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Allen Products, Inc., manufactures a complete line of black-and-white, color and microfilm photographic processors and a high-speed, low-cost microfilm printer. Standard features of Allen processors include: stainless steel construction, automatic temperature control, electronic variable-speed drive, air squeegee, complete plumbing and elevators. Allen Products also has the ability and flexibility to design and build custom processors to meet individual customer requirements.

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Lider Cine Laboratories S.A., Rua Alvaro Ramos, 71, Botafago, Rio de Janeiro, Brazil

Lider Cine Laboratorios S.A. is a Brazilian film laboratory operating in B-&-W and color, and in all gauges. The head office and the Rio laboratories are located at the above address with a branch at Rua 13 de Maio, 402, Sao Paulo, also operating in B-&-W and color. In line with the increased requirements for film laboratory activities, Lider is completing construction of a new premises that will house the most modern laboratory with all services connected with the motion-picture and TV requirements. It will have capacity for developing and printing to meet all possible market demands. The new installation will be fully activated in November, 1972 when the head office will be transferred to the building. The address is Avenida 28 de Setembro no 168, Vila Isabel.

Address Inquiries to: The address above until Nov. 20, 1972. Then send inquiries to Av. 28 de Setembro, no 168, Vila Isabel, Rio de Janeiro, G.B., Brazil.

Marconi Electronics Inc., 500 Executive Blvd., Elmsford, New York 10523

Marconi Electronics Inc. is the U.S. subsidiary of The Marconi Company in England, which was the world's first radio company having been incorporated in 1897. Marconi manufactures a complete range of equipment for the industry which includes products for space communications, both ground station and satellite in addition to microwave communications equipment and a complete range of HF transmitters and receivers. In particular Marconi Electronics distributes its Broadcast, Radio and Television products including a complete range of radio transmitters from 1kW through 750W AM; 1kW and 10kW FM; and 100kW, 250kW short wave. The television transmitter line covers 1kW through 15kW VHF and 10kW through 55kW UHF with higher powers available by paralleling. Marconi's comprehensive studio equipment includes the world's first fully automatic color camera—the Mark VIII; a full facilities film chain; audio and video switchers and switching systems; custom remote trucks; pulse generation and distribution systems; monochrome cameras; test charts and all accessories needed for a complete studio installation. Test equipment for the Broadcaster and the whole field of industrial electronics is available from the above address.

Address inquiries to: The address above.

J. A. Maurer, Inc., 33-14 47th Ave., Long Island City, NY 11101 (212)937-8800

J. A. Maurer, Inc. has been manufacturing cameras and optical sound recording equipment for over thirty years. Our 70mm aerial reconnaissance systems are currently in use in U.S. Air Force and foreign aircraft. All motion picture camera coverage for Gemini and Apollo used Maurer space designed cameras. A military version of the space camera is being used by the U.S. Navy for Gunsight photography. Our latest entry into the professional hand-held 16mm camera field is the Maurer Pro 16 which was shown for the first time at the SMPTE Los Angeles Conference.

Address inquiries to: Mr. Edwin J. Neff, address above.

Schneider Corp. of America, 154 Lodi Street, Hackensack, NJ 07601

Our primary business activity is to market and provide technical, design and engineering support in optics, optical systems and sub-systems for O.E.M. of electronic, office copier, microfilm, bio-medical, industrial, graphic arts, theater projection, M.P. Camera, CCTV and other specialized and photo products. The Schneider Corp. of America is a subsidiary of the Joseph Schneider Co., Bad Kreuznach, Germany, and we are the American representatives for Schneider, Isco and Goerz lenses.

Address inquiries to: The address above.

Scholarship Awards

The Scholarship Committee has selected two recipients for the SMPTE Scholarships (*Journal*, p. 45, Jan. 1971) and four recipients for the Academy-SMPTE Scholarships (*Journal*, p. 45, Jan. 1971) for the 1972-73 academic year, it was reported by Herbert E. Farmer, Vice-President for Educational Affairs.

Constance Malach, who is a student at Cornell University, and Mark Rozett, who is a student at Montana State University, have each been awarded an SMPTE Scholarship.

Paul Berg, Rochester Institute of Technology; Steven Cowen, University of California, Santa Barbara; Jay Eastman, University of Rochester; and Martin Greenfield, University of Rochester, have each been awarded an Academy-SMPTE Scholarship.

Miss Malach was born September 17, 1951, in Buffalo, N.Y. She is a Communications Arts major who upon completion of her undergraduate work hopes to continue her studies toward the M.A. degree in the communication/linguistics field. She says of herself that she is "project oriented" and that she receives satisfaction from tangible results. In discussing her educational goals, she said, "While recognizing the need for an understanding of communication theory, I find courses in television, radio writing and production, advertising, photography and visual aids to have an interest priority. By taking courses in all these areas, I hope to familiarize myself with the methods, techniques and processes for communicating information to the general public." She noted that the Communication Arts Dept. at Cornell University emphasizes group association and productions, necessitating a development of effective interpersonal interaction as well as the individual accomplishments of the student.

Mr. Rozett was born October 3, 1951, in Great Falls, Mont. He is working toward the B.S. degree in Film and Television. From 1969 to 1971, he attended the College of Great Falls, Mont., then enrolled in Montana State University. While at the College of Great Falls he organized a dance band and won first prize in the College literary magazine. After graduation from Montana State he plans to seek employment as a recording engineer and possibly, later, as a sound man for a film crew. He also hopes eventually to write music scores for films since one of his interests is music.

Mr. Berg, who received an SMPTE undergraduate scholarship for the 1971-72 academic year (*Journal*, p. 657, Aug. 1971), is a recipient of an Academy-SMPTE scholarship for graduate work at the Rochester Institute of Technology. He explained that his present technical interests are taking him into the intricate properties of light-sensitive materials, especially the areas of color dye production and photographic information storage.

Mr. Cowan, who was born October 11, 1947, is working toward the Ph.D. degree. His creative drives, he explained, led him into the area of research and development of practical electronics systems. At present, he is assisting in the design of a pulsed ruby laser system, employing stimulated Raman backscatter, which will ultimately be able to map air pollution

profiles of areas a mile or more distant. He noted that the design and evolution of such a system had proved to require coordination between the fields of optics, electronics, spectroscopy, acoustics and computer processing. After he receives his Ph.D. degree he hopes to work "in a systems area with specific aims of the development and application of forms of technology which will help to solve the growing problems of overcrowding, widespread pollution and the depletion of the world's natural resources." Mr. Cowan said that he intends to "evaluate and reevaluate" his goals and ambitions "in the context of what has been done and what could be done while in industry."

Mr. Eastman, who was born June 9, 1948, is working toward the Ph.D. degree at the Institute of Optics, University of Rochester. He is specializing in thin-film optics and has proposed a research topic concerned with scattering of light in optical thin-film devices. He noted that this is of considerable importance in many laser applications and in thin-film waveguides. When he completes his graduate studies, he hopes to enter "an industrial environment and work on problems that exist in the area of thin films with the goal in mind of improving the state-of-the-art in this field," he said.

