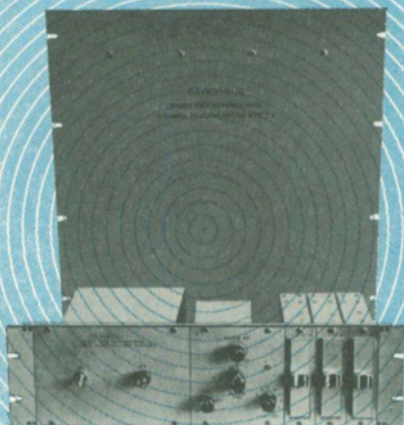


# REVERBERATION UNLIMITED!



only with  
**FAIRCHILD REVERBERTRONS**

Now with the FAIRCHILD REVERBERTRON you can reproduce the thrilling reverberated sounds of the Grand Canyon or the colorful reverberation qualities inherent only in good acoustical chambers. In addition, because reverberated sound is apparently louder than the same non-reverberated signal, by utilizing the FAIRCHILD REVERBERTRON in motion picture, radio and television studios you can create realistic sound effects and attention holding commercials.

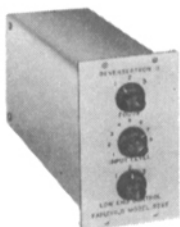
No longer do you need expensive reverberation chambers or special "on location" recordings. The FAIRCHILD REVERBERTRON costs less than you imagine and is available in economy model too.

The advantages of a FAIRCHILD REVERBERTRON in your studio are virtually unlimited for creating wide audience appeal and impact and literally hundreds of "ear appealing" sounds.

The next time you want to "glue" your audience's ears to the sound you're making be sure to use a FAIRCHILD REVERBERTRON!

#### SPECIFICATIONS OF MODEL 658A (Pictured above)

The 658A is a complete solid state reverberation system with electronically controlled reverb time adjustments up to 5 seconds; mixing control for adjustment of reverberated to non-reverberated signal ratios; reverb equalization at 2, 3, and 5 KHZ. Size: 24½ x 19".



#### ECONOMY MODEL 658B ALSO AVAILABLE

Compact, reverberation system for the "big" sound in a small space. Contains reverb equalization in mid and low frequency range; level control; solid state design. Size: Only 5¼ x 3 x 10" deep.

Write to FAIRCHILD — the pacemaker in professional audio products — for complete details

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bodies and the national network. The CBC has indicated that it may be willing to set up a public agency to provide educational TV networks.

Robert Gale, Eastman Kodak Co., Rochester, demonstrated a new high brightness front projection screen. The new screen is formed by placing a lubricant between two thin sheets of aluminum foil and subjecting it to a high pressure. This "sandwich" construction is reported to give a gain of 10 over a matte screen and a gain of 6 over a lenticular screen. The material can be curved to eliminate the "hot spot" of a flat screen and to give a more even distribution of brightness over the entire surface. The effectiveness of the new screen was vividly demonstrated by shining a bright spotlight onto the new screen and a standard screen and displaying slides on both of them.

Willis L. Stockdale, presented a paper coauthored by himself and Mr. Robert C. Lovick, Eastman Kodak Co., Rochester. He discussed the "Evaluation of a System for Mass Production of Super 8mm Prints." Since super 8mm film shows good possibility of becoming popular in the educational field, a new system of mass producing prints of this format is essential. The design goals of the system were first cost and second, quality. A great deal of effort has gone into maintaining a high quality of reproduction. From a cost viewpoint the normal 10 steps, including post stripping of magnetic sound, has been reduced to six steps with the use of a fine-grain prestripped stock. The organization of the process was directed toward minimizing the amount of rewinding necessary by the processing laboratory. Some of the features include improved rollers to reduce scratching and high speed magnetic sound transfer.

Gordon H. Tubbs, Eastman Kodak Co., gave a paper entitled "Eastman Kodak Looks at the Educational Field." Since education supplies industry with people, there is a corporate responsibility to help education. At the present time there is little use of audiovisual devices in many schools which can be traced to the lack of proper teacher training in the use of these devices. Some steps have been taken to properly train teachers in the use of all audiovisual aids. More stress should be placed on them in teachers colleges.

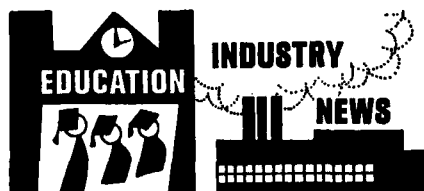
Historically, teachers have been dispensers of facts. This role is changing and teachers must become student guides. They must assist in diagnosing student problems. To do this, the available teaching aids must be used more than in the past. To make them useable they must be easy to operate, light and particularly reliable. Because of the mushrooming growth of education, the equipment must also be economical. Motion-picture prints must be produced in larger quantities at lower costs.

W. R. Wilson, Technical Advisor to the Canadian Board of Broadcast Governors, Ottawa presented "The Potentialities of Space Broadcasting for Educational Television." Although the use of satellites for ETV was in a stage of early development, present and possible future developments indicate that there is a definite possibility of their use in this field. The use of a synchronous satellite was indicated to feed either a master ground station for redistribution over a given area and for direct reception from the satellite to individual schools. Figures were presented to show that with foreseeable radiated powers from a satellite, low cost front-end equipment could be developed for individual reception. In quantities of a million or more receivers, front ends could be made for approximately \$200 which could be used in noisy areas or for about \$20 in low noise areas. Wilson warned that further studies are needed and that these costs should be used with care. The achievement of this, however, would probably not be until the mid 1970's.

A panel consisting of the previous speakers on the program and Dr. D. Abbey, an Educational Consultant, answered questions from the floor. A number of interesting questions posed by educators, motion-picture and television people were directed to the panel and produced a lively discussion.

About 40 ladies registered for the Ladies Program which was under the direction of Mrs. Vi Crone.

