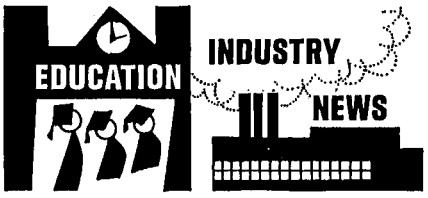


A joint seminar on Technologies in the Laboratory Handling of Motion Picture and Other Long Films, co-sponsored by the SMPTE and the Society of Photographic Scientists and Engineers will be held in New York on March 18 and 19. This seminar is a repeat of one held in Los Angeles in November. Further information is available from Raymond A. Eynard, SPSE Public Relations Chairman, P.O. Box 2001, Teterboro, NJ 07608.

A film seminar, conducted by Temple University's School of Communications and Theater, will be held July 5 – Aug. 13 in London, England. The seminar will be conducted in association with the British Film Institute which will make available the library, film archive and research department maintained at its London offices to participants of the seminar. British film directors, writers, actors, archivists and government officials will give lectures and preside over discussions. The program will include field trips to film studios, archives, museums and government offices. Professors in charge of the seminar will be Raymond Fielding, Professor of Communications at Temple University; and Kenneth Adams, Overseas Visitor to Temple University and former Head of British Broadcasting Corp.'s Television Service. Further information is available from Dr. Raymond Fielding, School of Communications and Theater, Temple University, Philadelphia, PA 19122.

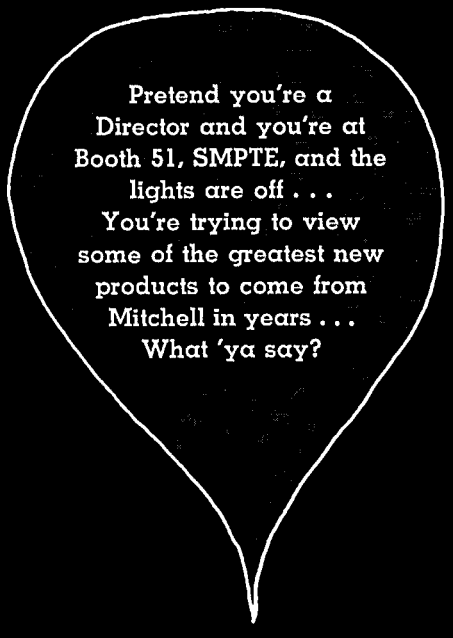
The Biological Photographic Assn., in cooperation with the Rochester Institute of Technology's School of Photographic Arts and Sciences, will hold a workshop course in Biomedical Photography June 14–19 on the RIT campus. Lectures, demonstrations and "hands-on" workshops will be conducted in the new studios, darkrooms and classrooms of the school. All categories of the B.P.A. examination for certification as Registered Biological Photographer will be covered, including color, patient photography, photomicrography and medical motion-picture techniques. Further information is available from Percy W. Brooks, Cornell University Medical College, 1300 York Ave., New York, NY 10021.

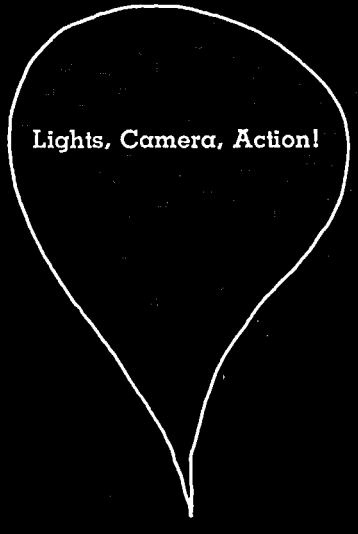
The University of Illinois at Urbana-Champaign, Ill., owns more than 70,000 documents concerning Joseph T. Tykociner who joined the U. of I. faculty in 1921 and died in 1969 at the age of 91. Prof. Tykociner was born in Vlaclavek, Poland, in 1877 and he became a pioneer on two continents in wireless, electronics, sound movies and a new science of research which he named zetetics. He retired in 1948 but in 1965, at the age of 84, he came out of retirement to teach this new science which he described as the collection and systemization of "all information about research activities, including creative processes, with the view of extending that knowledge which leads to discoveries, inventions and the solution of human problems." He continued to teach the subject to the time of his death.

Some of his work in sound is described in a paper which appeared in the *SMPE Transactions* of May 1923, "Photographic Recording and Photoelectric Reproduction of Sound" by J. Tykocinski-Tykociner. His work was evaluated by Joseph E. Aiken and John B. McCullough in the August 1958 issue of the *Journal* ("Joseph T. Tykociner; Pioneer in Sound Recording" by McCullough and "Technical Notes and Reminiscences on the Presentation of Tykociner's Sound Picture Contributions" by Aiken). Mr. Aiken had been personally associated with Prof. Tykociner at the University of Illinois in 1921 and 1922. The obituaries of both men appeared in the November 1969 issue of the *Journal* (pp. 1024–1026).

Other items on the work of Prof. Tykociner appear in the May 1964 and October 1964 issues of the *Journal.*

The Pacific Film Archive, part of the new University Art Museum at Berkeley, CA 94720, opened January 22. The Archive





MITCHELL

666 W. Harvard Street, Glendale, California 91209 (213) 245-1085

contains a theater, a Film Study Center and storage and preservation facilities. The 200-seat theater is equipped with custom-built projectors with variable-speed controls for both 16mm and 35mm which can show silent films at the original 16 to 24 frames/s. The Film Study Center will make the special study collection available without charge to historians, teachers, filmmakers and film students. It is designed as a prototype for a national network of regional film study centers. The storage and preservation has begun with a collection of about 600 prints. Plans include additional areas for storage and off-campus vaults for films on nitrate stock.

