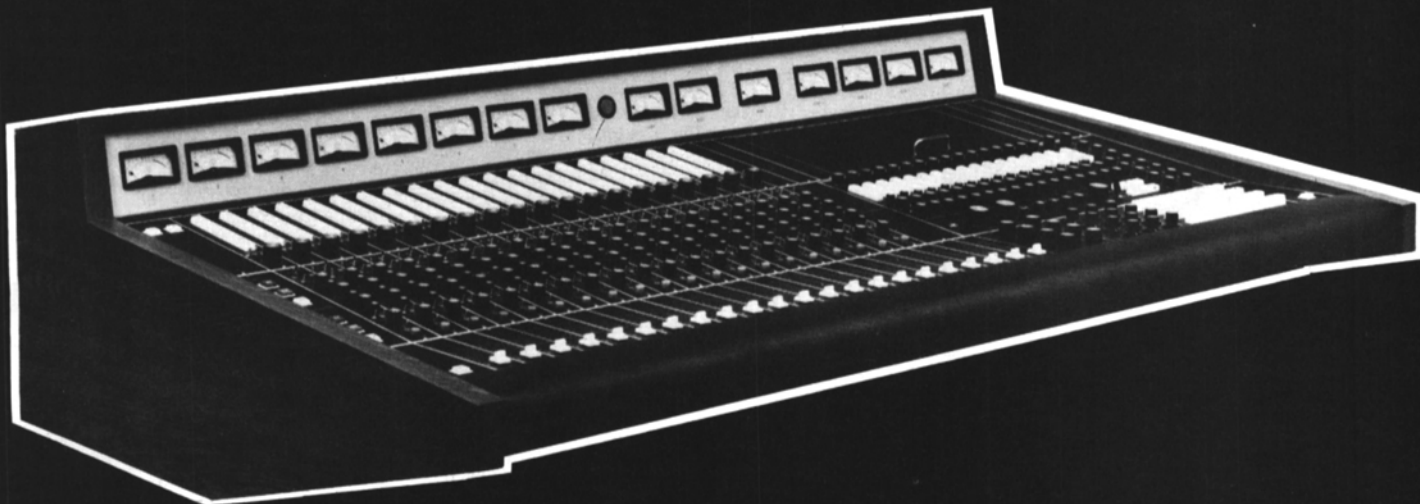
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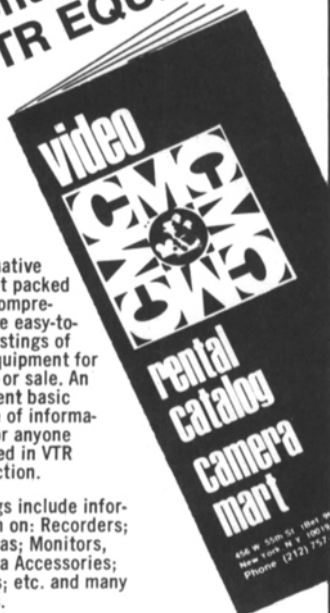
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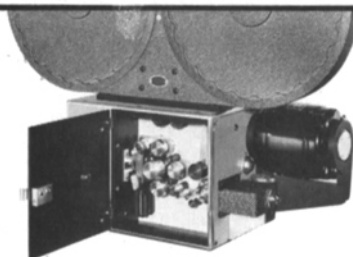


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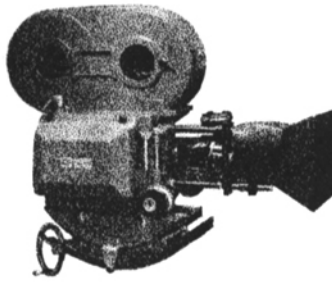
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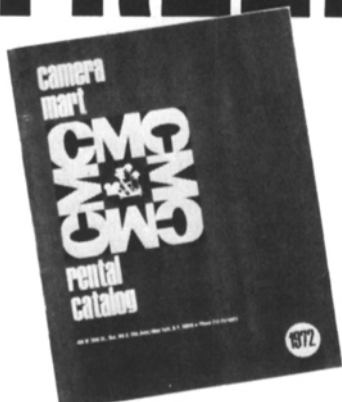
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