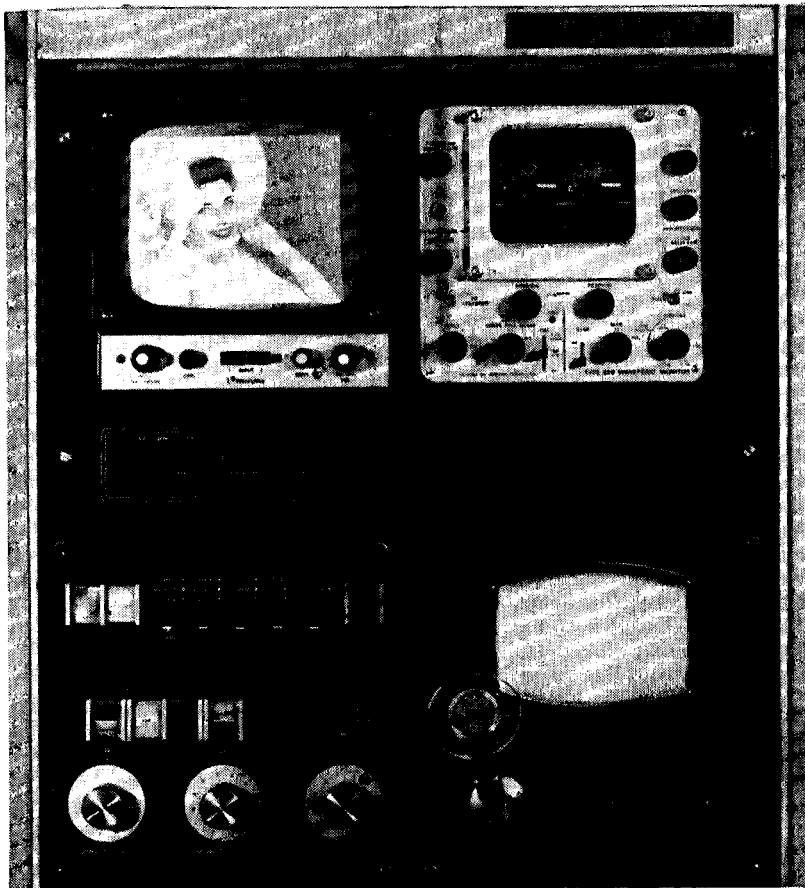
Other members of the convention committee included Harold Eady, Bonded TV Film Service Ltd., Toronto, Arrangements; Joe Grimaldi Pathe-Humphries of Canada Ltd., Registration; and Les Hadley, Les Hadley Audiotronics, Facilities.—R. J. Brule, The 3M Co., London, Ont., Canada.



**Motion Picture Laboratory Practices and Procedures**, a course presented by the University of Southern California's Division of Cinema in cooperation with the Society's Committee on Education, will be held each Wednesday, 7:15 to 10:15 P.M. beginning February 14 and continuing through May 29. The course is planned specifically to assist the practicing laboratory technician and others

who need to know more about laboratory operations. The announcement of the course noted that changing demands on the motion-picture processing laboratory have greatly increased the knowledge requirements of technicians in the industry, due to expanding markets, such as television, industry and education, and also to the increasing frequency with which new techniques and materials are being introduced.

**The Society of Photographic Scientists and Engineers (SPSE)** held the Second Symposium on Unconventional Photographic Systems October 26-28 in Washington, D.C. The program included five technical sessions and six applications work-

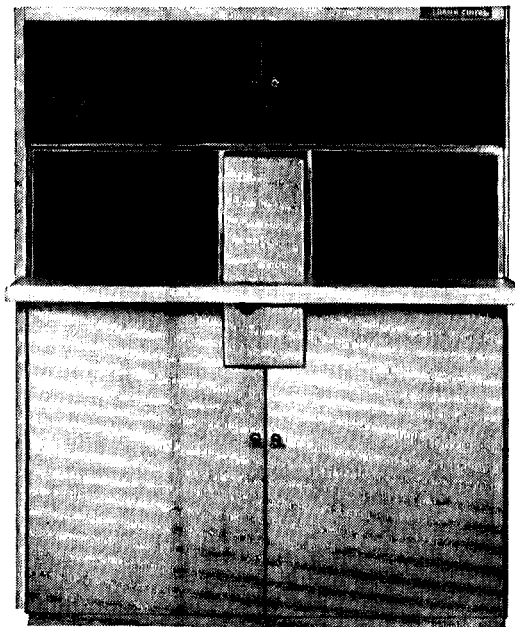
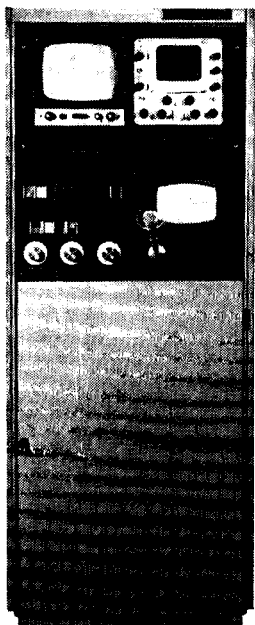


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The Mk VIII Broadcast Slide Scanner is intended primarily for colour studio operation. The equipment scans either colour or monochrome transparencies and generates high quality video signals on 405, 525 or 625 line standards with facilities for preview, cut, mix and fade.

Sixty 35 mm. transparencies can be presented in sequence or selected at random as required. Electronic colour masking is employed in the video channel to correct for inherent errors in colour film dyes.

## MARK VIII BROADCAST COLOUR SLIDE SCANNER



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shops. Each technical session opened with an invited state-of-the-art review paper, presented by the session chairman, and reports on recent advances in unconventional photographic systems. (For the purposes of the Symposium, the term "unconventional photographic systems" was defined as "all photographic imaging systems except those using silver halide in the usual manner.") State-of-the-art papers were presented by David P. Habib, who spoke on "The Diazotype Process"; Joseph Gaynor, whose subject was "Deformable Films"; Carl J. Claus, who spoke on "Electrophotographic Processes and Materials"; G. H. Dorion, who spoke on "Recent Trends in Photochromic Materials Development"; Allan Shepp, who spoke on "Unconventional Silver Systems"; and A. B. Cohen who reviewed "Photopolymer Imaging Systems."

Workshops were held on Holography; Lithography, Photoengraving and Gravure; Reconnaissance Image Readout and Duplication Systems; Microfilm Systems; Information Display Systems; and Office Copy Systems. The workshops were conducted (in that order) by John DeVelis, Albert R. Materazzi, William F. Gorog, Dr. Habib, Richard Nelson and Meyer L. Sugarman, Jr.