Mr. Greenfield, who was born January 24, 1953, is also working at the Institute of Optics, University of Rochester and hopes to remain there to complete work for the M.S. degree in optics and the M.B.A. degree in business. He expects to acquire a comprehensive background in photography at the Fine Arts Dept. of the University and his access to George Eastman House. He also expects to acquire a background in photographic science through the technically oriented courses at the University of Rochester and the Photo-Science Depts. of the Rochester Institute of Technology, and in behavioral sciences in business management, by way of the Psychology Dept. and the Graduate School of Business Management at the University of Rochester. He also hopes to study at the Center for Visual Science where he would study vision, perception, color balance and other eye-brain interaction functions stimulated by light, he said. He noted that he had not had an opportunity to explore in detail all segments of the optics curriculum and therefore had not narrowed his field of interest to a particular segment.

Correction

Century Strand Inc.'s correct address is 3411 W. El Segundo Blvd., Hawthorne, CA 90250. An erroneous address for Century Strand was given in an item (Edmond P. Hyatt has been appointed General Manager, Technical Operations . . .) which appeared on p. 560 of the July 1972 issue of the *Journal*.

The Production Team — Motion Pictures and Television presented by the Division of Cinema, University of Southern California, in cooperation with the SMPTE, is a new course planned specifically to give management, production personnel, historians and students of the media an insight into the complexities of the varied forms of production. Classes began September 20 and will continue through January 17. Classes include the showing of representative productions of feature motion pictures, television series and specials, documentaries, news specials and cartoons, followed by an in depth discussion and analysis by the production team. Course content and speakers (including the earlier ones) are: Sept. 20, The Golden Age of Motion Pictures, MGM's *Hollywood, The Dream Factory* (a glimpse into the past), William Tuttle, Moderator; Sept. 27, The Major and the Independent — screening of Russ Meyer's *Vixen*; Oct. 4, The Low Budget Feature, Russ Meyer; Oct. 11, The Animated Features — Walt Disney's *Aristocrats*, Wollie Reitherman; Oct. 18, The Animated Feature (continued), Tom Belcher, Alan Sandler; Nov. 1, 16mm Production for Theatrical Release — screening of *On Any Sunday*, Bruce Brown; Nov. 8, The Location Film — an overseas-produced episode of *I Spy*, Leon Chooluck; Nov. 15, The Multi-Screen Ultra-Wide Presentation — Disney World's *Hall of Presidents*, a stage and screen production, Jim Algar; Nov. 29, The Electronic Theatrical Feature — videotape as a feature production medium; Dec. 6, The Electronic Theatrical Feature (continued); Dec. 13, The Television Special — *The John Wayne Special*, Nick Vanhoff; Dec. 20, The Television Documentary—A Jacques Cousteau Special, Christina Friedgen; Jan. 3, The Television Series, David Victor; Jan. 10, The Feature Theatrical—1972, *The Poseidon Adventure*, Irwin Allen; Jan. 17, The Feature Theatrical (concluded).

Further information is available from Noncredit Programs, University College, Room 355 Adm. Bldg., University of Southern California, University Park, Los Angeles, CA 90007.

The Future Cable Services Subcommittee is a newly formed subcommittee of the Federal Communications Commission's Cable Technical Advisory Committee (C-TAC). Its purpose is to formulate technical standards for the transmission of cable programs originated by cable TV, two-way communications and various cable services as they develop. The data will be used by the FCC to evaluate certain cable TV standards for the public interest, according to FCC Chairman, Dean Burch. Head of the new subcommittee is Joseph L. Stern, Vice-President of Engineering for Goldmark Communications Corp. (GCC), a subsidiary of Warner Communications Inc. Mr. Stern, who is a recognized cable TV authority, formerly was Engineering Vice-President for the CBS Television Services Div. He has been with GCC since it began operations in January 1972.

The 1972 Rochester-Toronto Little Convention was held September 23 at the Holiday Inn Downtown in Rochester. H. R. McNair (left above) and R. W. Bauer (right) arranged the program and John R. Altavena, Eastman Kodak Co., 343 State St., Rochester, NY 14650, was head of the Little Convention Promotion Committee. The 1972 Little Convention was planned to give a panoramic look at the use of color films in television. The opening address was given by William Hedden, who was followed by C. C. Bard who discussed film processing and its role in facing the environmental problems of today; Rodger Ross, who spoke on the latest technology of tape-to-film transfer; Herbert Starbird, who discussed the production of network news films with examples including the Nixon-China trip; C. Bailey Neal, who explained the use of new technologies in improving color rendition on home color receivers; and Charles Ahto who described the production and distribution of TV commercials. Other topics covered included local news and documentation, CATV and 16mm productions for entertainment.

The American Film Institute and the Los Angeles County Museum of Art have arranged to provide an expanded program of film presentations at the Museum on a year-round basis. The arrangement represents a major effort to present the art and history of motion-picture film from its earliest silent days to its present day use on television. Half of the showings will be premiered at the Museum and half by the American Film Institute at the John F. Kennedy Center for the Performing Arts in Washington, D.C. The Los Angeles programs will be seen almost every weekend throughout the year. David Shepard, Programing Manager of AFI, will be in charge of developing film programs for the Museum on behalf of the Institute. The programs planned for the joint venture include a continuation of the Museum's annual Animated Film Festival that has been seen for the last seven years, plus new projects such as major retrospectives of important film directors, writers and actors, a survey of films from other countries and an historical look at television films.

At the University Film Assn.'s annual conference, held August 20–25 at the University of Washington in Seattle, announcement was made of scholarship awards for film study. McGraw-Hill Film Scholarships were awarded to Carole Rob-

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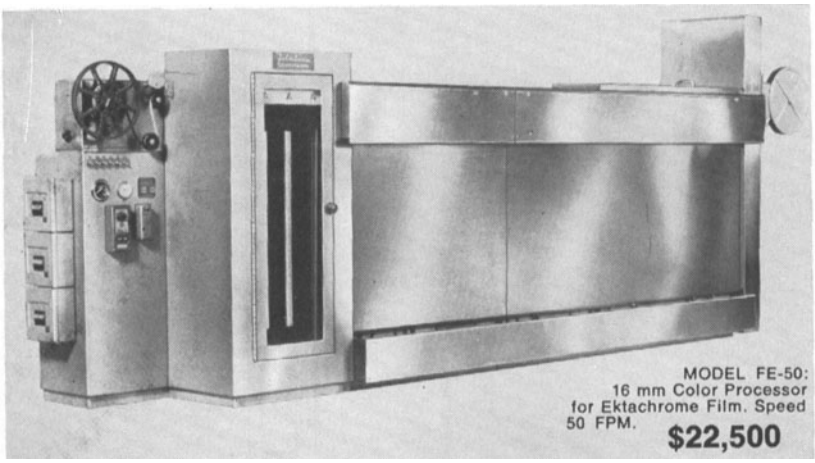

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●**"ZERO DOWN TIME"** The reputation of any film processor is only as good as its reliability. The combination of the exclusive and special added Filmline features guarantees trouble-free operation with absolute minimum down-time and without continual 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).

