



Audio Controls Division
Altec Lansing Corporation

SUPERIOR NEW INSTRUMENT SWITCHES AND ATTENUATORS

It's no longer a secret that our Audio Controls Division at Altec is well on the way to producing what we feel will be the best instrument switches and attenuators ever made specifically for the recording and broadcast industries. Without wishing to detract from my own three decades as a design engineer and manufacturer in this field, nor from the superb facilities available to me at Altec, I must admit that much of the credit goes to the fact that we are starting from scratch on all of our designs. Frankly, this is an engineer's dream—no preconceived ideas, no old designs that have to be adapted, no existing tooling that has to be used. Our only concern is the here and now, and how can we make it better.

LOW NOISE, LOW MAINTENANCE, LONG LIFE

Looks like our switches and attenuators will give you the best set of performance specifications ever available. Here are a few of the things we've done to achieve this superiority: Each brush blade is independently sprung to provide contact all the time. We predict a total absence of contact bounce. The brush springs are completely out of the circuit and will carry no current. Our brushes are made of fine silver ("coin" silver, normally used, contains copper and is subject to oxidation which reduces conductivity and raises noise level among other things). The fine silver does not oxidize—it sulfides. This has two advantages: conductivity is not affected and sulphide of silver has a lubricative quality which is actually beneficial.

MORE INNOVATIONS

As you know, most switches come in round cans. We're putting ours in square ones. You don't have any use for the space around the can anyway so we're using the corners for the wiring. The result is that our switches will give you more positions in less space. For example, most switches have 12 positions at the most. Ours have 31 positions on a 1½" switch and up to 45 positions on the 2¼" one.

To cap the whole thing off, we'll be able to gang up to 8 of our attenuators in tandem so you can operate the whole works with just one control.

NEW SOLID STATE 470A PREAMP NEARLY READY

We announced this device in our last "Studio Talk." It's the one you can use as a preamp or as a line, booster, or program amp with no internal changes needed. By the way, the 470A has a lower noise level than any vacuum tube unit on the market.

And by the time you read this, our 61A Program Equalizer and 62A Graphic Equalizer will be in full production. So give me a call or drop me a line. I'll be happy to send you the latest information on what's here now and what's coming soon.

Art Davis
Art Davis

Audio Controls Division • Altec Lansing Corporation • Anaheim, California

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society, Mr. Bernhard saw the number of members triple. Mr. Bernhard, in addition to membership promotion, was responsible for publications promotion, technical conference management, and financial and business affairs of the plastics group.

Mr. Bernhard holds a degree in chemistry and business administration from Fordham University. Before entering Fordham, he served as a Navy petty officer first class during World War II. Mr. Bernhard was employed as laboratory chemist at St. Joseph's Hospital in Stamford, Conn., and in the quality-control department of Machlett Laboratories, Springdale, Conn., before joining the Society of Plastics Engineers.

Col. Stodter retired in 1954 after a 30-year Army career, the last four years of which he served as chief of the Army Pictorial Service. Following his retirement from the Army, he was engaged in communications research at the University of Pennsylvania.

Education, Industry News

Pay-TV will be in operation late in 1965 in Miami, Atlanta, Houston and Dallas, according to plans announced by Paramount Pictures Corp. and its subsidiary International Telemeter Corp. Franchises have been granted which "contemplate construction of cable circuits to reach a minimum of 75,000 homes in each locality," the announcement stated. The Telemeter system (in common with the Subscription TeleVision system) uses a cable system and thus avoids the necessity for FCC supervision. It has been in operation on an experimental basis near Toronto for more than three years (Patrick J. Court, "Telemeter pay television system," *Journal*, 161-166, Mar. 1962). An over-the-air system of subscription television is presently in operation in Hartford, Conn. The system, developed by Zenith Radio Corp., is owned by General Tire & Rubber Co.

Franchises for the Telemeter system have been granted in Houston and Dallas to Home Theatres, Inc. The Miami franchise has been granted to Florida Home Theatres Corp. and the Atlanta franchise has been granted to Home Theatres of Georgia, Inc.

A joint meeting of the Rochester and Toronto Sections of the Society will be held September 18-19 at the King Edward-Sheraton Hotel in Toronto. Known as the "Little Convention," the joint meeting is an annual event. One of the highlights of the meeting will be a symposium on Reversal Processing, announced as the "first of its kind." The symposium will be followed by presentation of papers dealing with television and film. The symposium is expected to be of special interest to the personnel of small television stations. Further information is available from Maurice French, Canadian Broadcasting Corp., 354 Jarvis St., Toronto, Ont., Canada.