An important event during the Symposium was the presentation of the first Jaromir Kosar Award (*Jour.*, p. 828, Aug. 1967). Recipient of the Award is Carl S. Miller of the 3M Company. The citation noted Dr. Miller's "pioneering and con-

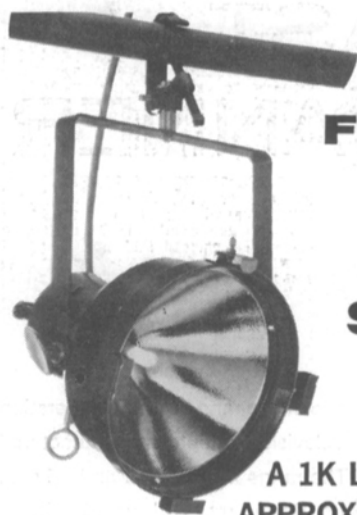
tinuing efforts in the field of thermographic reproduction, culminating in the birth and growth of the mass convenience copying field as we know it today." A Senior Research Specialist in the Graphic Systems Research Division of 3M, Dr. Miller developed the first office copying machine in the late 1940s. Designated Thermofax, the system was introduced in 1950.

Closing event of the Symposium was a panel discussion on the subject of "Conventional and Unconventional — What Lies Ahead?" Moderator was Gordon O. F. Johnson. Panelists were sessions and workshop chairmen.

**The Audio Engineering Society's 34th Convention** will be held April 24–May 2 in Hollywood. Topics to be included in the technical program are: Transducers, Amplifiers — General, Amplifiers — FET, Instrumentation, Recording, Automotive Tape Systems, Acoustics and Hearing, Music and Speech, Recording and Broadcasting Facilities, Sound Reinforcement, and Audio Applications. In addition to the technical program there will be an exhibit of professional audio equipment. Further information is available from Convention Chairman Don Davis, 34th National Convention, Audio Engineering Society, c/o Altec Lansing, 1515 South Manchester, Anaheim, Calif. 92803. Mr. Davis requests that abstracts of proposed papers for the AES Convention be sent to him before January 30.

**The University of Michigan** will hold a two-day course on Photography in Engineering Research, February 13–14, 1968. The course's objective is to acquaint the practicing engineer with the broad range of photographic techniques available in research. The course is not intended to teach the engineer photography. It's goal is to provide ideas on how to apply photography to problems. The fee for the course is \$60. Information is available from: Photography in Engineering Research, Chrysler Center, North Campus, The University of Michigan, Ann Arbor, Mich. 48105.

**Refocus**, a cinematography and still photography festival, will be held March 18–24 at the University of Iowa, Iowa City, Iowa. The festival will be held in the Iowa Memorial Union and will include feature-length motion pictures, student films, slides and still photographs. Closing event of the festival will be a review and discussion of the best feature films. Highlights of the festival will include three distinguished guest speakers, among them Chuck Jones, animation specialist at M-G-M Studios, Hollywood, who will also conduct a workshop on animation. Jerry N. Uelsmann, Associate Professor of Art at the University of Florida, will present a slide show. Mr. Uelsmann is a



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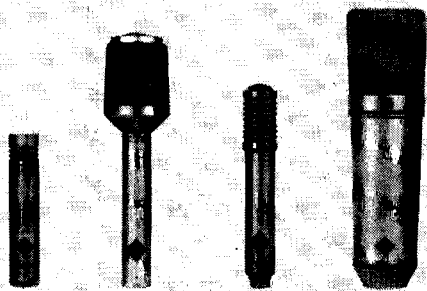
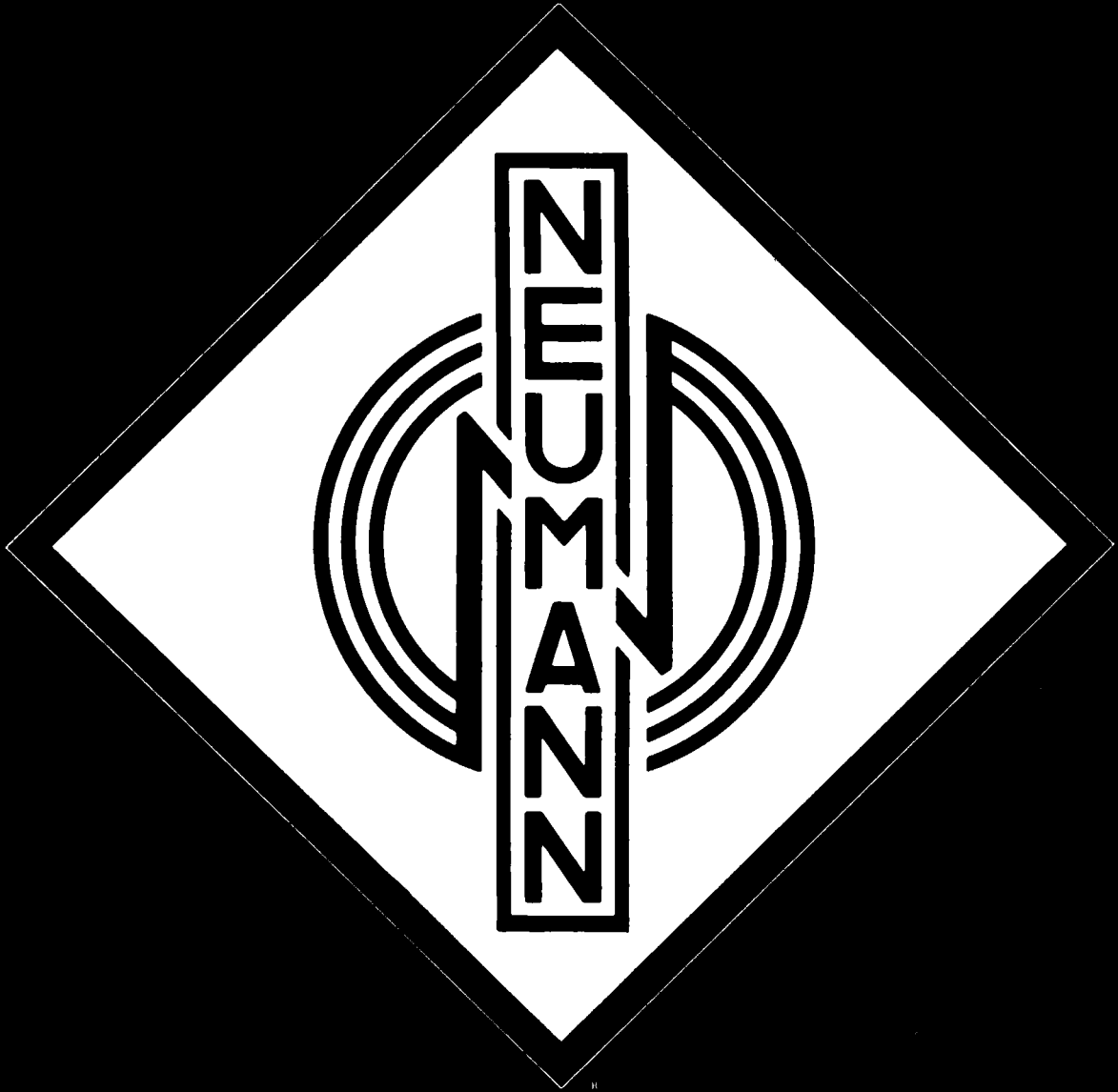
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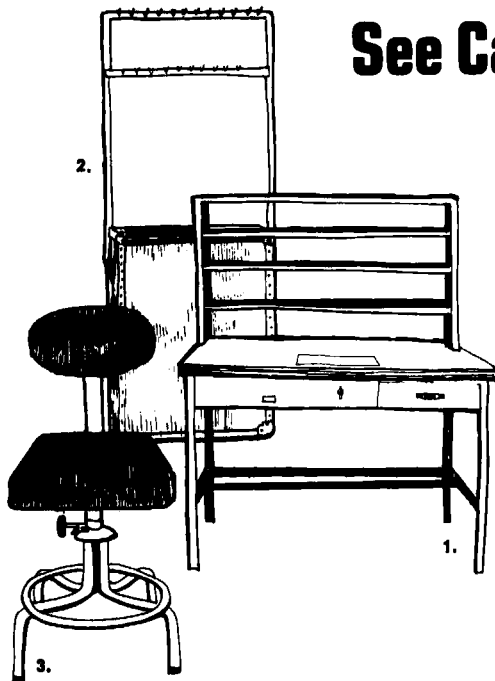