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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, WCPO-TV, KTAR-TV, WSYR-TV.

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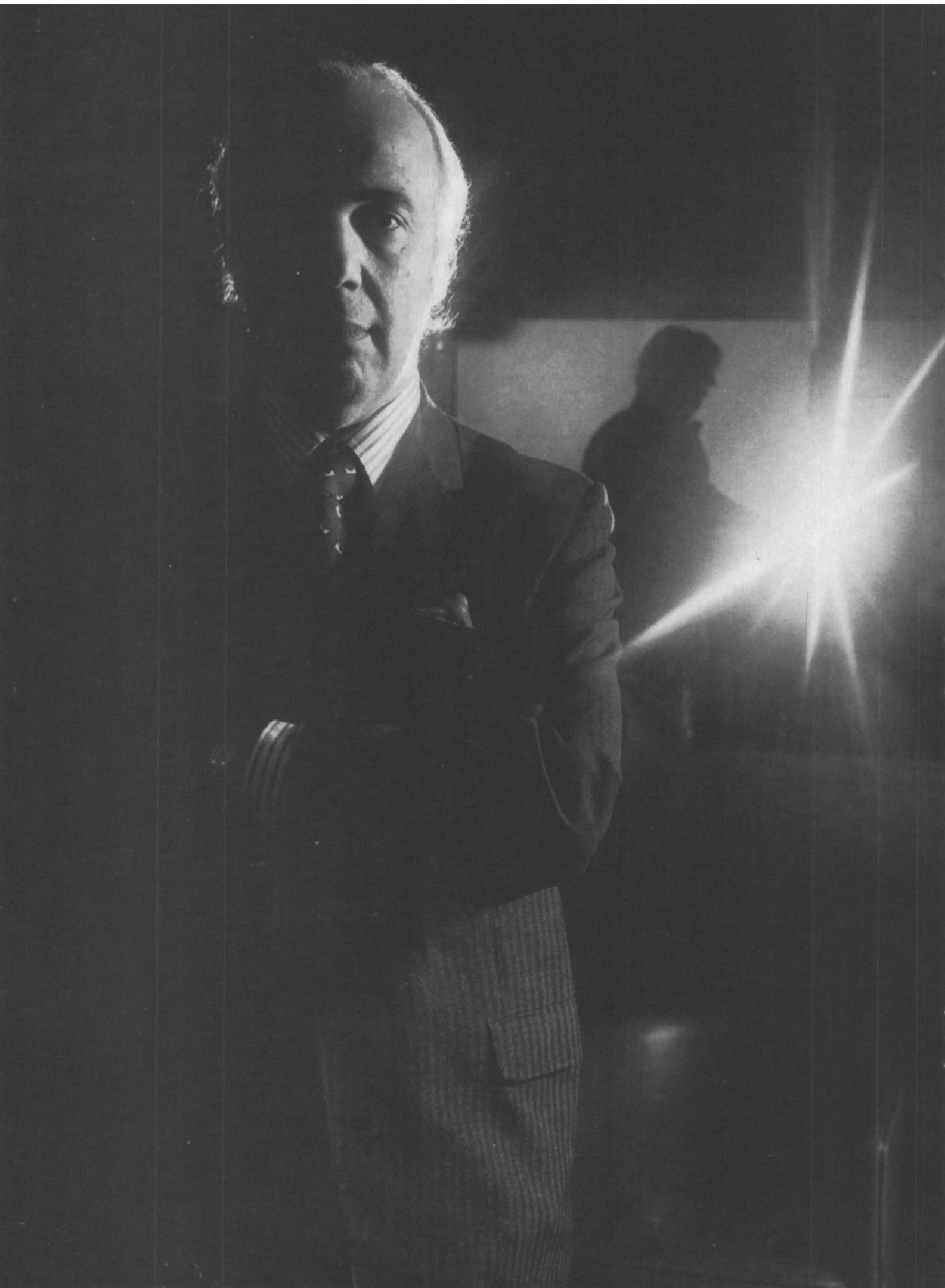


You'll be seeing a big surge in G-rated pictures.

That's just my opinion, but profits in this business come from getting people into theaters, and that means youngsters, too. Pictures with broad appeal should attract more people.

I think a film that cuts across age groups will be good for the whole industry.

That's why it makes me feel good whenever I see a new neighborhood theater opening up somewhere.

Because that helps all of us in the industry. But it also brings back our commitment to audiences to give an enjoyable few hours in those theaters. For instance, I put all my releases on Eastman print film. I know how audience enjoyment can be shattered by a film break. There's no compromise with Eastman film quality. It's part of my bargain with my exhibitor. We both know Eastman print film holds up.

erts of the University of Southern California and Mark Henricksen of Iowa State University. The University Film Association Scholarship, which is awarded particularly to encourage minority group members to consider careers in film, went to Bill Dominguez, of Philadelphia Community College. The Ken Edwards Memorial Scholarship was awarded to John Vasey of the University of Iowa. A scholarship, given by the White House News Photographers Assn., for film art and film journalism, went to Ben Levin of Temple University.

The Sixth Annual Scanning Electron Microscope Symposium sponsored by the IIT Research Institute will be held April 23-27, 1973, in Chicago. A Workshop on Electron-Specimen Interaction Theory for Scanning Electron Microscopy will be held April 23 and a Workshop on Scanning Electron Microscopy in Pathology will be held April 26-27. Topics to be covered are scanning electron microscopy instrumentation, techniques, accessories and interpretation. Further information is available from Om Johari, Director, Annual SEM Symposia, IIT Research Institute, 10 W. 35 St., Chicago, IL 60616.

The Museum of Cameras has been established at 200 Park Ave South, New York, NY 10003, by Minolta Corp., suppliers of photographic equipment. Old cameras are needed for the new museum, the company announced, and to acquire museum-worthy units, it will exchange a new camera for every old camera it accepts. An old camera, gathering dust in attic, garage, barn or basement, could be worth a new camera in exchange, the announcement stated. A drawing or snapshot of the camera should be sent to the Minolta Museum together with any available data, including the name and age of the camera.

The Audio Engineering Soc. held its 43rd annual convention September 12-15 at the Waldorf-Astoria Hotel in New York. Session topics included Magnetic Recording and Reproduction; Audio Instrumentation and Measurements; Disc Recording and Reproduction; Electronic Music; Sound Reinforcement; Quadrasonics; Audio in AM/FM/TV Broadcasting; Acoustical Noise Control; Digital Techniques in Audio; Electronics Circuitry and Signal Processing Devices; and Transducers.