The 12th National Industrial Photographic Conference of the Professional

Photographers of America, Inc., 152 W. Wisconsin Ave., Milwaukee, Wis. 53203, was held August 2-7 at the Conrad Hilton Hotel, Chicago. Special government and military programs were held in conjunction with the Conference. Papers presented included "Mission of Navy Photography and Its Application in Support of the Fleet," by Capt. J. J. Crowder, USN; and "Rendering a Community Service With Your Camera," by R. Vetter.

A fiber optics instrument under joint development by Walter J. Gamble, M.D., of the Children's Hospital Medical Center in Boston and Robert E. Innis of American Optical Co., Southbridge, Mass., has been used to photograph the interior of the heart of a living dog without the need for major surgery. High-speed motion pictures have been obtained of the valves and other areas of the heart and the opening and closing of the aortic valve leaflets. When using a tungsten light source, the color of the lining of the heart can be seen.

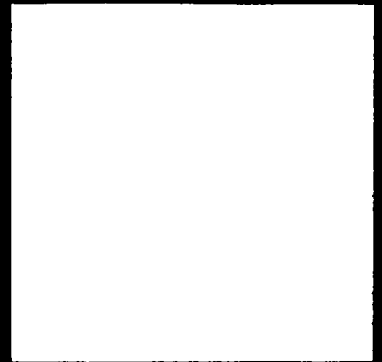
The prototype instrument is a rigid tube 14/100 in. in diameter and 21 in. long. It is introduced through a small incision in the neck of the dog and advanced along the blood vessels until it reaches the inside of the heart. A transparent balloon on the tip of the instrument is inflated and pressed gently against the wall of the heart, displacing the blood. The selected area inside the heart can be seen through this balloon.

The instrument contains a lens system in its tip which focuses an image of the part to be observed on the end of an image transfer fiber optic bundle which contains 76,000 optical glass fibers precisely arranged in parallel. One end of the fiber optics bundle is outside the dog and the image, transferred by the glass fibers, can be viewed through a microscope. Illumination is supplied by an external light source such as a tungsten bulb or a high-intensity mercury arc lamp. The light is carried through the instrument by a second smaller separate fiber optic bundle. The fibers of this bundle are arranged in a circle as they bypass the image-forming lens. The light leaves the ends of these fibers at the tip of the instrument and illuminates the parts of the heart under observation through the balloon. The balloons are specially made with fine glass thread, about 2/1000 in. in diameter imbedded in the side walls so that when inflated the balloon will assume the proper shape and stability.

The next step is development of a flexible instrument that can be used to photograph the interior of a living human heart.

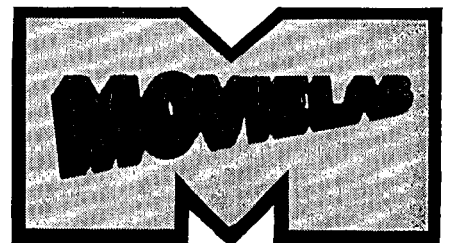
Studies of the spectral energy distribution of daylight and skylight have been conducted at the Eastman Kodak Research Laboratories by H. R. Condit and Frank Grum. A paper discussing the study appears in July 1964 issue of the *Journal of the Optical Society of America* (pp. 937-944). The work provides basic information as to how the various conditions of skylight and daylight, such as haze, overcast, or sunny skies, affect the light spectrum. It is hoped that the findings of this research will provide a basis for stand-

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AND TAPE VAULTS AND THE FINEST SCREENING FACILITIES IN THE EAST



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SMPTE test films for television



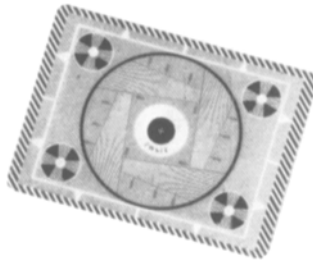
NETWORK, LOCAL, CCTV...