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## See Camera Mart.



**1. CAMART EDITING TABLE** Custom-built, heavy-duty all welded steel construction, genuine formica top (flush trim). Built-in light-well (9" x 12") with 1/4" frosted plexiglass. U.L. approved. 28" x 33" x 60" with light box \$129.50, without light box \$109.50, other sizes, prices on request. (Packing charge for deliveries outside New York City Area.)

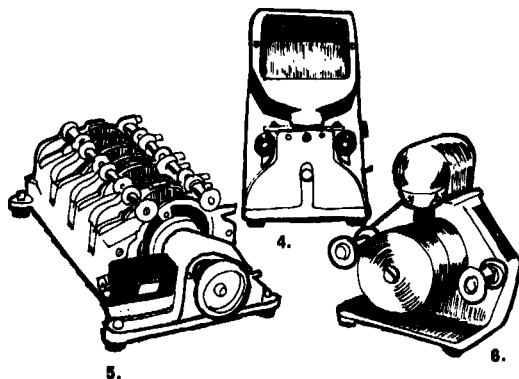
**2. CAMART FILM BIN** • Rectangular construction—30" x 24" x 12" • Vulcanized fiber with reinforced metal frame • Double-row racks. Complete with rack and scratch-proof liner. With skids \$43. with casters \$48.75

**3. EDITORS SWIVEL CHAIR** Seat and back-rest are deeply upholstered with Durafoam. Mounted on heavy gauge steel seat pan 17" x 16". Adjustable backrest. All welded tubular steel frame. Without casters \$35.80, with casters \$39.10.

**4. 16mm ZEISS MOVISCOP VIEWER** Sharp 2 1/4" x 3 1/4" picture. Large magnifying screen, hooded against stray light, shows exceedingly bright image, right to corners. • Film can be run backward or forward, left to right. • Fits Precision sound base. \$132.

**5. MOVIOLA SYNCHRONIZERS** Easy to read. Easy to operate. Strong cast aluminum frame. Main Shaft turns on sealed, precision ball bearings. Film retaining rollers equipped with self-lubricating bearings. All parts machined for interchangeability. From \$120.

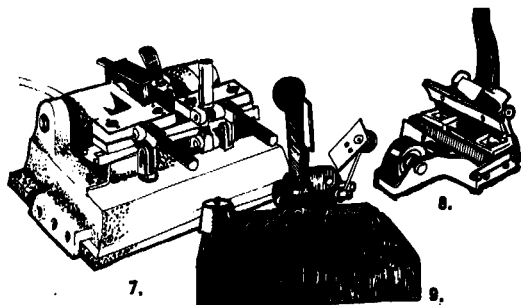
**6. MOVIOLA OPTICAL SOUND READER MODEL SRB—35 mm-16mm, 35-32mm \$188.** Moviola's versatile optical sound reader, reads left to right, right to left, emulsion up or down.



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founding member and currently on the board of the Society for Photographic Education. Beaumont Newhall, Director of George Eastman House, Rochester, New York, will speak on The Photographic Revolution in the Graphic Arts. Faculty advisors for Refocus are Professor John Schulze of the School of Art, Associate Professors Raymond Fielding and John Winnie of the University Television Center, and Mark Snegoff, a visiting lecturer at the Center. General Chairman of Refocus in David Dawson of Des Moines, Iowa. Mr. Dawson is in his junior year at the University and is majoring in Political Science.

A new film drying technique for color and black-and-white motion-picture film has been developed by DeLuxe Laboratories, 850 Tenth Ave., New York, N.Y. 10019, and Reeves Electronics Co. of Chicago. The technique is based on an ultra-high-frequency device which uses a combination of waveguides and a 2.5-kW magnetron to produce closely controlled heatability and better coupling of the heat energy to the film. Film can be dried with this process at over 200 ft/min. Films of different drying characteristics can be uniformly dried while being sequentially processed. Control can be set to dry a film containing the greatest amount of water and, without changing the settings, other films containing less water can be dried sequentially without being overdried. The system does not give off heat in the processing room. The system uses a frequency of 2450 MHz because it gives the best drying characteristics and creates no radiation problems.

DeLuxe-General Film Laboratories has announced the establishment of a new Sales Service office in Chicago to serve the Midwest area. The new office, headed by John G. Rogers, will provide personalized contact for the servicing and developing of film orders to be processed by General Film in Hollywood, or DeLuxe Laboratories, 850 Tenth Ave., New York, N.Y. 10019.