Stanford Research Institute, Menlo Park, CA 94025 has announced plans for a cable television research study, entitled *The Outlook for Cable Television,* which will extend and update a 1971 report. The new study, containing 10 reports will be made available to SRI clients at a price of $2,750. A controversial study to be covered in the new study is the impact of the Federal Communication Commission's recent order opening up markets of some of the nation's largest cities to CATV. It is expected that one effect of the FCC ruling will be the growth of pay television via CATV. Other topics to be covered in the new study include government regulation, financial requirements, pay television, merchandising and advertising in CATV, multichannel microwave systems and the development of broadband communications for hotels, office complexes and educational institutions.

The Winona School of Professional Photography, Winona Lake, Ind., which is owned and operated by the Professional Photographers of America, celebrates its 50th anniversary this year. At the time of its founding in 1922 it was the first school of its kind in the country. At present it has a curriculum of some 50 courses encompassing all facets of photography. Facilities at the school have expanded from part of one building to a three-building complex with classrooms, laboratories, camera rooms and an auditorium.

RCA Institutes has been authorized by the New York State Board of Regents to confer the degree of Associate in Occupational Studies (A.O.S.) to students completing the school's Electronics Technology Program, a two-year college-level engineering technology course which stresses communications and computer technology. After completing the program, a student is qualified as an engineering technician in such fields as microwave technology, medical electronics and computer technology. In addition to the new degree status, the program is accredited by the Engineers Council for Professional Development. Credit for the course is also given at a number of colleges and universities, including Massachusetts Institute of Technology, Yale and Columbia, to RCA Institute graduates who elect to continue their education towards the baccalaureate degree.

The Index to the International Congresses on High-Speed Photography 1952-1970, compiled by Jill Wadsworth and M. W. Glover, is available from the Technology Reports Centre, Dept. of Trade and Industry, Orpington, Kent BR5 3RF, England. The price is £1.50 in the United Kingdom and £2 for buyers from other countries. Some 800 papers, presented at the nine international congresses and published in the nine *Proceedings,* have been indexed by author and by title. Each paper is listed with full bibliographical information. Where the titles are not entirely indicative of the content of a paper, brief abstracts are given. An extensive subject index is provided and a list of the organizations represented at the congresses is given. The *Index* ($8\frac{1}{2}$ by 12 in) contains 158 pages.

The *Proceedings* of the nine international congresses on high-speed photography are listed (with bibliographical information) in the *List of SMPTE Publications,* available upon request from SMPTE Headquarters at 862 Scarsdale Ave., Scarsdale, NY 10583. The *Proceedings* of the First and the Ninth International Congresses are available from SMPTE. The *Proceedings* of the Second through the Eighth Congresses are available from the publishers (full information is given in the *List of SMPTE Publications*) with the exception of the *Proceedings* of the Fifth International Congress which are available on microfilm and also as xerographic reprints from University Microfilms, Inc., 313 N. First St., Ann Arbor, MI 48106, priced at $23.45. It should be ordered as SOC M PIC & TV ENGS OP 4231 V5.

The *Proceedings of the First International Congress on High-Speed Photography* (a Symposium, organized by John Waddell, held at the 72nd SMPTE Conference, October 1952, in Washington, D.C.) is available at a price of $4.50. The papers (all on high-speed photography available at the time the book was printed) are in English. The book contains 359 pages.

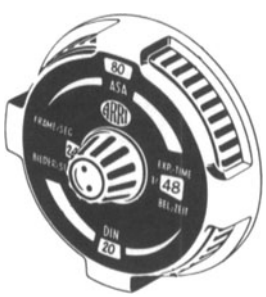
The *Proceedings of the Ninth International Congress on High-Speed Photography* (held August 1970 in Denver) contains 107 papers (in English) with abstracts in English, French and German. It is priced at $40. The book contains 605 pages.

An electronic numbering system, now under development, which uses crystal-controlled clocks about the size of cigarette lighters and is expected to replace the clapstick, has been announced by the Assn. of Motion Picture and Television Producers, 8480 Beverly Blvd., Hollywood, CA 90048. The system uses a time code which will be printed on each frame of film and on the sound recording tape. The Sound Committee of AMPTP's Research Center is developing a standard time code to be followed by equipment manufacturers. It will be possible to adapt the new system to any crystal-controlled sound recorder and camera currently in use. The system consists of small, crystal-controlled clocks which are started simultaneously and attached to the tape recorder and camera. The two clocks, running at precisely the same speed, record on the tape and on the film the date, hour, minute, second and 1/24 second (since there are 24 frames per second). This information is printed in the time code which is read by machine. The editor, or sound man, by twisting a dial can get automatic synchronization of film and tape at any point in the take, not only at the start mark. Since both camera and tape recorder clocks run at precisely the same speed and record precisely the same time, there will no longer be any need for a clapstick to cue start marks. Announcement of the new system was made by Billy H. Hunt, AMPTP Executive Vice-President, Wilton R. Holm, Executive Director of the AMPTP Research Center and Petro Vlahos, Chief Scientist.

The Agfa-Gevaert Group — structure, history and achievements — is described in a folder printed in Belgium for Agfa-Gevaert N.V., B-2510 Mortsel, Belgium. The Group was formed in 1964 and consists of two operating companies; the German Agfa-Gevaert AG and the Gevaert Photo-Producten N.V. each have a 50 per cent interest. The same officers are on both Boards of Management and there is one President — Dr. Hendrik Cappuyns. Agfa-Gevaert products are manufactured in 29 factories. Most of them are in Belgium, Germany, France and Spain. Outside of Europe there are factories in Argentina, Brazil, India and the United States. The manufacture of photochemical products is concentrated in Mortsel-Antwerp in Belgium and in Leverkusen in Germany. Cameras and processing labora-

Arri 16BL's APEC: Does the pro *need* a built-in meter?

With your eye at the eyepiece, you can frame, focus *and* set the f stop. Accurately — and fast. It could save the shot.



Sceptics were dubious in the beginning. "No substitute for a hand-held incident reading," they said. For lighting a set, we agree. No contest.

But in documentary situations, there's clearly nothing better than a meter set behind the lens. Because it tells you *precisely* how much reflected light is getting to the film.

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No! APEC reads a central area of the frame — about one-third of the full aperture, regardless of focal length. If you zoom in to 120mm, for example, you get a closeup reading of 3 degrees. (See the photo on the next page: the dotted line shows the measured area.)