A professional development program for educational broadcasters which includes courses in the areas of management, instructional design, television production and engineering is being conducted by the National Association of Educational Broadcasters (NAEB), 1346 Connecticut Ave., N.W., Washington, DC 20036. The courses are held in a number of locations throughout the United States. Basic Principles of Supervisor Management will be held in New Orleans April 2–5 and in San Francisco April 12–15. A course in Operation and Maintenance of Helical Scan Videotape Recorders will be held in San Francisco April 12–15. A course in Legal Issues for Management was held in Washington, D.C., and in San Diego in February. A course in Instructional Design will be held in Des Moines, Ia., Mar. 28–Apr. 2 and in Sacramento, Calif., April 18–23. Schedule for a two-day course in Remote Lighting Procedures for Television has not been announced. Additional information about the program is available from NAEB.

Contemporary Optics, a summer program for professional scientists and engineers, to be held July 26–Aug. 6, has been announced by the Institute of Optics, University of Rochester. The course will cover Fourier optics, quantum optics, instrumental optics and physical optics at an introductory graduate level. It is designed as a refresher course for professional men and women whose optical training needs to keep pace with recent developments and as an intensive cram course for those who may lack an extensive background in optics but whose work requires them to interact with optical scientists and engineers. Further information is available by writing to Contemporary Optics, The Institute of Optics, University of Rochester, Rochester, NY 14627.

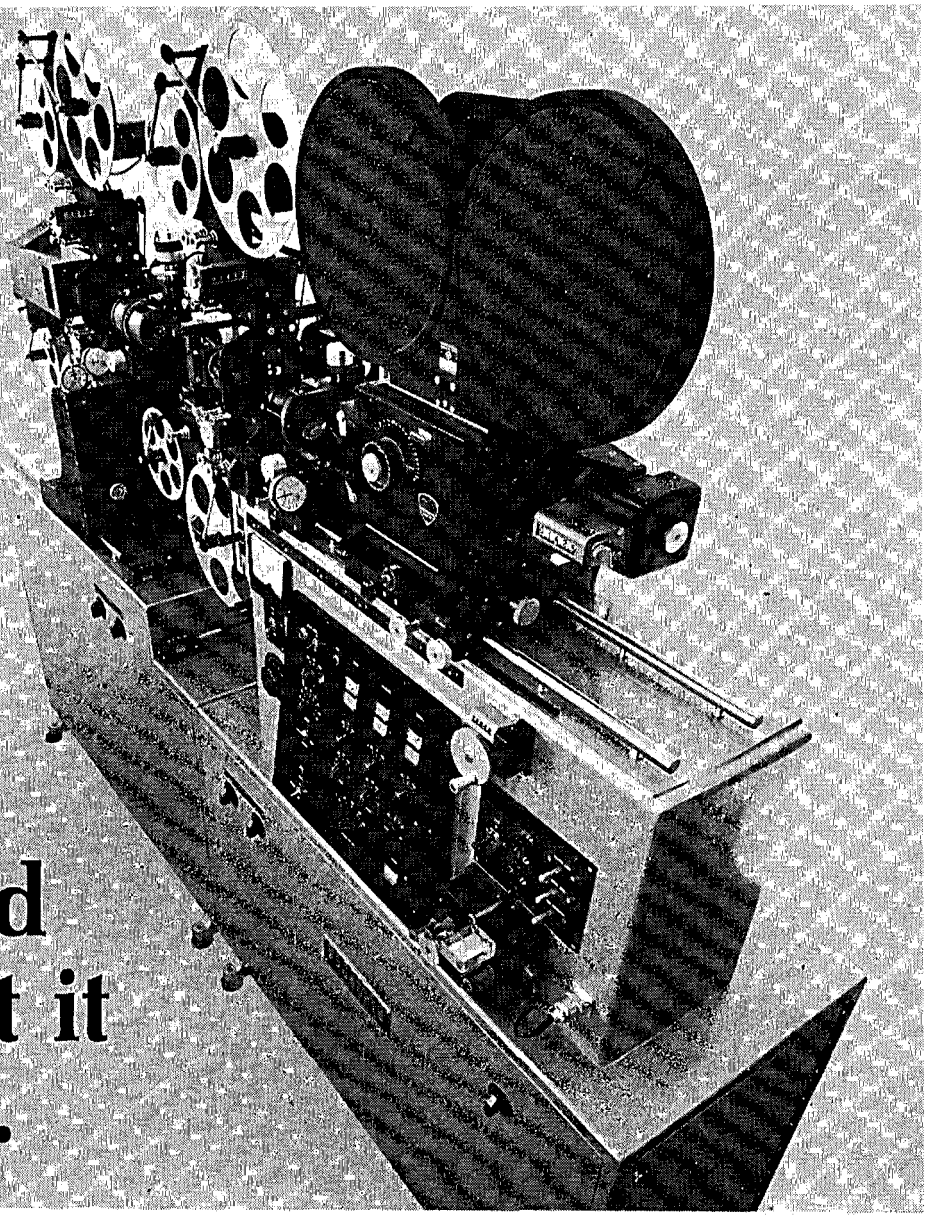
The Optical Communications Link (OCL), a system that converts television signals to light near the infrared part of the spectrum, will be used to transmit television signals to homes within a city, it was announced by University Instruments Corp., Boulder, Colo. OCL can be used to transmit TV signals where cable costs are prohibitive, microwave channels not available or improved reception required, the announcement stated. Present systems have a range of up to six miles and repeaters can extend this range.

The announcement also noted that a CATV company is using the OCL system to feed a microwave antenna on top of a mountain, thus eliminating the need for stringing wires up the side of the mountain or establishing complex microwave stations to relay the signal. No FCC licensing is required since the OCL system does not operate in the overcrowded portions of the electromagnetic spectrum.

Use of light beams in a data-transmitting system was developed at the University of Colorado to connect the Engineering Research Center on the campus with the Computing Center about 3,000 ft distant (*Journal*, p. 138, Feb. 1970).

An optical modulator that impresses one billion bits of information (a gigabit) per second over a laser beam has been developed at Bell Telephone Laboratories. Through the use of high-speed circuits, information streams can be electrically multiplexed prior to impressing them onto a laser beam. The high-speed circuits used in the new device are comprised of four transistorized switches or gates, fabricated in microstrips of thin film. Four different pulse streams, each capable of transmitting 250 million bits (megabits) of information per second are electrically multiplexed into one stream using a form of integrated circuitry. The resulting gigabit/s pulse

Our new Optical Printer.