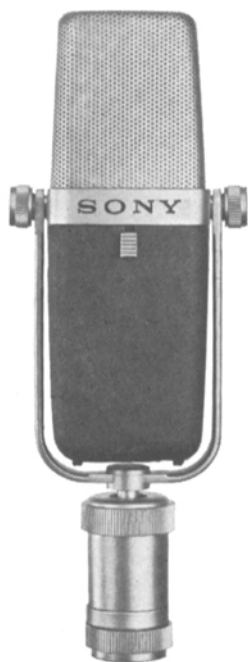
La Grange, Inc., 1139 North Highland Ave., Hollywood, Calif., will distribute products manufactured by Eumig-Vienna it was announced by Eumig (U.S.A.) Inc., 101 W. 31 St., New York, N.Y. 10001. The distribution arrangement covers the Western and Midwestern States of the United States.

Robert Larson Productions, Ltd., has established new facilities at Tooker 8 West, Chicago, for 35mm and 16mm film services, as part of an expansion program. The firm will also establish facilities in Denver primarily for production of 16mm industrial and educational films. Operations and service offices will continue to be maintained in Dallas and at 1330 Wilshire Blvd., Los Angeles.

The Scanning Electron Microscope—The Instrument and Its Application is the title of a symposium to be held April 30—May 1 at IIT Research Institute, Chicago. Operation and applications of the electron microscope will

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The new Sony Solid-State C37-FET Condenser Microphone is designed to give you the ultimate in professional capabilities wherever you may need them. A revolutionary Field Effect Transistor (FET) replaces the conventional vacuum tube, eliminating the external power supply and bulky connecting cables. Power is now supplied by a built-in replaceable 9-volt battery, delivering 300 hours of continuous power.

The C37-FET retains all the warm, natural quality, the unbelievable flat frequency response free of resonant peaks and dips—so characteristic of its illustrious predecessor the world-famous C-37. Musicians, conductors, soloists and sound engineers prefer the C37-FET for its wide dynamic range which captures the splendor of choral groups...for its faithful flat reproduction of high, middle and low registers to capture the magnificence and true timbre of strings, woodwinds and piano.

Add to this the outstanding signal-to-noise ratio specifications, unusually high front to back rejection of cardioid pattern, a built-in battery that delivers up to 300 hours of continuous power, and you have a microphone whose performance is unparalleled whether in the studio or on location.

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**F-121 Features and Specifications:** Select from three impedances (50, 150 and 10,000 ohms). On-off switch has electrical safety interlock to prevent accidental cut-off. Change single wire to switch impedances. Unidirectional characteristic. Frequency response, 30 - 18,000 Hz. Hum induction level, below 6 db/mgauss. Wind noise, less than 50 db in all directions. Dimensions: 7" x 1 1/4" max. dia., 1" min.

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And Scoopic-16 is engineered for your comfort. Everything about it—from its contoured hand grip with convenient thumb action shutter release to its light weight and balanced design—was planned to give you the ultimate convenience in hand-held action shooting.

If you're the kind of guy who has to go where the action is, you'll want to go there with the new Canon Scoopic-16. It's your kind of camera. By design.

**New Canon Scoopic-16:** Uses 16mm film, single or double perforated on standard 100' spools. Canon-Zoom lens, f1.6, coated. Zoom range 13-76mm, ratio: 5.84:1, focusing to 5 ft. Fully automated, motorized CdS exposure control system (with manual override) cross couples to all running speeds, all 'f' stops (f1.6—f22), all films ASA 10-320. Selected aperture shows on scale in viewfinder. Running speeds: 16, 24, 32, 48 fps. Self-threading. Thru-the-lens viewing. Built-in focusing glass. Viewing brightness not affected by 'f' stop. Corrective, adjustable eyepiece. Self-resetting film counter. Motor driven by one 12.5V interchangeable, rechargeable nickel cadmium battery (shoots approximately 8 rolls per charge).

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be discussed by invited speakers. Techniques will be discussed for using the scanning electron microscope in such fields as fractography, surface contamination studies, powder science, biological studies, electronics, fiber and composites research and chemistry. Further information is available from Lorne B. Alden, Manager, Program Development, IIT Research Institute, 10 W. 35 St., Chicago, Ill. 60616.

**CBS Television Network** has produced two 15-min 16mm films demonstrating color problems and their solutions. *Color and Brightness Contrasts in Television Production* deals with the two kinds of contrasts in color pictures, i.e., color contrast and brightness contrast, and the effects of exceeding the prescribed contrast ranges on picture quality. Techniques for evaluating color and brightness contrasts are demonstrated as well as measures to be taken to enhance picture quality and to avoid degradation of picture quality when adverse contrasts are encountered.

*Color by Design* deals with the proper use of color in effecting a pleasing presentation of color pictures on television. The adverse effects of improper use of color in set design are demonstrated. Guidelines are suggested for enhancing the color composition of the picture, including proper use of color in the design of the setting, in the use of fabrics and accessories, and in the make-up of individual personalities.

The films were originally produced for the instruction of the staff and advertisers of CBS Television Network. They have been made available at a price of \$200 each or \$375 for the two, plus shipping charges. Orders or requests for information should be addressed to Murray Benson, Vice-President, Columbia Broadcasting System, 51 W. 52 St., New York, N.Y. 10019.

Availability of two black-and-white films dealing with lighting and camera operation has also been announced. *Simplified Operating Practices for Studio Cameras* describes the practices employed to obtain consistently good results from 4½-in. image-orthicon cameras in normal day-to-day operation. *Lighting for Television* describes and demonstrates techniques of television lighting. The procedures relate to lighting for all types of existing television cameras including 3-in. and 4½-in. image-orthicon, vidicon and Plumbicon cameras. The films run about 20 min and are priced at \$150 each.

**The Numerical Control Society** will hold its Fifth Annual Meeting and Technical Conference April 3-5 at the Marriott Motor Hotel in Philadelphia. Theme of the Conference is Numerical Control — Tomorrow's Technology Today. A program has been developed to examine the many key factors at work today in the widespread use and acceptance of numerically controlled machines and processes. Attendance at the NCS Conference is open to anyone interested in this field of technology. Further information is available from Numerical Control Soc., 44 Nassau St., Princeton, N.J. 08540.

The design and fabrication of optical components and systems are shown in a



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24-min informational film available (for showing) from Diffraction Limited, Inc., Middlesex Turnpike, Bedford, Mass. 01730. The 16mm film, in color and sound, narrates the complexities and critical procedures necessary to the production of exotic optical components and systems.