a test film library for
engineering and telecine

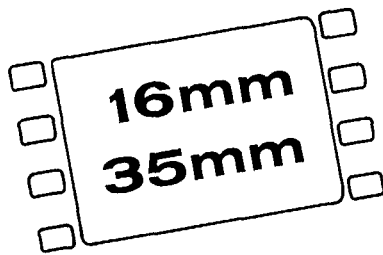
VIDEO TEST FILMS

TEST FUNCTIONS:

alignment resolution
focus linearity
low and medium frequency response
storage and transfer characteristics
automatic brightness control
qualitative picture analysis



FOR COLOR TELEVISION



Grey Scale — for setting-up and adjusting
signal generators

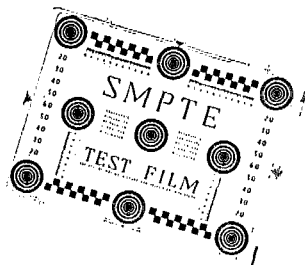
comparative and qualitative test of systems
ability to reproduce color

representative quality Technicolor and Eastman
color prints

PROJECTOR PERFORMANCE

Test and Adjust:

picture steadiness jump and weave
Shutter timing (travel ghost)
framing focusing
aperture alignment



SOUND REPRODUCTION *optical | magnetic*

Test, Adjust and Calibrate

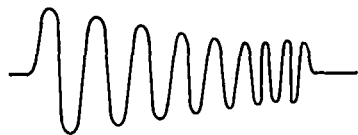
scanning beam slit position

multi-frequency response

Azimuth and focus of sound optical train

signal level and balancing, output
flutter

scanning beam illumination



FOR THE SCREENING ROOM

Jiffy Test Film: a time saving quick evaluation of 16mm sound projector system performance

for further information

and for a complete listing of test films, write to department TF

Society of Motion Picture and Television Engineers

9 EAST 41st ST. NEW YORK, N.Y. 10017

ardization in the fields of photography and colorimetry. It is expected that the study will be of particular interest to designers of color photography materials by providing a means for determining the precise effect of various atmospheric conditions in the visible and invisible portions of the light spectrum. The information will also have importance for designers of devices for simulation of natural light and manufacturers of light-measuring devices.

The researchers found that the extremes of the wavelength, the ultraviolet and the infrared rays, tend to vary more than other portions of the spectrum under differing sky conditions. Meanwhile, the study will continue on a "spot" basis to determine whether seasons of the year present any significant variables.

Dimension-150 is a new wide-screen process announced by Dimension-150, Inc., 233 W. 49 St., New York, N.Y. 10019. The system includes use of various wide-angle lenses up to 150°, and requires use of a 65mm camera equipped with Dimension-150 lenses for photography and a standard 70mm projection machine for presentation on deeply curved screens ranging from 120° to 150° of arc, depending on the physical features of the theaters. Printing for the new process is done on a standard 65/70mm optical printer. A specially developed printer lens corrects the image for purposes of deeply curved screen projection, permitting correcting of previously photographed 70mm material. The image format allows an area for 6-track stereophonic sound-on-film. First use of the new process is for the Dino De Laurentiis production, *The Bible*.

Opening of a Data Analysis Center in Alexandria, Va., has been announced by Itek Corp., Lexington 73, Mass. The new Center, which occupies 6,300 sq ft, will provide photographic analysis and evaluation services for government agencies and industrial firms. Services will include photogrammetric evaluations, interpretation of aerial photographic data, development of new data handling techniques and analysis of photographic measurement problems inherent in exploring the moon and the planets. Head of the new Center is Charles E. Chambers. Before joining Itek he was a with Autometric Corp.

Formation of a Canadian subsidiary called Itek Business Products, Ltd., has been announced by Itek Corp., Lexington 73, Mass. The new subsidiary, located at 214 Laird Drive, Toronto, will provide sales and service facilities in the fields of offset printing, microfilm and photocopying.

Oxberry Corp. has moved from 38 Hudson St., New Rochelle, N.Y., to larger quarters at 620 Fayette Ave., Mamaroneck, N.Y. The move includes the firm's offices, engineering and manufacturing facilities. Increased activity in the firm's current line of printers and animation equipment as well as its expansion into film processing and lower priced animation equipment made this move essential, according to A. Kip Livingston, the firm's Executive Vice-President.