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Frame your subject, and focus. Then center the APEC needle, by turning the f stop ring. That's all! And all with your eye at the finder. You take the reading and set the stop *all in one movement.*

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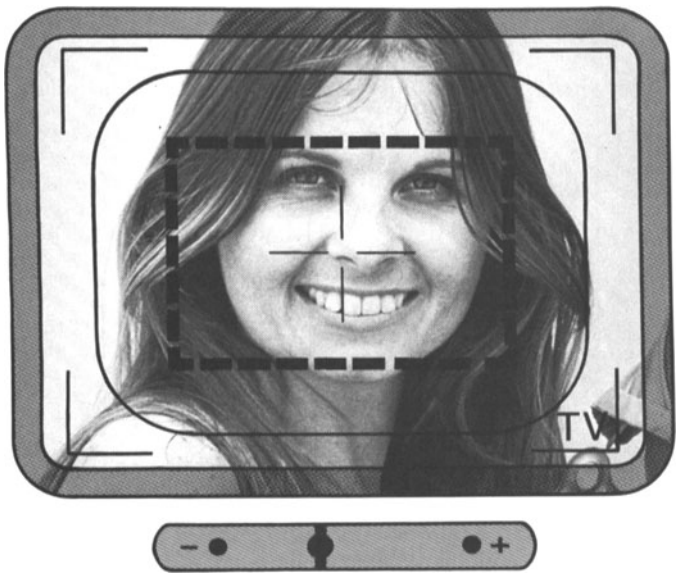
Zooming in for an APEC reading is a lot faster than walking onto the set, of course. And sometimes it's not easy to *get* there. Shooting surgery, for example; or wildlife. Or a speaker at the podium.



See the reading during the shot

The needle is visible just below the image area, as you can see above. If the action moves from shade to sunlight, you can ride the f stop. (APEC is manual, of course — not automatic.) And this is a noteworthy fact: Some APEC users have gotten *one-light release prints!*

Three cogent facts about APEC

1. Image quality is not affected. APEC takes its reading off the mirror shutter. There's nothing to obstruct the light path to the film.

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3. Easily installed in most 16BLs. The APEC system is mounted in the 16BL's door. If your serial number is 50701 or higher, you can have a new door fitted, with APEC built in.

APEC AT WORK:

Arena staff changed lighting without any warning — in mid shot!

Shooting a Jesus Movement rally at the Los Angeles Sports Arena, film-maker Roger Boller arranged the light levels ahead of time with the arena's staff. And before the crowd arrived, he took hand-held readings at various points in the stadium.

But when the rally began, its producers repeatedly lowered the lights for prayers, and raised them at dramatic moments, without warning — often in mid-shot! Mr. Boller just had to follow it from camera position with his APEC meter. *Every foot was perfectly exposed.*

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FOR FREE BROCHURES ON OUR 16MM AND 35MM CAMERAS, WRITE TO ARRIFLEX COMPANY AT P.O. BOX 1050, WOODSIDE, N.Y. 11377; OR AT 1011 CHESTNUT ST., BURBANK, CALIF. 91502.

tory equipments are manufactured in the Munich factory.

Agfa-Gevaert history began in 1867 when a dye factory was founded at Rummelsburger See, near Berlin. In 1873 the factory was named Aktiengesellschaft für Anilinfabrikation. The Belgian company was formed in 1890 when Lieven Gevaert started the manufacture of calcium paper at Antwerp. In 1894, the optician Rietzschel established his Optische Anstalt in Munich — the precursor of the present camera factory. In 1908, the Agfa film factory was established at Wolfen (now in the German Democratic Republic—it was abandoned after World War II). The Antwerp factory had had an era of great expansion and in 1920 its name was changed to Gevaert Photo-Producten N.V. That same year the factory started production of celluloid and three years later it started producing motion-picture film. Agfacolor, a pioneer subtractive process for color photography, was developed in 1936 and in 1940 the first Agfacolor feature film was shown. The Agfa AG für Photofabrikation was established in Leverkusen following abandonment of the factories at Wolfen. Prior to formation of the Agfa-Gevaert Group in 1964, Agfa AG (formed by the merger in 1957 of the Leverkusen plant and Agfa Camera-Werk AG in Munich) had acquired Perutz Photowerke; Leonar-Werke; Mimosa; Chemische Fabrik Vaihingen and Gelatinefabrik, vorm., Koepff & Söhne. At present The Agfa-Gevaert Group has its own subsidiaries in 23 countries. Independent firms act as distributors in 120 countries spread over five continents.

A complete (13-vol) set of NICEM indexes to non-book media has been announced by the University of Southern California's National Information Center for Educational Media, University Park, Los Angeles, CA 90007. The entire set contains more than 250,000 entries. The entries are arranged alphabetically and are annotated and fully described. The subject section of each index has been substantially expanded. Volumes included in the set are: *Index to 16mm Educational Films* (2 vol); *Index to 35mm Filmstrips* (2 vol); *Index to Educational Audio Tapes; Index to Educational Videotapes; Index to Educational Records; Index to 8mm Motion Cartridges; Index to Educational Overhead Transparencies; Index to Vocational and Technical Education-Multimedia; Index to Psychology-Multimedia; Index to Health and Safety Education-Multimedia;* and *Index to Producers and Distributors.* Prices of the 11 indexes range from $18.50 to $79.50 (slightly higher outside the United States and Canada).

Current Papers in Physics, published every two weeks by INSPEC (The Institution of Electrical Engineers (London) in association with the American Institute of Physics), contains information on the contents of journals from 47 nations. Included are titles and bibliographic details of the original publications. The information includes authors and affiliations, original language, source journal and nation and translation journal. In addition to journals, books, conference proceedings, dissertations, technical reports, patents and technical processes are covered. Subscrip-

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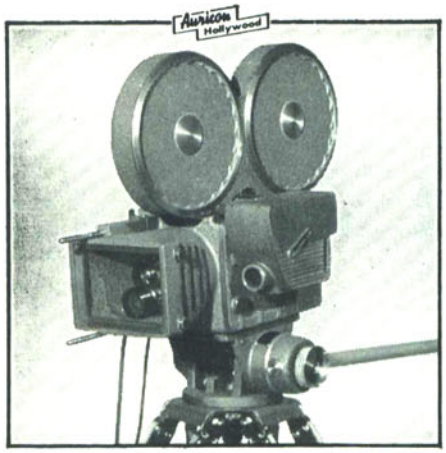

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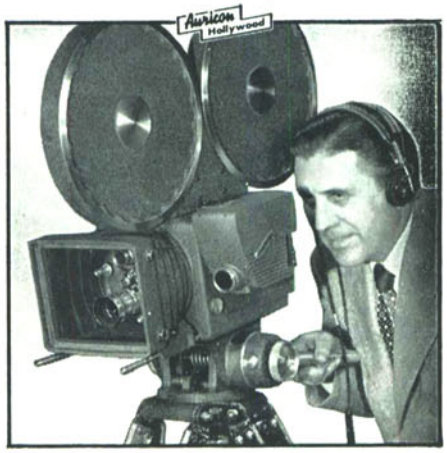