**An authentic reproduction of Gimbel's department store** in New York was constructed on Stage 5 at the Samuel Goldwyn studio in Hollywood during the filming of *Fitzwilly* produced by Walter Mirisch. A great number of "extras" — more than 450 — constituted a possible safety hazard. To avoid the possibility of broken glass large sheets of Plexiglas (a product of Rohm and Haas Co., Independence Mall West, Philadelphia, Pa. 19105) were used for the windows and doors of the store. The Plexiglas sheet for the stage set was supplied by the Los Angeles branch of Cadillac Plastic and Chemical Co. The reproduction of Gimbel's was accomplished at a cost of about \$100,000. The time of the scene is just before Christmas; Christmas trees, plastic and glass decorations and stock for the store required more than 100,000 items valued at about \$1 million.

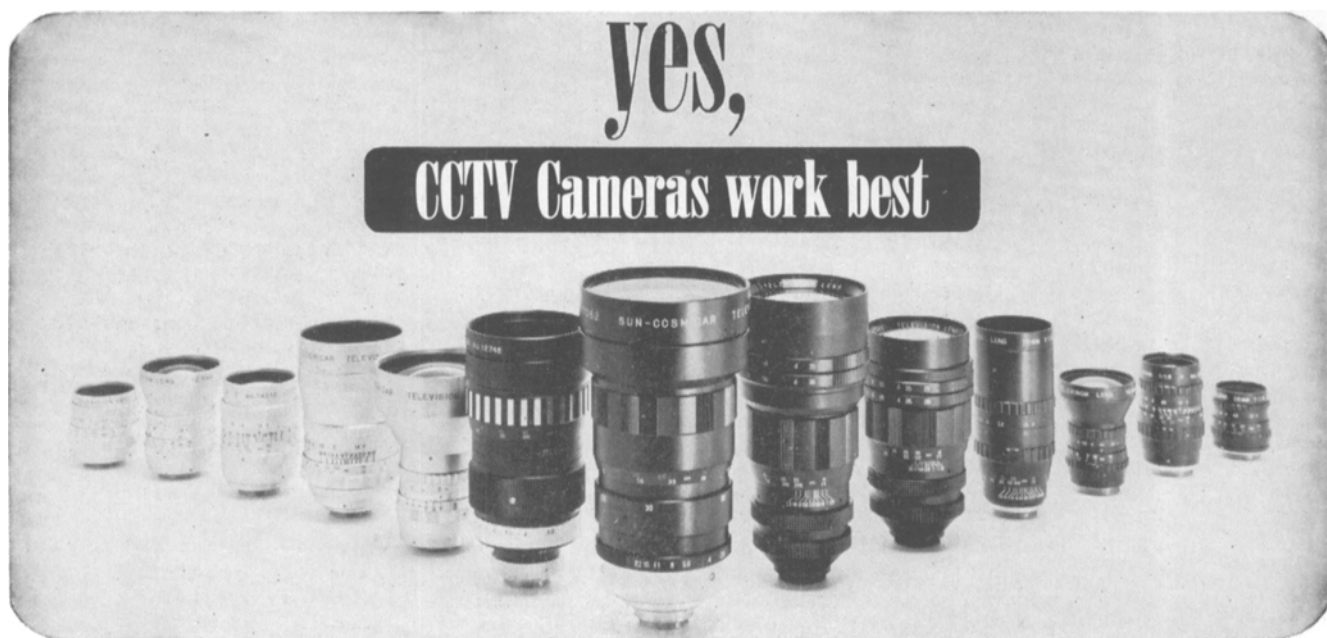
**Business Communications Producers Association Inc.** is a new group organized by 25 industrial producers. Incorporated in New York, it represents the first effort to unify the rapidly growing industry of business communications. Charter member

companies are: Tele-Tape Productions, New York; Kerbawy Co., Detroit; Michael John Associates, New York; Wernecke Studios, Chicago; Paul Roth Productions, New York; Show Counselors, Ltd., Detroit; Bob Lees Productions, New York; Wilding Inc., New York; Jam Handy Organization, New York; Production Services Inc., New York; Pan Media Company, New York; Muller, Jordon & Herrick, New York; Marketing Concepts, Inc., New York; Charisma Group Inc., New York; Depicto Meetings, Inc., New York; Fred A. Niles Communications Centres, Inc., Chicago; H. G. Peters Company, Indianapolis; Jack Morton Productions, New York; Howard Lanin Productions, New York; Gordon Crowe Productions, Inc., New York; Business Theatre Productions Div. of Display & Exhibit Co., Detroit; Alan M. Fishburn Productions, Chicago; Contemp Productions, New York; House of Shows, New York; and Michael Brown Enterprises, New York.

Officers of the new association are: President, A. J. Pocock of SCI Division of Communications Affiliates, Inc.; Vice-President, Howard Hoyt of Wilding Inc.; Treasurer, Mike Stanley of Jam Handy Organization; Secretary, Fred Pullen, House of Shows; Assistant Secretary, David Marshall of Contempo Productions. Further information is available from Mr. Pocock, c/o SCI, 605 Third Ave., New York, N.Y. 10016; or from J. W. Anderson, c/o Wilding Inc., 1345 W. Argyle St., Chicago, Ill. 60640.

**Experiments in Art and Technology, Inc.**, 9 E. 16 St., New York, N.Y. 10003, has announced the competition for the best contribution by an engineer to a work of art produced in collaboration with an artist. A first-place award of \$3,000 and two second-place awards of \$1,000 each will be granted to an engineer for his technical contribution to the collaboration. Works of art selected will be included in a major exhibition at the Museum of Modern Art in New York, entitled *The Machine*, to be held in the fall of 1968. The awards will be for the most inventive use of new technology as it evolves through the collaboration of artist and engineer.