GLEN



GLENN

SOUND

GLEN GLENN SOUND COMPANY

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G. CARLETON HUNT, president

TRANSISTORIZED DISTORTION ANALYSER

MODEL 2331 \$795

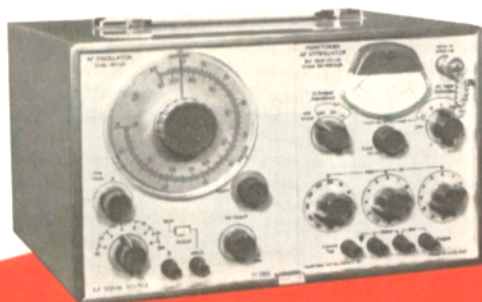
- Frequency Range 20cps to 20 kc
- Switchable bandwidths 20kc and 100 kc
- Seven distortion ranges 0.1% to 100% F.S.D. (reads to -72 dbm)
- L. F. cut can eliminate hum components



MARCONI

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DIVISION OF ENGLISH ELECTRIC CORPORATION
111 CEDAR LANE, ENGLEWOOD, NEW JERSEY



LOW DISTORTION SIGNAL SOURCE

MODEL 2000 \$745

OSCILLATOR 2100 \$420

- AF Signals 20 cps to 20 kc
- Distortion <0.05% 63 cps to 6.3 kc
<0.1% 20 cps to 20 kc
- Output 15 dbm in 600Ω (8.5 V open)

ATTENUATOR 2160 \$325

- 111 db in 0.1 db steps monitored
 - 75Ω, 150Ω and 600Ω balanced,
600Ω unbalanced.

Installation of XeTRON CX-9 lamphouses on two Eastman 25 type 16mm projectors and two Simplex 35mm projectors in the number one screening room of the J. Walter Thompson advertising agency of New York has been announced by XeTRON Division, Carbons, Inc., 400 Myrtle Ave., Boonton, N.J. The lamphouses are equipped with 450-w xenon bulbs. Installation of CX-900 lamphouses using 900-w xenon bulbs in the agency's number two screening room is planned for the near future.

A call contract has been awarded Reid H. Ray Film Industries, Inc., 2269 Ford Parkway, St. Paul 16, Minn., by the Office of Education of the U.S. Department of Health, Education and Welfare. Services include script writing, photography, animation, sound recording and laboratory services. Under the terms of the contract the Office of Education may assign the film company to a project anywhere within the continental United States.

Film cutting rooms have been made available by Camera Mart, Inc., 1845 Broadway, New York, N.Y. 10023. The cutting rooms are located on the 4th floor of Camera Mart's newly renovated quarters and may be rented on a weekly, monthly or annual basis.

Encyclopaedia Britannica Films Inc. will adapt *National Broadcasting Company* television documentaries and distribute them to schools, colleges, universities, libraries and adult education centers, according to the terms of a recently signed five-year contract. Patrick Hazzard, head of the English Department of Beaver College, Glenside, Pa., has been retained by EBF as television consultant for the project. Dr. Hazzard is Chairman of the Committee on Commercial Broadcasting of the National Council of Teachers of English. The contract gives EBF the right to distribute films of any of NBC's documentary, news, special, religious and children's programs.

A number of franchises from camera equipment manufacturers have been granted to Camera Mart, Inc., 1845 Broadway, New York, N.Y. 10023. Products for sale or rental include Bolex 16mm cameras and accessories (granted by the Paillard Co. via an industrial audiovisual franchise); Stellavox battery-operated 1/4-in. professional tape recorders; Siemens 16mm optical magnetic interlock projectors; and Moviola crab dollies.

The Abtronics line of image converter cameras and accessory equipment has been acquired by Beckman & Whitley, Inc., San Carlos, Calif., according to a joint announcement by Harvey M. Owren, President of Abtronics, Livermore, Calif., and John C. Beckman, President of Beckman & Whitley. Under terms of the agreement the Beckman & Whitley service organization will service all Abtronics cameras now in the field as well as those purchased after July 7, the date the agreement became effective.