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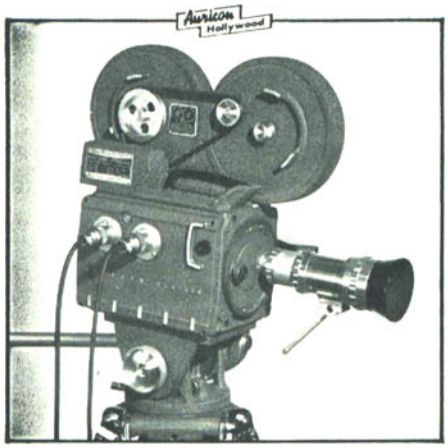

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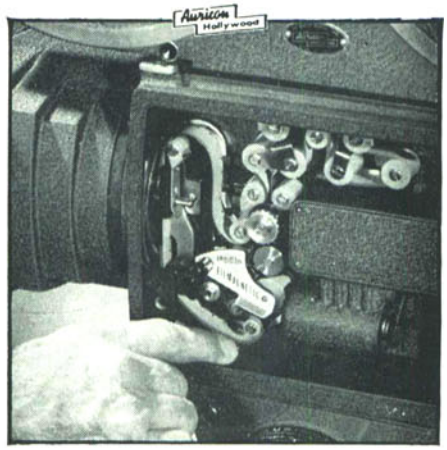

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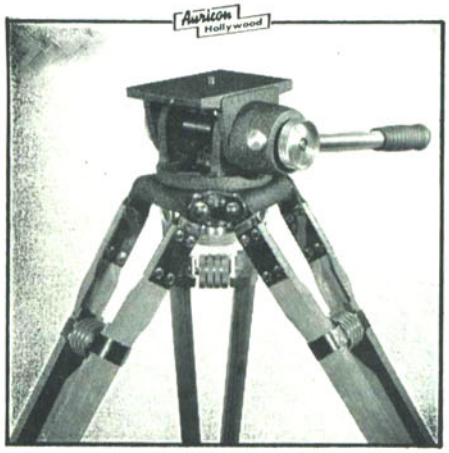

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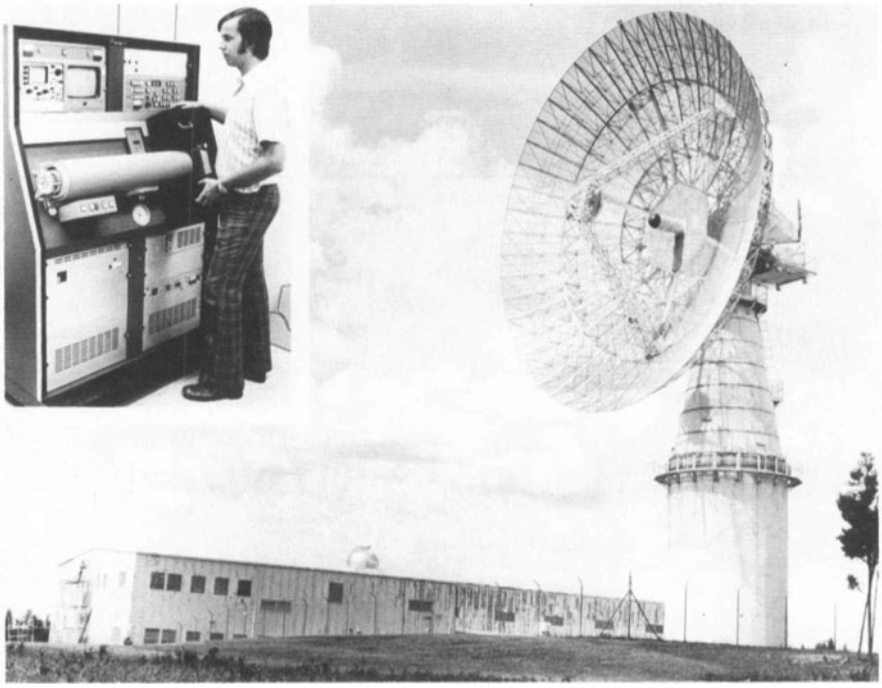
Physics Abstracts is also published every two weeks by INSPEC. For this publication, 1800 journals, 2500 theses, 4000 reports, 3000 patents, 300 books and 500 conference proceedings are scanned for relevant items; 120 physics journals are completely abstracted and classified. The yearly subscription is $290.

Subscriptions and further information on these and other INSPEC publications are available from American Institute of Physics, 335 E. 45 St., New York, NY 10017.

Engineering Index, Inc., United Engineering Center, 345 E. 47 St., New York, NY 10017, has announced that a newly instituted computerized production system will be in operation in 1973 resulting in a greatly increased coverage of engineering literature and conferences. Other improvements will include a substantial reduction in the time required for the production of abstracts and other items and also in a better appearance of the *Engineering Index*. Some rate increases have also been announced. *The Engineering Index Annual (1972)* is now priced at $275. *The Engineering Index Monthly (1973)* (12 issues) is priced at $540. A combination subscription (*1972 Annual* and *1973 Monthly*) is priced at $650. Engineering Index, Inc., offers a number of other services including Card-A-Lert, which supplies specialized information weekly on 3 × 5 file cards.

The Bell System Technical Journal marked its 50th anniversary with its July/August 1972 issue. The first issue (July 1922) announced that the new journal would include a range of subjects "as broad as the science and technique of electrical communications itself." During the years it has recorded such important advances as the discovery of the transistor effect and, more recently, has had articles on such subjects as charge-coupled devices, magnetic bubbles, miniature crystal lasers, the beginnings of optical integrated circuits and low-loss optical fibers. During the 50 years it has been in existence, the journal has published some 2,500 technical articles. In the first three decades (1922–1952) it averaged 20 articles a year. During the next 10 years it averaged 50 articles a year and since 1962 it has averaged 150 articles a year. It is available from American Telephone and Telegraph Co., Room 2312C, 195 Broadway, New York, NY 10007 at $10.00 a year or $1.25 for single copies. Foreign postage is $1.00 a year and 15 cents for single copies.

An anamorphic companion lens to the Canon spherical zoom-varifocal lens (*Journal*, p. 122, Feb. 1971; p. 322 June, 1971) is being built by Canon, Inc., of Japan to specifications of the Research Center of the Assn. of Motion Picture and Television Producers, 8480 Beverly Blvd., Hollywood, CA 90048. The new lens may be completed early in 1973, it was announced by Wilton R. Holm, Executive Director of the Research Center. The spherical lens has been used as the sole lens on some feature productions, Mr. Holm said, noting that the new anamorphic lens "should be a great aid to shooting for wide-screen projection."