**Changing to the metric system** of weights and measures is the subject of Resolutions offered in the U.S. Congress. The resolutions authorizing the Commerce Department to make a study of the problems involved have been introduced in Congress by Senator Claiborne Pell of Rhode Island and Congressmen George P. Miller of California, Richard Ottinger of New York, Don Edwards of California and Robert McClory of Illinois. A statement from Scale Manufacturers Association, 1 Thomas Circle, Washington, D.C. 20005, quotes the Association's Executive Secretary, Arthur Sanders, as warning that "The United States will soon find itself alone among the great powers and commercial nations using pounds and feet." Noting that Japan, Korea, India and Great Britain have converted to the metric system, which is now used by well over 90% of the



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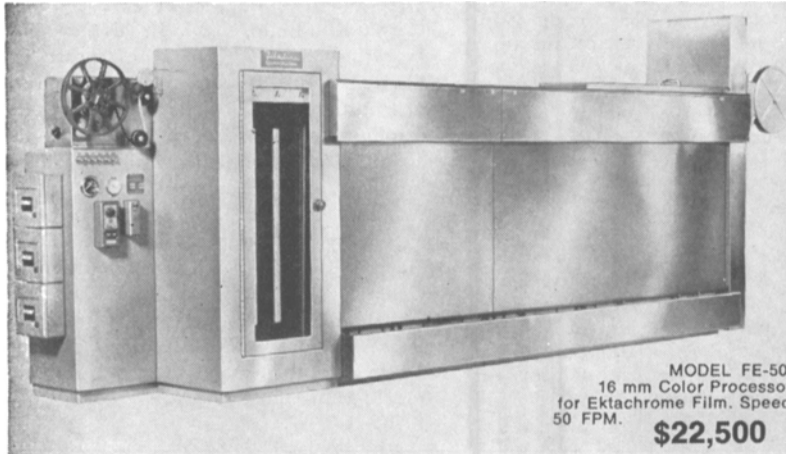
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- **"TORQUE MOTOR TAKE-UP"** gives you constant film take-up and does not impose any stress or strain on the film itself. Completely independent of the film transport system. This FILMLINE feature is usually found in professional commercial processors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

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### 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, WCO-TV, KTAR-TV, WSYR-TV.



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world's population, Mr. Sanders said, "Americans use at least 85 different weights and measures. Length comes by the inch, foot, yard, chain, rod, furlong, league and mile. Area may be in square miles or acres. Volumes and weights are stated in teaspoons, quarts, pecks, gallons, barrels, bushels, drams, gills and cords. There are three different tons, two different pounds, three different ounces, three quarts and three miles. No wonder," he said, "The rest of the world is a bit confused by American weights and measures."

Other interesting facts relating to weights and measures were brought out by Mr. Saunders: "Washington, Jefferson, Madison and John Quincy Adams (among many Presidents) each in turn called upon Congress to take definitive action in the weights and measures field. We're still waiting," he said. He suggested that an impartial study by the National Bureau of Standards which is "neither an advocate of nor an opponent of the metric system" would be an important step toward clarifying the weights and measures dilemma.

**New Directions in Laboratory Instruction for Engineering Students** is the title of a report compiled by the Commission on Education and published in the November 1967 issue of the *Journal of Engineering Education*, available at a price of \$1.25 from the American Society for Engineering Education, 2100 Pennsylvania Ave., N.W., Washington, D.C. 20037. The study was

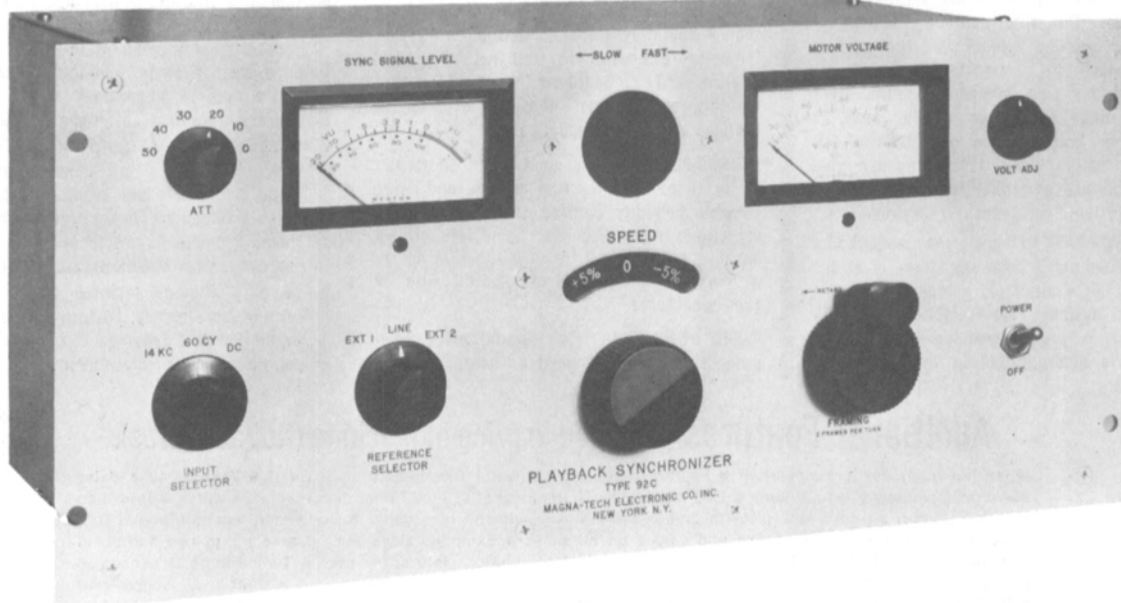
supported by the National Science Foundation. The study group found three specific problem areas which exist in laboratory programs: (1) the communication of ideas and methodology, (2) laboratory instruction aids and (3) laboratory faculty. Some of the suggestions for improving communication among faculty and institutions included summer workshops for faculty, a visiting laboratory faculty program, a visiting lecturer program of distinguished experimenters, publication of laboratory teaching "how-to-do" ideas in society journals or in the form of monographs, establishment of a national depository of laboratory information, and other proposals.

**Harvey J. Brudner** has been elected a Vice-President of Westinghouse Learning Corp., 90 Park Ave., New York, N.Y. 10016. Dr. Brudner joined the organization in April 1967 as Director of Research and Development, with responsibility for the implementation of the company's long-range programs of research in the field of educational technology. He was formerly a research scientist at the New York University Courant Institute of Mathematical Sciences, Principal Physicist for Emerson Research Laboratories, and a Guest Scientist at Rockefeller University. He is a member of the Advisory Committees to Middlesex County College and the National Security Industrial Association. He is the author of a six-volume series of books on college technical mathematics.

Current activities of Westinghouse Learning Corp. include the operation of the Job Corps Capital Project in Washington, D.C., which functions as a development center for methods and materials applicable to the entire U.S. Job Corps program for underprivileged and undereducated youths; operation of the Atterbury Men's Job Corps Center at Edinburgh, Ind., training of hard-core unemployed at centers in Baltimore and Pittsburgh for the U.S. Department of Labor, as well as other research programs in the learning process and the development of audio-visual educational materials.