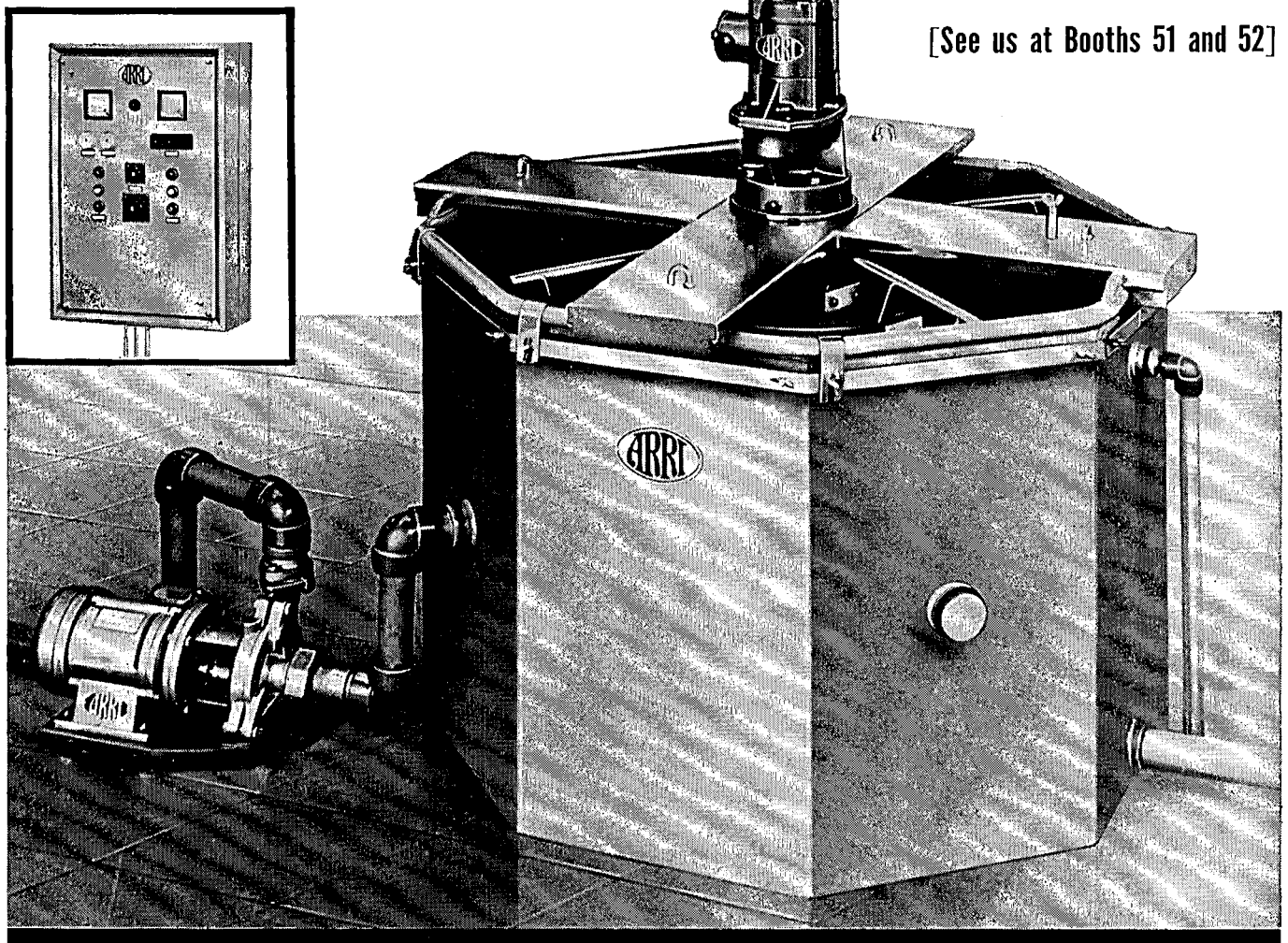


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A complete line of Arri Silver Recovery Plants—ranging in current density from 10 to 100 amperes—is available to photofinishers, X-Ray and film laboratories, and other large-volume hypo users. Efficient performance, together with today's higher silver prices, make Arri Silver Recovery units a sound investment which will pay for itself in very short time.

[See us at Booths 51 and 52]



Features: Minimum space requirements ■ Maximum efficiency through optimum flow conditions (turbulation and cascading motion) ■ Long service life ■ Automatic recovery of silver with a high grade of purity ■ Minimum manpower requirements for maintenance and operation ■ 50% saving on fixing chemicals

Write for detailed information and prices

MODEL	MAX. CURRENT (Amperes)	NUMBER OF CATHODE PLATES	APPROX. HEIGHT	APPROX. DIAMETER	TOTAL AREA CATHODE PLATE	FLOOR SPACE REQUIRED	FOR MAX. DAILY HYPO CONSUMPTION OF:
10	10	1	17¾"	9¾"	547.5 sq. in.	8 sq. ft.	100 liters
25	25	2	17¾" 17¾"	19¾" 8¾"	1642.5 sq. in.	11 sq. ft.	250 liters
50	50	2	21¾" 21¾"	27½" 15¾"	2943 sq. in.	13 sq. ft.	500 liters
100	100	2	25½" 25½"	35¾" 21½"	4586 sq. in.	22 sq. ft.	1,000 liters

ARRIFLEX CORPORATION OF AMERICA 257 Park Avenue South, New York 10, N. Y.