A 3M electron-beam recorder (EBR), developed by 3M Company at its Mincom Division facilities in Camarillo, Calif., (inset above) is used to produce negatives of space photographs of the Canadian land mass from television signals received at the Canadian Earth Resources Technology Satellite (ERTS) station (above) in Prince Albert, Saskatchewan. High-resolution TV cameras aboard the satellite, which was launched in July, take pictures of the earth at 25-s intervals, producing 1,300 still photographs daily, each covering a 115-mi² area. The television pictures of the Canadian land mass are relayed to the Prince Albert ground station where the electronic impulses are recorded on videotape. The tape is flown to the Canadian Center for Remote Sensing in Ottawa where the video recordings are converted to 70mm film by the electron-beam recorder.

TeleMation, Inc., has announced its fall-winter schedule of television production seminars. Two-day seminars for beginners are followed immediately by two-day advanced seminars. Seminars will be held in Anchorage, Alaska, beginning October 3; Honolulu, Hawaii, October 10; Atlanta, Ga., October 24; Chicago, Ill., November 14; Salt Lake City, Utah, December 5; Dallas, Tex., January 16; and Norwalk, Conn., January 30. Further information is available from TeleMation Training Manager, Richard L. Williams, P.O. Box 15068, Salt Lake City, UT 84115.

The CATV Operation of GTE Sylvania Inc., will construct a 228-mi cable TV transmission system in Pasadena, Tex. (a suburb of Houston), for Pasadena CATV Inc. and will also install cable TV transmission systems in Ann Arbor, Ypsilanti, Pittsfield Township and other areas of Washtenaw County, Mich., for the Michigan Cable-TV Associates. The Sylvania system utilizes modular design concepts providing bi-directional capability which allows future expansion to two-way transmission if desired.

Poly-Tek Enterprises, a new firm offering a wide range of marketing services, has been announced by Charles Lipow, one of the leading principals. Located at 139 S. Beverly Dr., Beverly Hills, CA 90212, services of the new firm will include marketing consultation, sales promotion, advertising and public relations, primarily for the motion-picture industry. Mr. Lipow has developed marketing, sales promotion, advertising and public relations programs for Hervic Corp./Cinema Beaulieu, Berkey Colortran, Camera Mart, and others.

The Kinax Mobile Color Film Processing Laboratory, designed and built by Kinax Wilhelm Ax KG, 634 Dillenburg, Germany, was used during the Olympic Games at Kiel to process films of the sailing contests. The laboratory is contained in a van. In addition to the processing machine, there are facilities for chemical supervision and sensitometric control of the different processes. Kodak films Commercial Type 7252 and EF Type 7241 can be developed at a rate of 900 m/h. A special service was provided at Kiel—that of re-recording synchro-pilot to 16mm tape.

Derann Film Services Ltd., Dudley, Worcs, England, an 8mm motion-picture film library, has installed its own sound dubbing plant containing a new Leevers-Rich Series F copying machine. The firm specializes in supplying full-length 8mm feature films for amateur projectionists. Derann Film Services buys the copyright and releases as many as 24 films a year, ranging from such classics as *Long John Silver* to a film of the Apollo moon landings. Before the firm installed its own sound dubbing plant the sound quality of the films had not always been satisfactory. However, the announcement stated, since installation of the Leevers-Rich machine criticisms have become rare. The machine

is of the type used for 35mm and 16mm copying work but built to copy from a 16mm magnetic master onto two 8mm magnetic striped films running at twice the playing speed. The master is recorded from the optical soundtrack of the 16mm film, supplied by the copyright holders, onto a 16mm full-width coated tape. In addition to dubbing the films the firm sells or rents, it also supplies a dubbing service to other studios.

Optical Coating Laboratory, Santa Rosa, Calif., has appointed Heinecke Corp., Sudbury, Mass., as its representative on the Northeast Seaboard for its line of thin film optical coatings and related components. Heinecke Corp. represents other companies in the electrooptical industry. The firm supplies optics, filters, coatings, photo-type setting lenses and photooptical readers.

An all-solid-state color television camera using three tiny charge-coupled devices (CCD) as image sensors rather than the vacuum-tube and electron-beam-scanning system of existing color cameras has been designed and operated at Bell Telephone Laboratories, Mountain Ave., Murray Hill, NJ 07974. The CCD is a new type of silicon electronic device invented at Bell Laboratories in 1970. The charge-coupled semiconductor principle makes it possible to use simple devices to perform electronic functions usually requiring complex integrated circuitry (*Journal*, p. 520, June 1971).

The camera, which measures 8 × 9 × 5 in, can be further reduced in size and weight, the announcement stated. As with conventional tube cameras, light, from the scene to be televised, is split into red, blue and green images by a prism. Each primary color is focused on one CCD sensor; the image is converted into an electrical charge pattern by the sensor and this charge pattern is then read out as a video signal. The CCDs in the Bell Laboratories camera measure 4mm × 5mm. The camera overcomes difficulties of picture alignment and registration. Color fringing, caused by alignment problems and by electronic "lag" in camera tubes of existing cameras, is avoided through use of the new CCD device. CCD cameras have not yet reached the resolution capability required for commercial television applications because current integrated circuit fabrication processes are not, at present, able to routinely make devices large enough for the purpose. However, Bell Laboratories engineers expect that such processing techniques will soon be sufficiently improved to make CCD technology available for practical video systems.

The Siemens portable 16mm projectors are no longer in production, it was announced by Kingsway Film Equipment Ltd., 821 Kipling Ave., Toronto 18, Ont., Can. The projectors will be replaced by the Bauer P6 line for both single and double system projectors. The firm handles Siemens parts and service in addition to Bauer P6 sales.

Modern Video Center, Modern Talking Picture Service, Inc., 4 Nevada Dr., Lake Success, NY 11040, has announced the availability of 40 color programs on a free-loan basis for use on U-Matic type videocassette systems. The programs cover such subjects as sports, travel, home economics and ecology and range in length from 10 to 30 min. Each program is sponsored by a company or organization as part of its public information program.

Rodel Audio, 1028 33rd St., N.W., Washington, D.C., has announced an expansion program involving the construction of an additional recording studio designed specifically for quadraphonic sound. Plans for the new quadraphonic 5,000 ft² studio have been drawn up and construction is expected. The announcement was made by Nelson Funk, newly elected President. Del Ankers, formerly President, is now Chairman of the Board.

Robert Craver has been appointed to head the Video Dept. of Byron Motion Pictures, Inc., 65 K St., N.E., Washington, DC 20002. He is a television industry consultant and has held positions with NBC, WCBS-TV, WOR-TV and Transmedia International. Byron Motion Picture's Video Dept. offers production services and duplication in the professional 2-in quadruplex and ¾-in Sony videocassette fields. It is equipped with Ampex high-speed duplicating, computer videotape editing and the new ¾-in Sony videotape duplication.