The most complicated thing about it is its name.

Our new optical printer was designed around one basic idea: Simplicity.

Because we wanted it easy to operate.

And we wanted it reliable.

So we started by throwing out the complicated or hard-to-maintain parts. Gear trains for example. Because gears wear and develop vibration and backlash. Or the grease gums up and they drag or stick. And it happens in the middle of a rush job . . . because that's when trouble **always** happens. So out they went. And with them went levers, belts, pulleys, stop-motion clutches and brakes. And, to nobody's surprise, problems like flash frames and loss of definition went too.

We replaced all that complicated hardware with a space-age drive system called "PhotoTron" that features computer-accurate stepping motors and solid-state electronics mounted on printed circuit cards.

For operating ease we've made our new printer automatic. You get continuous, automatic zooms from 4X enlargement to 5X reduction. And automatic dissolves, either logarithmic or linear, for perfect fades or dissolves without overlap. And, at the flip of a switch, the automatic shutter can be programmed over a predetermined fade count. And an automatic skip-frame programmer gives you unlimited combinations at all speeds and with three heads at once.

Operating ease extends to the control panel. It's human engineered to reduce fatigue and increase efficiency. Simple control switches, all within easy reach, replace cumbersome gear shifts located all over the room.

In our search for simplicity, we came up with a side benefit that you might find useful. By making the drive system all electronic, our new printer easily adapts to computer control or tape programming. When you're ready for this next step, your printer will be too.

One other thing. The price. By throwing out the complicated, tailor-made hardware and simplifying construction, we can offer an optical printer with these features at the lowest price in the industry.

When you call us about our new printer, its official name is the Model 2101 Aerial-Image Optical Printer.

But please, just call it the Model 2101.

To keep it simple.

Write, wire or phone for our full line catalog

RP **RESEARCH PRODUCTS, INC.**

6860 Lexington Ave., Hollywood, Calif. 90038
Phone: (213) 461-3733, Cable: "RESEARCH"

Visit us at Booth 52 during the SMPTE Convention in Los Angeles

stream is then impressed onto a laser beam. This process, called optical modulation, takes place within a crystal device called an optical modulator and ordinarily requires about 30 V to function efficiently. To help reduce the voltage a technique called etalon tuning is used. The result is a pure optical beam that can be modulated satisfactorily with about 5 V. Once modulated, the laser beam acts as a carrier for the stream of high-speed information signals. Sophisticated electronic circuits can recover the multiplexed circuits by separating one message from many being transmitted simultaneously over the light beam.

A Laser Energetics Laboratory has been established at the University of Rochester, Rochester, NY 14627. One of the projects now underway is the application of laser plasma theory to the production of an intense x-ray source. The laboratory equipment includes an ultra-high-power neodymium glass laser system equipped with a disc amplifier. The unit was designed and built at the University in conjunction with the UR Institute of Optics. The disc amplifier is designed to intensify the beam of the neodymium laser system and produce a pulse that can create a plasma with a temperature of 60 to 70 million degrees.

The Fourth Annual Scanning Electron Microscope (SEM) Symposium will be held April 27–29 at IIT Research Institute on the Illinois Institute of Technology campus in Chicago. More than 65 papers will be presented. Sessions will cover biological, medical, dynamic and semiconductor applications; materials characterization; instrumentation; analytical techniques and crystallographic information. SEM manufacturers will exhibit their microscopes at the Symposium. Accessories, such as energy dispersive x-ray detector systems and vacuum equipment, will also be on display. Further information is available from Dr. Om Johari, SEM Symposium Director, Metals Research Div., IIT Research Institute, 10 W. 35 St., Chicago, IL 60616.

The Institute of Electrical and Electronic Engineers International Convention will be held March 22–25 in New York. Fifty-four program sessions will be held in the New York Hilton and a Technical Applications program will be presented at the New York Coliseum. Subjects to be covered at the Coliseum include LSI testing, minicomputers, computer-assisted manufacturing, multilayer boards, new connector developments, the application of microwave semiconductors, IC reliability, assembly techniques, pollution control and other subjects. Detailed information is available from IEEE Convention Dept., 345 E. 47 St., New York, NY 10017.

The National Audiovisual Center (GSA), Washington, DC 20409, established in 1969 by the National Archives and Records Service, now supplies all inquirers with information about most Federally produced audiovisual materials, lending and renting materials placed with the Center by government agencies and materials approved for public sale by the producing agencies. The Center's objective is to achieve the most efficient use of Federal audiovisual materials and to supply information on Government sources of audiovisual materials. The Center is under the National Archives and Records Service which is part of the General Services Administration. James B. Rhoads is Archivist of the United States.

Rank Precision Industries mobile telecine vehicle, built to demonstrate Rank Cintel color broadcast equipment is now engaged in a series of tours throughout Europe. The vehicle consists of an articulated trailer some 37 ft long with a 150-hp diesel prime mover. A special pneumatic suspension system on the trailer minimizes the risk of transit disturbance to the television equipment. The interior of the trailer is divided into three areas. The front section contains a viewing lounge where presentations can be watched on a number of color monitors. The area has been designed to provide good acoustic properties with carpet on the floor and the walls. A variable seating arrangement accommodates up to eight persons.

The central area contains one 16mm and one 35mm flying-spot telecine mechanism together with associated color processing

channels. The layout can be modified to take a photoconductive telecine, slide scanners or other equipments. A control desk with monitoring and preview facilities is provided.

The rear area has racks containing the associated electronic systems, mains power control and distribution and a bench for film rewinding and maintenance. A platform on the roof holds a color camera. The vehicle is compatible with a television station and can be linked to a studio to use as a self-contained program source.