High intensity,
high brightness,
full spectrum,
long life,
complete reliability,
rapid start,
no maintenance.

What more could you want from a compact arc lamp? Nothing. Hanovia Xenon, Xenon-Mercury and Mercury Lamps boast every feature you could require for solar simulation, lasers, instrumentation, photochemistry, and communications. All operate DC, AC, pulsed, simmer-flash or modulated, in wattages from 80 to 5,000. One universal starter is all you need for *all* Hanovia compact arc lamps. And only Hanovia makes the lamp *and* all associated equipment such as electrical controls and power supplies . . . in America, of course. Write for complete technical information.



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Emerson Yorke, Executive Producer of Lehi Productions, Hollywood, has announced completion of *Voyage of the Lehi IV*, a sea adventure feature picture in 35mm Eastman Color. The picture deals with the successful attempt by Captain DeVere Baker to follow the westward flow of the Japanese Ocean current with a raft, manned by four men and a dog, which was allowed to drift from the coast of California to the Hawaiian Islands, thus proving Captain Baker's theory of the sea route pursued by the first voyagers from this continent to the Islands. These are believed to be descendants of the pre-Mayan peoples who, more than 2,000 years ago, inhabited Central America. Original thematic music for the film was composed by Solita Palmer and Edith Jackson.

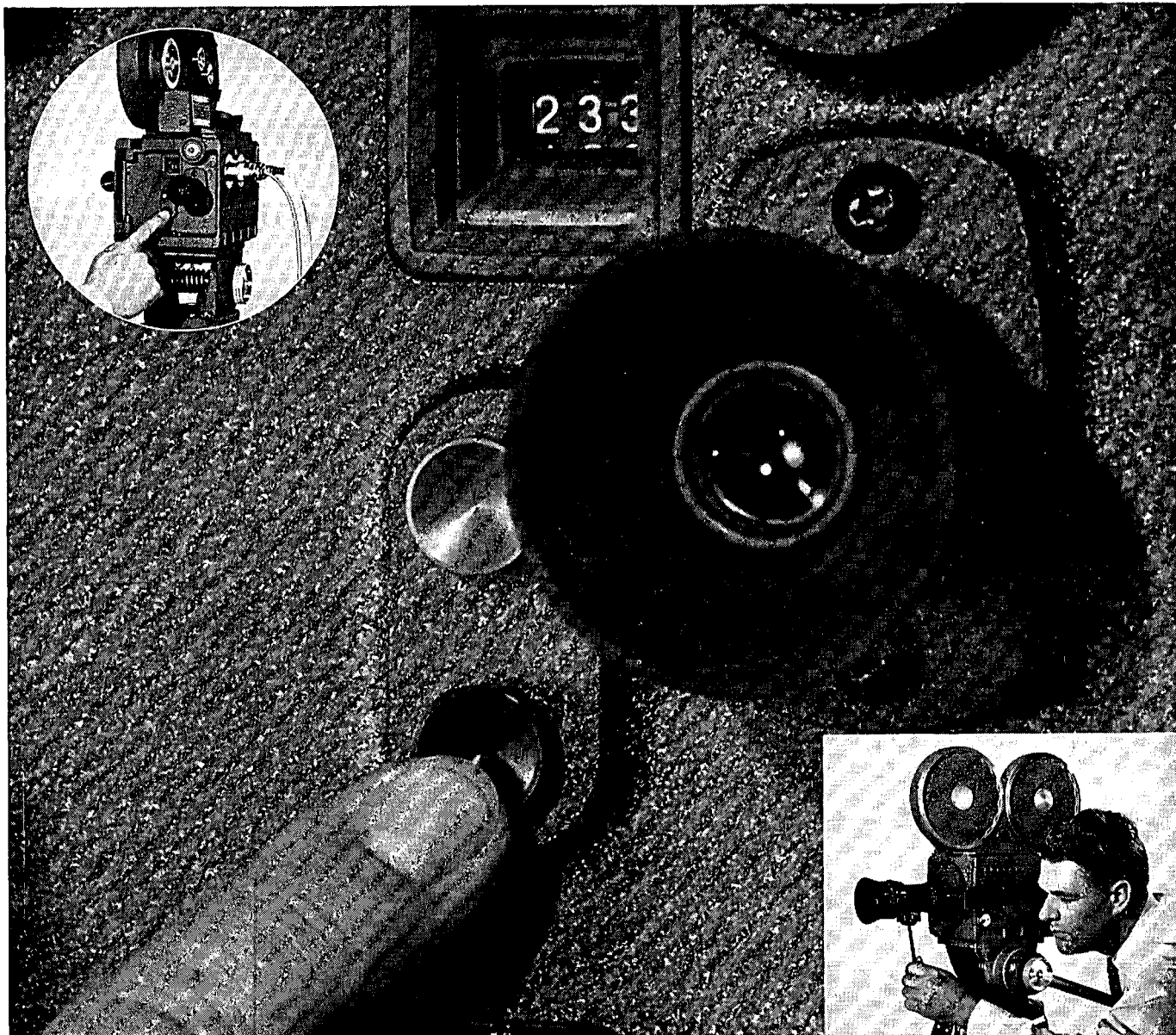
Louis F. Salig has been appointed Manager of Projection Lens Sales at Kollmorgen Corp., Northampton, Mass. He will specialize in the sales of standard and special purpose projection lenses, such as the 35mm Snaplite lenses used for Cinerama and other motion-picture projectors. Mr. Salig has been with the firm for 16 years.