**Ralph L. McCreary** has been appointed to the newly created post of Director of Corporate Planning, Hoffman Electronics Corp., El Monte, Calif. In his new post he will "chart the course of future expansion, both through the selection of new products to be developed for the communications market and through the acquisition of companies with capabilities in the field," according to David C. Arnold, President of the firm. Dr. McCreary was formerly Director of Engineering for the San Diego operations of General Dynamics Electronics. His earlier experience includes posts as Director of Research for Collins Radio Co., and Manager of the Systems Research Laboratory of Motorola, Inc.

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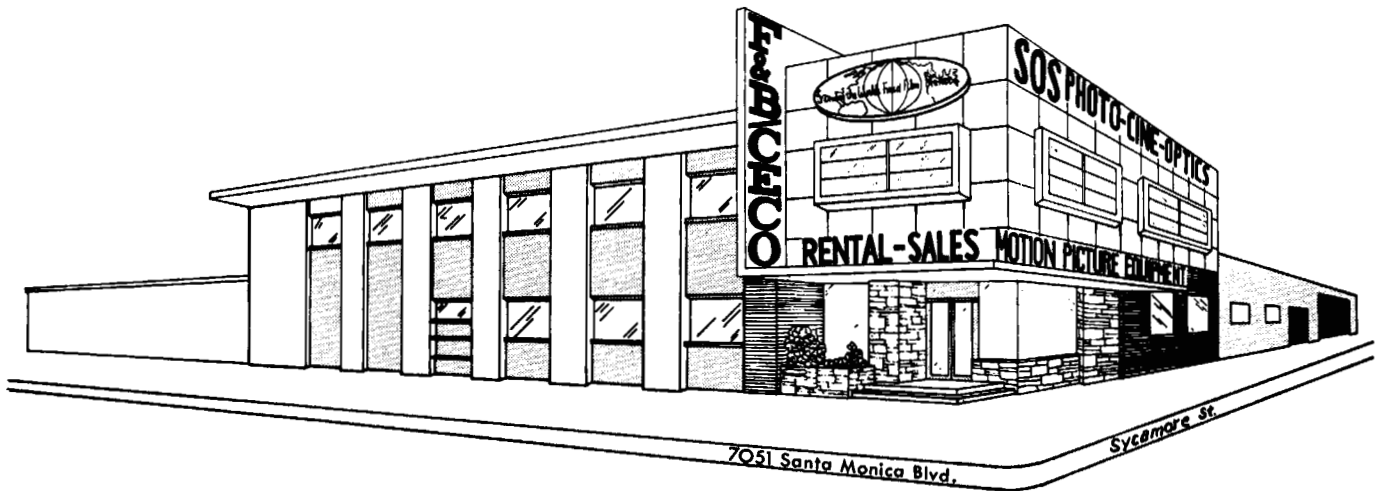
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**William Feldman** is the recipient of the NASA Public Service Award presented for "outstanding contribution to the success of the Lunar Orbiter project in which he played a key technical and management role for the Eastman Kodak team in the design and packaging of the photo subsystem," the citation stated. Dr. Feldman is Program Manager, Research and Engineering Dept., Kodak Apparatus Division. The photographic system that took the historic moon pictures transmitted back to earth from the Lunar Orbiter was designed and built by Eastman Kodak. (A group of six papers describing in detail the construction, design and operation of the Lunar Orbiter photographic system appears in the August 1967 issue of the *Journal*. The papers had previously been presented at the 101st Conference of the Society.)

Aboard each Lunar Orbiter was a self-contained photographic laboratory which enabled the Lunar Orbiter to relay back to earth photographs of broad areas of the moon. Major elements of the photo system were a dual-lens camera, film processor and a readout system.

**William B. Snow**, Head of the Electro-Acoustic Laboratory, Bisset-Berman Company, is recipient of the John H. Potts Memorial Award, awarded by the Audio Engineering Society. Presentation was made by D. W. Martin, Awards Chairman, at the AES 33rd Convention held during October in New York. The award to Mr.

Snow was made "in recognition of his pioneering work particularly in the field of stereophonic sound transmission and recording."

The Emile Berliner Award was presented to Robert Morris, retired staff engineer of American Broadcasting Company, "in recognition of his pioneering work in the field of disc recording, particularly in "orthacoustic" preemphasis volume indicators. The Audio Engineering Society Award was presented to Floyd Harvey for "contributions beyond the call of duty during and after his official terms of office."

AES Fellowships were awarded to John S. Boyers "in recognition of his pioneer work on tape recorders for professional and home use"; A. Pierce Evans "in recognition of his outstanding work in the field of audio facility design"; and to Adolph R. Morgan "in recognition of his achievement in sound recording and electro-acoustic research."

**Richard R. Conger** (Lt. USN, Ret.) has joined the management team of Creative Arts Studio, Inc., 814 H St. N.W., Washington, D.C. 20001. At the time of his retirement from the Navy he was Officer in Charge of the Naval Photographic Laboratory at the U.S. Naval Air Station, Norfolk, Va. A recognized authority on underwater and cold weather photography, he is the author of a number of papers, including "Ultra-Cold Weather Photography," in the January 1958 issue of the *Journal* (pp. 419-425).

**John Bennewitz** has been appointed Executive Producer for the New York office of Wilding, Inc., 1345 Argyle St., Chicago, Ill. 60640, producers of motion pictures and industrial stage shows. Well known in the audio-visual field, Mr. Bennewitz's most recent post was with the Joint United States Public Affairs Office of the U.S. Information Agency. He spent a year in Viet Nam where he supervised a staff of Vietnamese production personnel in filming five motion pictures. His previous experience in audio-visual communications includes eight years as executive producer of Kevin Donovan Films.

**Frank M. Bunch** has been appointed Field Sales Manager of X-Ray and Motion-Picture Products for the Northeastern District of the Photo Products Dept. of E. I. du Pont de Nemours & Co., Wilmington, Del. 19898. Mr. Bunch has been with the Du Pont Company since 1963. He has been located in Chicago as Office and Warehouse Manager since March, 1967.

**Irving Schwartz** has been appointed Controller of Camera Mart Inc., 1845 Broadway, New York, N.Y. 10023, and associated companies. He entered the motion-picture field more than eight years ago at Camera Equipment Co. Most recently he was Chairman of the Motion-Picture Division of the National Association of Credit Management.



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