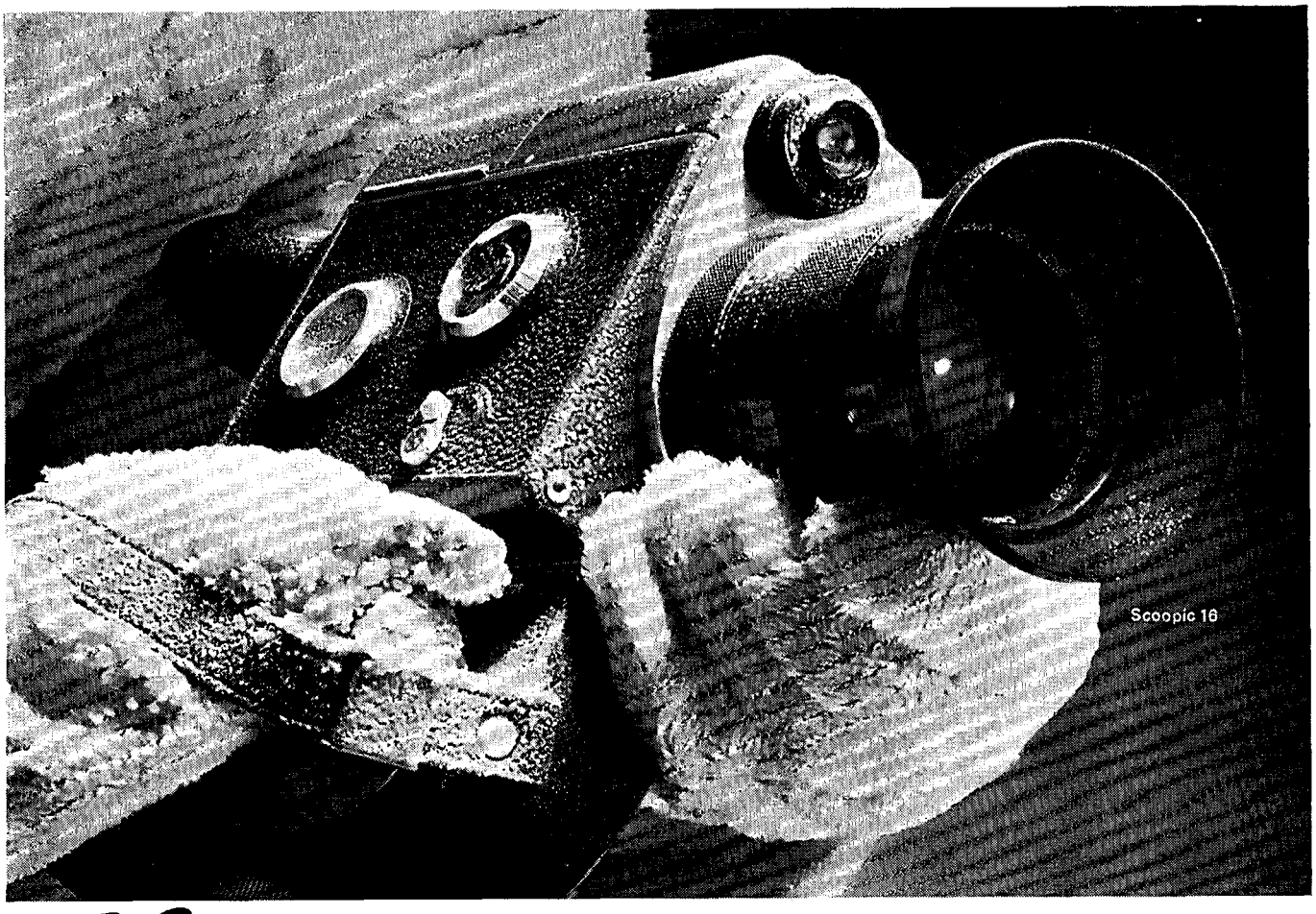
The video system runs 625-line PAL coded signals with provision for change to 525-line NTSC if required. An electronic video switcher allows routing of telecine, camera, off-air receiver, test or remote inputs to the various color and monochrome monitors within the vehicle, and through distribution amplifiers to program outputs.

Each area has an air conditioner and an additional cooling plant in the front overhang feeds cooled air to the electronic equipment.

Protect-a-Print, a new leader developed by Louis Wutke, a member of the Society's Projection Practices Committee, and Larry Brunswick, of Photographic Specialties, Studio City, Calif., which manufactures the leader, has been adopted by American International Pictures, Inc., 9033 Wilshire Blvd., Beverly Hills, CA 90211. The leader, presently in use on all prints of *Wuthering Heights,* will be used on all other American International Films, it was recently announced. Five feet of the new leader are attached to the 25-ft black leader. It is specially treated with abrasive characteristics to remove dirt from the gate of the projector. The black leader prevents cinch marks when films are being rewound. American International estimates an additional annual outlay of $8,000 for the combination leaders on all releases, but they expect a 25% increase in print life, fewer replacements and damage costs and improved audience reception.

The Apollo 14 launch vehicle lift-off was photographed in color for television broadcast by a camera supplied by Westinghouse Aerospace and Electronic Systems Div. The camera was equipped with a very-wide-angle lens which enabled the camera to view the entire launch vehicle so that the television audience saw many prelaunch activities in close-up. The camera was mounted at the 360-ft level on the launch umbilical tower (LUT), or gantry, next to the launch vehicle. A special housing to protect the camera from heat, vibration and moisture was provided by NASA. The camera's highly sensitive image tube provided pictures over the entire range of light levels from deep shadows in the morning to the brilliance of the rocket exhaust during lift-off. The signals produced by the camera were carried by cables to the television pool control trailer. Field-sequential signals were then converted to NTSC standard color format video which was then fed to the major TV networks.