R. J. Gavin has been named Vice-President and General Manager of 3M Company's Revere Wollensak division, with headquarters in St. Paul, Minn. He succeeds G. W. Sandell who has been appointed General Sales and Marketing Manager of Videotape Productions of New York, Inc., a 3M subsidiary. Mr. Gavin has been with 3M since 1944 where he has held a variety of positions with the electrical products group. Prior to his present appointment he served as Divisional Vice-President in charge of the firm's Irvington and Mico divisions, which are primarily manufacturers of electrical insulating materials.

Edward H. Wolk, 1241 S. Wabash Ave., Chicago, Ill. 60605, has acquired the Wenzel Projector Co., according to an announcement by Fred J. Wenzel, President, who also announced his forthcoming retirement. The company was founded in 1922 by the late Mack Wenzel.

Bernard M. Kamber has been elected President of Cinex Distributing Corp., importers from Germany of raw stock positive film. Mr. Kamber was recently head of his own public relations firm. He was formerly Vice-President of Hecht-Hull-Lancaster.

Edward E. Engel has been appointed to the Industrial Sales Division of Birns & Sawyer Cine Equipment Co., 6424 Santa Monica Blvd., Los Angeles, Calif. 90038. Prior to his present appointment he was associated with Reid H. Ray Film Industries as Vice-President Regional Sales. Previously he was Audio-Visual Director for the Clark Equipment Co., film editor for the Geo. W. Colburn Laboratories, and Assistant Director for WBBM-TV (CBS-Chicago). He has also been associated with Century Camera and Marshall Field & Co.



AURICON PRO-600 SPECIAL
400 FT., RUNS 11 MIN.
\$1295 UP

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Silent operation is built into the Pro-600 Special. As a result, you can get high-quality sound even under difficult acoustic conditions without a blimp. You save as much as 75 pounds and \$1800!

A superb photographic instrument, the Pro-600 Special gives you a rock-steady picture with perfect frame-line registration. Takes a 400- or 600-foot magazine; records either optical or "Filmagnetic" single system sound, as well as double-system sound.

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
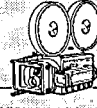
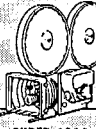
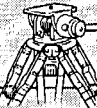

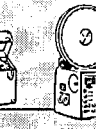
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Hollywood 38, California



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CINE-VOICE II \$967.00 & up	AURICON PRO-600 \$1456.25 & up	SUPER 1200 \$4149.00 & up	TRIPOD \$406.25 & up	PORTABLE POWER SUPPLY UNIT \$269.50	SOUND RECORDER \$3643.00 & up