John M. McDonough has been appointed Director, Motion Picture Film Product Planning for the Pacific Southern Region of the Motion Picture and Education Markets Div. of Eastman Kodak Co., and **John M. Waner** has been appointed District Sales Manager. Mr. McDonough will be responsible for overall product planning activities in the field of professional motion pictures. Mr. Waner will coordinate marketing activities of a team of sales and engineering representatives. Both men are Fellows of the SMPTE and both have contributed to the Society's Papers Programs operations. Mr. Waner served as a Regional Papers Chairman, contributing particularly to the 94th Conference held in Boston; he was also a Topic Chairman and was Program Chairman for the 95th Conference held in Los Angeles. He was awarded the Herbert T. Kalmus Gold Medal Award in 1967 for contributions in "achieving greater quality, consistency and usefulness of color motion-picture film."

Anthony J. Loeb has been appointed Chairman of the Motion Picture Dept. of Columbia College, Chicago, 540 N. Lake Shore Dr., Chicago, IL 60611. He succeeds Robert Edmonds who has retired from the post to devote all his energies to teaching. Mr. Loeb was formerly with the United States Information Agency as Special Assistant to the Director of the Motion Picture and Television Service, in charge of the Young America Series. The successful program of low-budget films by new directors, some of them recent graduates from university film schools, led to the formation of The American Film Institute.

Mr. Edmonds, the retiring Chairman, has been producer, director, cinematographer and editor of more than 200 films and 300 TV commercials. Due to his efforts, Columbia College's Motion Picture Dept.

AN OPEN LETTER TO THE MOTION PICTURE AND TV NEWS INDUSTRY:

The new Cinecraft International Inc., of Moonachie, New Jersey, has recently been formed to reflect the vital and growing need within the motion picture industry for faster, better and more reliable equipment sales and service. I was named President of the organization and William "Bill" Allen and Jesus Acosta have been named Vice President Engineering and Vice President Electronic Service Division respectively. As you probably know these most highly experienced officers have, for many years, been closely associated in similar positions with a well-known international supplier of professional motion picture equipment. The export division is headed by Gilda Negron who is also known internationally in import and export circles.

The new and modern facility, located in the Moonachie Industrial Park in Moonachie, New Jersey, in the heart of the new Meadowlands Sports Complex, is only 25 minutes from the midtown Manhattan center of the motion picture industry. In addition to up-to-date offices and showrooms, the new facility will have ample servicing and warehousing space for the handling of a complete line of professional motion picture and related TV equipment.

Revolutionary changes in the motion picture and TV industry have necessitated the emphasis on light weight portable equipment, automation, sophisticated electronic controls, surveillance systems and similar equipment. These changes, together with today's need for speed and production, have guided our new company's planning and philosophy. We intend to assist our customers in selecting products best suited for their needs and to furnish these requirements at competitive prices. Efficient, fast, and reliable service is as important as the selection of the proper equipment, and both Bill Allen and Jesus Acosta are tops in that department. And, we guarantee to service what we sell.

We have a complete range of equipment and services. The next time you need motion picture equipment or service give us a call. We'll be delighted to hear from you. Do contact us soon.

Sincerely yours,

Dom Capano

CINECRAFT INTERNATIONAL INC.

CINECRAFT INTERNATIONAL, Inc.

11 Caesar Place, Moonachie, N.J. 07074 ▫ (201) 939-0876

International Headquarters for Motion Picture & TV Equipment

has greatly expanded since 1967 when he was the only full time instructor for 12 students.

Grand River Cable TV Ltd., 48 Preston St., Kitchener, Ont., Can., which broadcasts on Community Channel 12 from Kitchener, has completed a 30-min documentary program on Oktoberfest for K-W Oktoberfest Inc. and has begun distribution to cable television systems in Canada and in the northern and eastern United States, it was announced by David Battle, Producer/Director. This is the first attempt by a Canadian cable television company at major distribution in Canada and the United States, the announcement stated. It was noted that there are 361 cable outlets in Canada from coast to coast.

M. J. McGovern has been appointed Vice-President of Sales for Macbeth Sales Corp., a subsidiary of Kollmorgen Corp., Box 950, Newburgh, NY 12550, and Dane S. Denick has been appointed Sales Engineer. Mr. McGovern has been with the firm since 1969, first as Sales Engineer and later as General Manager. Macbeth Sales Corp. is the exclusive distributor of OSRAM xenon lamps in the United States.

S. N. Agarwal of Cinerama Private Ltd., Bombay, India, has been appointed representative in India for Alan Gordon Enterprises, 5362 N. Cahuenga Blvd., North Hollywood, CA 91601. He will be the firm's exclusive agent in India for professional motion-picture equipment sales and rentals.

Adrian B. Ettlinger has been appointed a special consultant on new technology to the National Board of the Directors Guild of America, 7950 Sunset Blvd., Los Angeles, CA 90046. He was formerly Associate Director of Technical Development for the CBS Television Network, where he was involved in the development of the CBS computerized lighting control system. (The system is described in the April 1972 issue of the *Journal* in a paper by Mr. Ettlinger and Salvatore J. Bonsignore.) Mr. Ettlinger is also responsible for the first stop-action video disc recorder, among other inventions and developments. (The recorder is described in the November 1966 issue of the *Journal* in a paper by Mr. Ettlinger and P. E. Fish.) Since 1970, Mr. Ettlinger has been President of AutoCue Corp., Hastings-on-Hudson, N.Y.

Hank Maynard has been appointed Chief Engineer of Research and Development and Fernando da Costa has been appointed Export Manager for TeleMation, Inc., P.O. Box 15068, Salt Lake City, Utah 84115. Mr. Maynard was formerly with RCA Corp. as senior engineer and group leader in television. In his new post he will be responsible for the development of new products for TeleMation. Mr. da Costa, a native of Portugal, will be responsible for home office marketing support activities for the international marketing arm of TeleMation, Inc.

Frank E. Pontius has been appointed National Vice-President of Theater and Recording Equipment of the Westrex Div. of Litton Industries, 360 N. Crescent Dr., Beverly Hills, CA 90210. Mr. Pontius joined Westrex in 1952 as a design engineer. Since then he has held various sales and marketing positions with the division. In his new post he will direct an expanded effort in the marketing and engineering of Westrex theater projection and sound equipment as well as recording equipment.

Anthony Guarco, who recently retired as Assistant Acting Director of the United States Information Agency, has joined Capital Film Laboratories, Inc., 470 E St., S.W., Washington, DC 20024. At USIA he served as Acting Director of the Motion Picture and Television Service and in 1968 received the USIA Distinguished Honor Award, the highest award the agency can bestow. His responsibilities with Capital Film Laboratories will be in the fields of management and customer relations covering both the home office in Washington, D.C., and the Florida branch office in Miami. Mr. Guarco will work directly with Capital's President, Peter Boyko, and Vice-President, William N. Brooks.

Avcom Div. of The Film Center Inc., 915 Twelfth St. N.W., Washington, DC 20005, which celebrated its 25th anniversary this year, has announced three new appointments to its executive staff. Doon Yee has been appointed Manager of Avcom. He has been with the firm three years. Craig McIntyre has been appointed Assistant Manager and Ron Jones has been appointed Director of Sales.