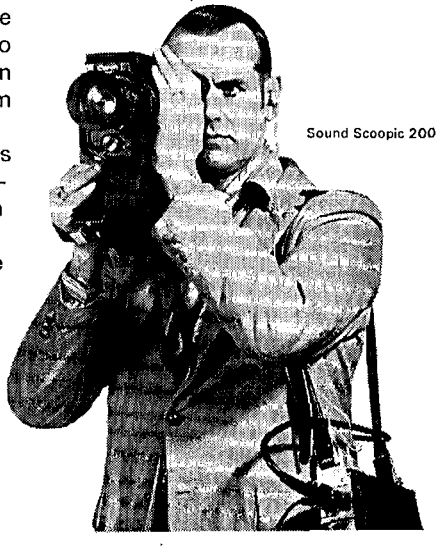
Video Film of Delaware, Inc., 77-25 164th St., Flushing, NY 11366, has developed a method of transferring videotape to film



16mm goes big time

Know those wise guys who smile indulgently when someone starts talking 16mm? Just show them this new Canon trio and watch the jaws drop.

First there's the Scoopic 16, featuring Automatic Exposure Control and F1.6 six times zoom. It lets you follow your subject indoors and out, without missing a second, zoom in on a ski champ when the weather's 68°F below zero and shoot from the hip to catch that left-end sneak nobody saw coming. Built for action, everything from the SLR viewfinder, semi-automatic loading and rechargeable battery pack to the ultra-efficient design adds up to the last word in perfect coverage when seconds count. Tough, too, the Scoopic 16's been tested for five years from the Antarctic to the Himalayas.


Sound Scoopic 200

If that doesn't impress 'em, whip out the new Sound Scoopic 200. It's perfect for interviews: features 200-ft. capacity, simultaneous sound recording and lightweight, compact one-man portability. EE aperture with manual override, TTL system, rechargeable battery pack.

Now that you've got them off balance, deliver the coup de grâce: the Macro Zoom Lens C10x12 Fluorite. Its optical system includes fluorite to practically eliminate chromatic abberation. In addition to macrophotography (down to 1mm) capabilities for special effects and multipoint focusing which provides exciting new zoom possibilities by matching focal point to focal length, this versatile beauty features an Arriflex mount (for the Arriflex 16ST, 16M, etc.) and is even available with a universal C-mount.

Now who's smiling?

CANON U.S.A., INC.: 64-10 Queens Blvd., Woodside, New York 11377, U.S.A. (Phone) 212-478-5600 **CANON OPTICS & BUSINESS MACHINES CO., INC.:** 3113 Wilshire Blvd., Los Angeles, California 90005, U.S.A. **CANON AMSTERDAM N.V.:** Gebouw 70, Schiphol Oost, Holland **CANON LATIN AMERICA, INC.:** Apartado 7022, Panama 5, Panama **CANON INC.:** 9-9, Ginza 5-chome, Chuo-ku, Tokyo 104, Japan

Canon

using electrons instead of light to produce television films of a quality comparable to the original signal, using an adapted 3M Electron Beam Recorder. The kinescope transfer process uses a phosphor screen, glass faceplate and light optical system as an interface between the electron beam carrying the TV signal and the photographic film that will store it. The Video Film process eliminates the interface. The superior reproduction of videotape originals on film eliminates many problems involved in the distribution of videotape copies. Among the users of the new process are the Childrens' Television Workshop, producers of *Sesame Street*, Goodson Todman Productions, NET Television, Inc., Massachusetts Institute of Technology and Ford Motor Company.

Sixteen Inflight Cine Theaters have been established from Florida to Michigan by Inflight Motion Pictures Inc., pioneers of airborne motion pictures. The ground-based Inflight Theaters are fully automated 300-seat theaters that use 16mm film. Inflight has been showing motion pictures to airline passengers for 10 years. For successful airborne screenings a new system of optics, projection and screening was developed. It is estimated that 50 million travelers have seen Inflight motion pictures in the air during the last 10 years.

A new four-story research facility at the 3M Center, St. Paul, MN 55101, now houses the Magnetic Products Div. of 3M as well as providing research facilities for the Chemical and Minicom divisions. The new laboratory contains a variety of sophisticated testing facilities and an on-site magnetic tape pilot plant. It has climatically-controlled research areas and clean-room facilities and also has room-size stainless-steel environmental chambers in which products can be subjected to a wide variety of extreme temperatures and humidity conditions. One of the testing areas is a paneled sound room where high-fidelity equipment is used to evaluate audible range tapes of the cassette, reel-to-reel and cartridge formats.

Instant Animation, a patented process, said to be speedy and economical, has been made available commercially by Instant Animation, 729 Seward St., Hollywood, CA 90028. The process is described by Stephen Mellow, President of the firm, as "spontaneous animation, mechanically created and combining the most sophisticated elements of puppetry and animation art." The process is used to create live animation in 30 seconds from preconceived characters and artwork. It can be recorded in black-and-white or color by film or videotape. It will be used to animate a character in a feature film being produced by Cinema General.

IVC-900 videotape recorders have been installed at KRCR-TV, Redding, Calif.; KOBI-TV, Medford, Ore.; WVIZ-TV, Cleveland, Ohio; and WBNB-TV, St. Thomas, Virgin Islands. The recorders are being used on the air in color, it was announced by International Video Corp., 675 Almanor Ave., Sunnyvale, CA 94086.

It's no song and dance.

If you're processing video signals, you've got enough to do without worrying about the equipment. So at 3M we've reached into our repertoire and come up with a handful of reliable video products that work like magic.

The first trick out of the bag is the **helical VTR dropout compensator.** A combination dropout compensator, ultra-stable processing amplifier, AGC and automatic chroma level control, it corrects, cleans up and stabilizes helical VTR signals.

Next on the bill is the only **dropout compensator** made that provides proper color and luminance replacement for quadruplex VTR's. The 3M system eliminates white and color flashes, color mismatches and grey-out values, while maintaining full video stability and color interlace even through multi-generation dubs. An interface kit for your VTR and a test tape are free with your order.

The perfect partner for either of the above units is the 3M **dropout profile recorder.** Operating on-line, it records an hour of playback on a 5" chart for evaluation at a glance. Tapes too degraded to use for new program material can be stored along with a permanent record of their performance. The recorder includes a built-in calibrator and remote control.

Our **color video encoder** works its magic by supplying a standard NTSC color signal from any 3- or 4-channel camera, low-priced or high-priced. Its unique all-digital color bar generator is exceptionally accurate yet never needs adjustment, while its just-as-unique video input clamping eliminates low frequency hum and noise. Other circuits provide sharper, crisper pictures, improved color fidelity and automatic green channel luminance in monochrome.

And as our last act (for now), there's our **10-channel bridging video switcher** with audio-follow. Frequency response is ± 0.25 dB to 10 MHz, low frequency tilt is under 1% and isolation is 52 dB at 3.58 MHz. Both the center conductor and video ground are switched, so connections are easily made and one switching has no effect on other switchers looped to the same input. Routing switchers up to 10 x 20 are readily assembled.

That's the 3M Video Magic Show. We've had to be brief, so why not contact us for the details? In the meantime, you might like to know that in spite of the high performance, we're more than competitively priced.

And if that's not magic, what is?

Mincom Division, 3M Company, 300 South Lewis Road, Camarillo, California 93010. Telephone (805) 482-1911.

VIDEO PRODUCTS

Mincom Division 3M COMPANY

TelePrompTer of Oregon, one of TelePrompTer's 90 operating cable TV systems, has installed a color studio at Eugene, Ore., equipped with RCA color TV originating equipment. About one hour of color programs are broadcast daily and additional color programs are planned. The RCA equipment includes four PK-730 live color TV cameras. Two of the cameras are used in the studio. The other two are installed in a mobile TV van which will cover news and special events in the area.

The Birns & Sawyer Filmovan is being used in Israel by the film production company Benwest/El Sol now filming *Please Whisper My Name* which is being filmed mostly on location at sites throughout Israel. The Filmovan is a trailer that can hook onto any heavy-duty pulling vehicle. It is designed to hold a full load of equipment for camera, grip, sound and electrical departments. Its weight empty is 3400 lb. It is 13 ft 9 in long and 7 ft 3 in wide. Height of shooting platform from ground level to roof is 7 ft. The access doors are insulated with 2-in glass-fiber liner and the doors swing upward to provide two shade areas 5 ft wide and 10 ft long.

Motorola Systems Inc., 4501 W. Augusta Blvd., Chicago, IL 60651, has established more than 400 independent service organizations throughout the United States for its new Electronic Video Recording (EVR) Teleplayer unit which plays cartridged film programs through any standard TV set. The teleplayer units, both color and black-and-white are designed with all-solid-state modules similar to the Motorola Quasar color TV construction. An extensive training program to provide technicians for the service centers is underway.

Television Equipment Associates, Box 1391, Bayville, NY 11709, has been appointed American representative for Magnetek Video Tape Cleaner, a product of Advanced Transducer Systems Ltd. of Toronto, Canada. The Magnetek removes physical errors, such as dirt and oxide particles from the tape surface (*Journal,* p. 896, Sept. 1970).

Development of a computer card reader consisting of a light-sensitive thin-film circuit deposited on glass and laid out like a crossword puzzle has been announced by RCA Corp. The new device, a form of integrated circuit 5,000 times larger in area than the standard type, is a flat array of 960 photosensitive elements, plus auxiliary components and interconnections, deposited on a 4- by 8-in plate of glass. In its present form, the unit is laid out as a computer card reader containing 12 rows of 80 elements that match the 960 positions on a computer card. Wherever a hole has been punched in a card the corresponding photoconductive element senses light and, in turn, provides an electronic signal.

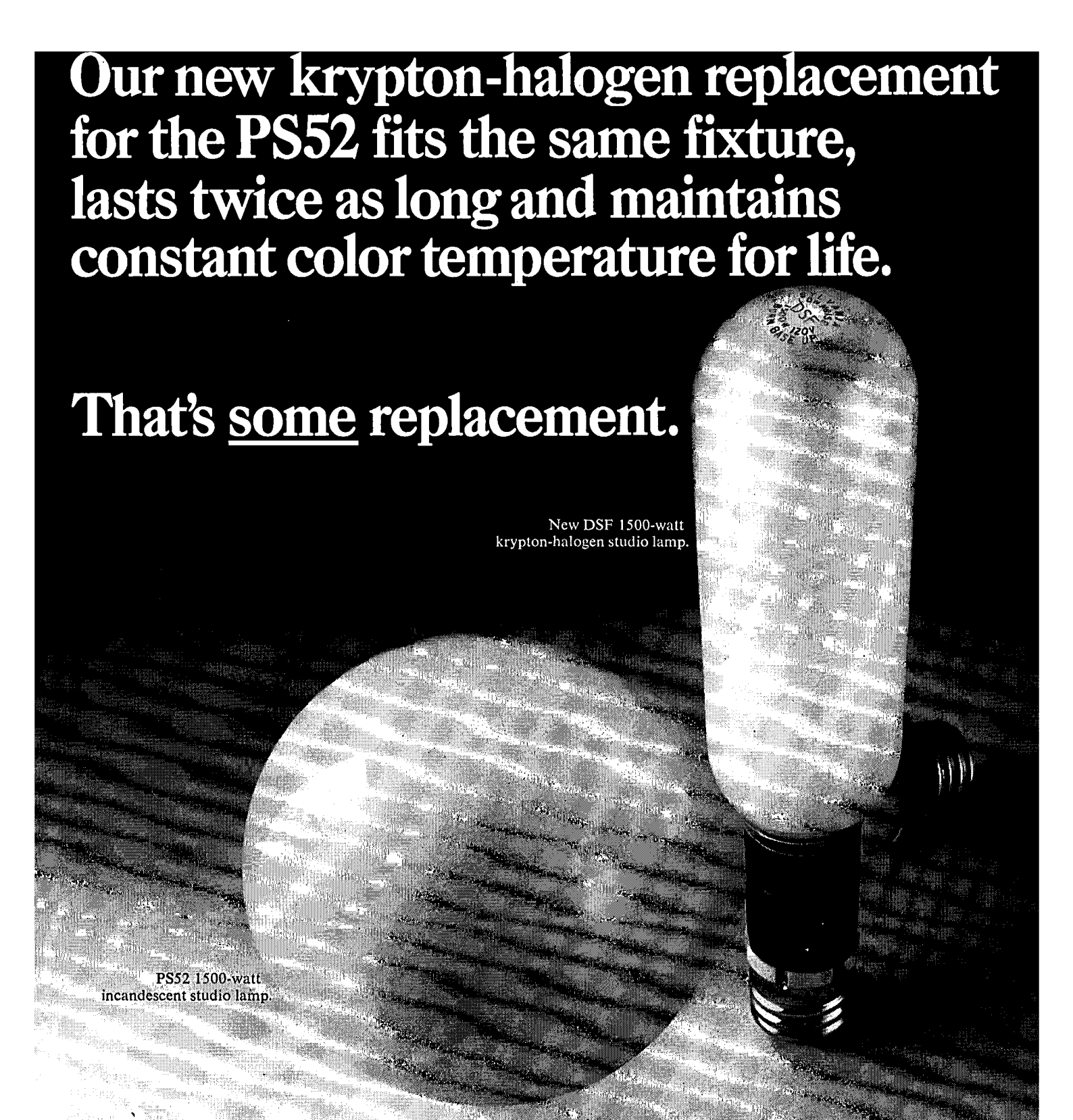
The arrays were tested with standard punched cards 1/16 in from the sensor surface. Illuminated by a 10-W fluorescent tube, the sensor provides a sequential-output signal for each position in the entire card in 2/3 s. The slow scan rate permits the use of a telephone line to convey information from the card reader to the central processor. However, in other tests the sensors were scanned at a 4.8-MHz digit rate and cards were read with an incident illumination as low as 2 fc.

Videocom, Inc., Dedham, MA 02026, has completed a 6,000 ft² production center containing a 40- by 60-ft studio and production, viewing, editing and conference rooms. The company, which was one of the first independent color broadcast videotape production companies in the Boston area, will use mobile vans with portable equipment for location assignments. New equipment will include two Ampex portable VR-3000 broadcast videotape recorders and three studio VR-2000 videotape recorders, an HS-100 slow-motion recorder and a VS-600 program switcher.

Future Systems, Inc., makers of equipment for recovering silver from used photographic materials, has moved to a new location at 809 University Ave., Los Gatos, CA 95030. The new facility consolidates operations which had been split between two locations in Campbell, Calif. First phase plans call for the immediate occupancy of an existing 11,000 ft² plant. The firm was incorporated in September 1969 and started business operations in March 1970. It manufactures Argenta Table Top Silver

Our new krypton-halogen replacement for the PS52 fits the same fixture, lasts twice as long and maintains constant color temperature for life.

That's some replacement.



New DSF 1500-watt
krypton-halogen studio lamp.

PS52 1500-watt
incandescent studio lamp.

When you replace a PS52 studio lamp you can replace it with something better.

The something better is Sylvania's DSF krypton-halogen lamp, which fits the same fixture as the PS52.

Its average rated life is 250 hours. More than twice the life of the PS52.

And that's useful life, because the DSF is as bright at the end of its life as it was at the beginning. There's no darkening with age as in the PS52.

And its 3200° K color temperature is there right from the beginning. And it's still there 250 hours later. Constant.

The DSF has low-noise construction. There are no loose parts to resonate when used with SCR dimmers.

With all these advantages, the DSF is more than a replacement.

It's a major improvement.

Sylvania Electric Products Inc., 100 Endicott St., Danvers, Massachusetts 01923

SYLVANIA
GENERAL TELEPHONE & ELECTRONICS

Mines which recover silver and also reconstitute the chemical solutions for reuse.

Castagna Electronics Corp., a subsidiary of Stelber Industries Inc., 33 West Hawthorne Ave., Valley Stream, NY 11580, has acquired exclusive manufacturing and marketing rights from Optasound Corp. to produce the Optasound system. The system is based on Optasync, a solid-state device which is used with an equipment package consisting of a battery-powered super-8 camera, a microphone and a tape recorder to produce sound movies. The tape recorder is loaded with perforated recording tape and linked to an Optasync unit to produce synchronized sound movies. The agreement between Castagna and Optasound envisions the incorporation of Optasync into a cassette tape recorder to be manufactured by Castagna.

Alan Gordon Enterprises Inc., 5362 N. Cahuenga Blvd., North Hollywood, CA 91601, has expanded its Projection Div. which now occupies a 15,000 ft² display, sales, rental and service area. The projection line now includes new, used and reconditioned equipment of almost all manufacturers and all items are available on a rental basis.

Tele-Color Productions, 708 N. West St., Alexandria, VA 22314, has installed two high-band videotape recorders, a slow-motion disc recorder and new studio lighting equipment. The firm provides color studio operations and color mobile units in addition to post-production services including color tape-to-film transfer.

The John B. Olsson Co. has moved to new and larger quarters at 945 N. Main St., Orange, CA 92667. The firm started in 1968 as a manufacturer's representative for photoinstrumentation products. It now offers film supplies and processing services for bank surveillance cameras.

F&B/Ceco Industries, 315 W. 43 St., New York, NY 10036, has announced plans to update rental equipment by replacing Arriflex and Eclair cameras more than 18 months old with new models. More than $250,000 has been spent on new equipment for the rental division, the announcement stated. There will be no increase in rental rates. The firm maintains rental facilities at New York, Hollywood and Miami.

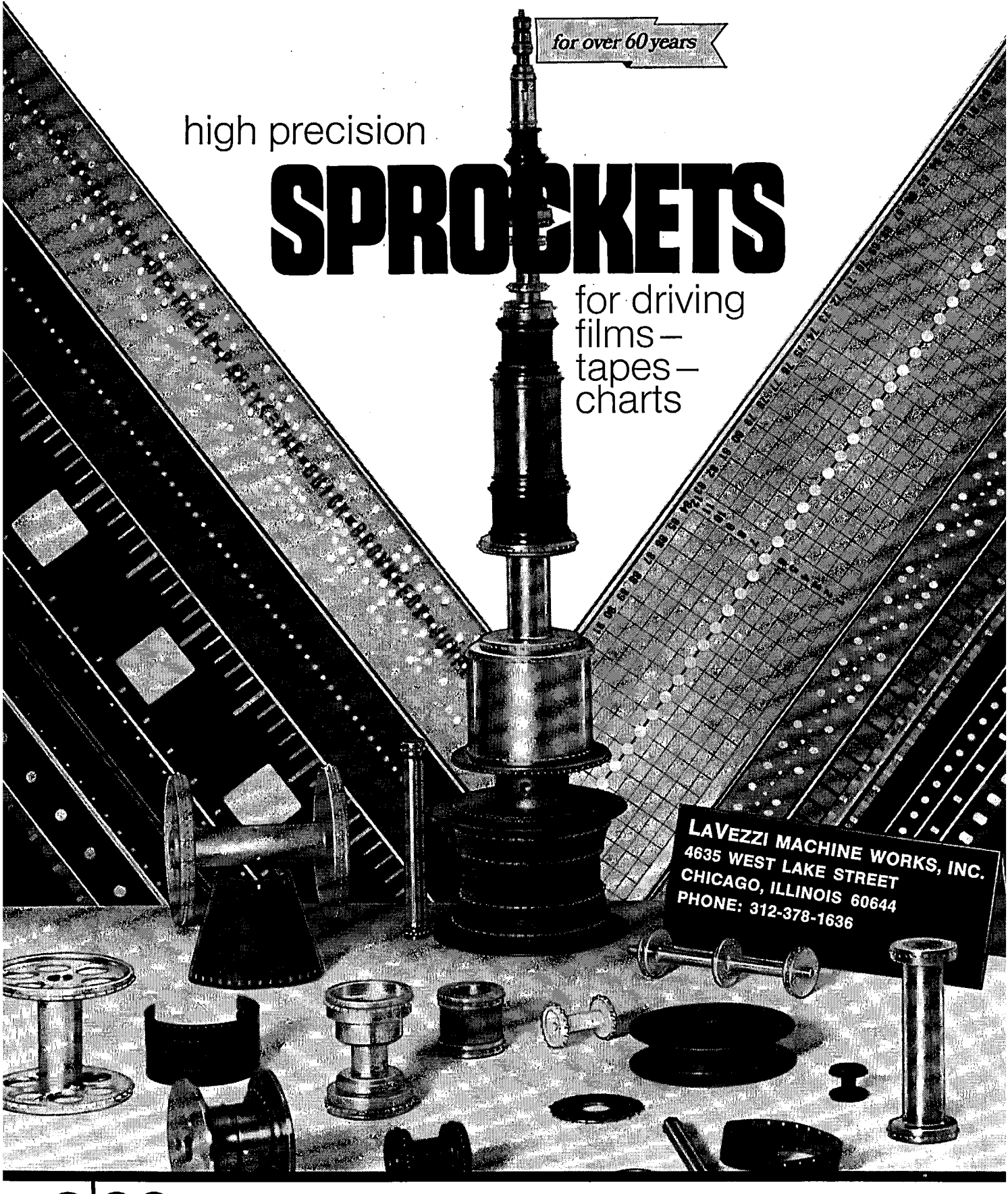
Wilton R. Holm has been elected a Vice-President of the Paris-based Union Internationale Des Associations Techniques Cinématographiques (UNIATEC), a worldwide association of film, sound and videotape technical organizations. Mr. Holm is Vice-President of the Association of Motion Picture and Television Producers and Executive Director of its Research Center.

Robert J. Allen has been appointed Director of Production and Creative Services of Canyon Films, Inc., 834 N. 7th Ave., Phoenix, AZ 85007. He was one of the founders of Canyon Films in 1953. He has been directly involved in production, photography and editing of more than 5,000 theatrical and nontheatrical films and TV commercials.

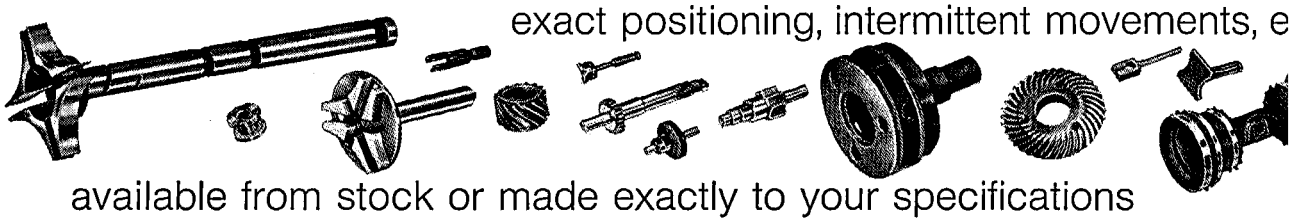
Patrick Cadigan has been elected to the Board of Directors of the Electronic Engineering Co. of California (EECO), 1601 East Chestnut Ave., Santa Ana, CA 92701. Mr. Cadigan is Vice-President and General Manager of EECO's Electronic Products Div. He was formerly with Sylvania at Waltham, Mass.

Ted V. Anderson has been appointed Manager, Distributor Sales and OEM Accounts, for TeleMation, Inc., P.O. Box 15068, Salt Lake City, UT 84115. He was formerly with Tektronix Corp.

C. Richard Hale has been appointed Marketing Manager of Photographic Sciences Corp., 23 W. Main St., Webster, NY 14580. He was formerly Customer Relations Specialist with Eastman Kodak Co. Photographic Sciences Corp. was founded in March 1970 by John E. Blackert and Lawrence P. Albertson. The Board of Directors includes William S. Shoemaker, Richard Zakia, Albert D. Rickmers and Hollis N. Todd. The firm placed initial emphasis on the production of form slide material for computer output microfilmer equipment. It is now expanding activity in the optical target and reticle field and in technical photographic consulting services.



also Geneva Starwheels and other high precision parts for critical indexir
exact positioning, intermittent movements, e



available from stock or made exactly to your specifications