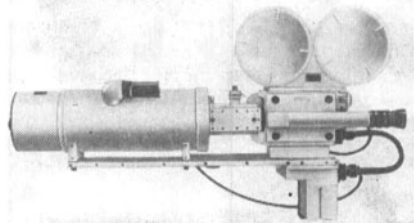


new products

(and developments)

.....
Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.



The Cameraflex 35mm boresight camera designed to photograph the target being tracked by a radar set is distributed by Camera Equipment Co., 315 W. 43 St., New York 36. The camera has a register pin movement and a reflex shutter principle whereby the action may be viewed through the taking lens while the camera is in operation. A variable shutter mechanism allows a maximum of 60° and a minimum of 1 7/8° opening. The shutter mechanism is driven through a differential drive which controls a return pulse contractor, giving a return pulse at precisely midpoint, regardless of the degree of shutter opening.

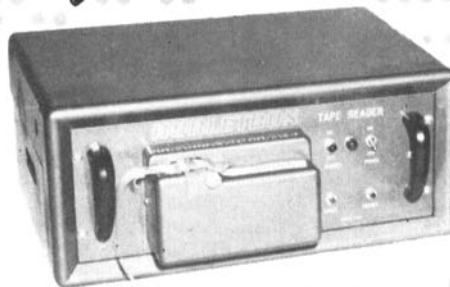
The camera is driven by a synchronous motor which operates the camera at a constant speed of 24 pictures/sec. It can also operate at a rate of 10 pictures/sec, 20 pictures/sec, or 30 pictures/sec. It can also use a pulse-driven speed up to 10 pictures/sec. A built-in data recorder allows the recording of binary coded information. Binary coded words, timing data and event marking pulses can be fed through the data recorder on separate tracks.

Other features include either 40-in. or 80-in. catadioptric lens, 200-ft or 400-ft magazines, gear driven by a separate torque motor; a radar-secondary mount with provisions for azimuth, elevation and camera-focusing adjustments.

70mm data recording motion-picture films are being studied by Technicolor Corp., 6311 Romaine St., Hollywood 38, with a view toward possible modification of one of the processing machines to accommodate 70mm data recording films in both color and black-and-white. Most of these films carry 1956 ASA Type I perforations. The firm has, for several years, been engaged, among other activities, in the production of 70mm color release prints. Fred H. Detmers is in charge of information for prospective users of the system.

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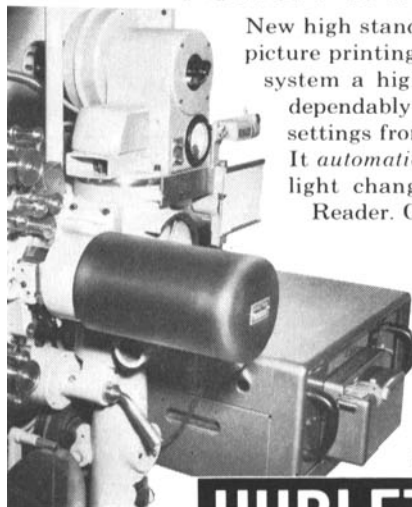


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New high standards of quality in motion picture printing are now possible! Under this system a high speed shutter moves accurately and dependably through the entire range of printer light settings from 0 to 22 . . . at increased printer speeds! It *automatically adjusts* to short scene and extreme light changes controlled by the Hurlertron Tape Reader. Output per man hour is greatly increased and *human errors due to fatigue are eliminated!*

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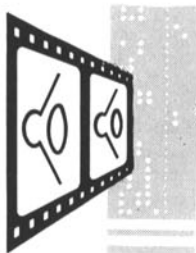
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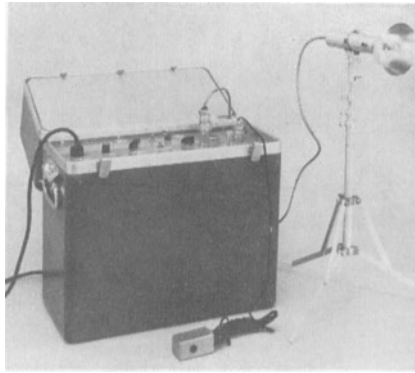
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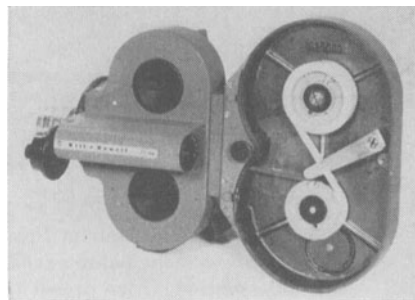


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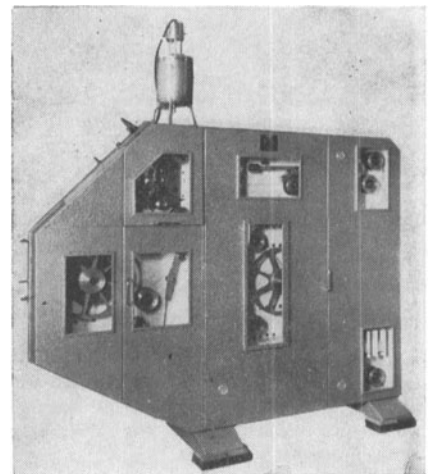
An electronic flash unit, Model 357, developed primarily for use with the Model 326 Dynafax High-Speed Camera has been announced by Beckman & Whitley, Inc., 973 San Carlos Ave., San Carlos, Calif. A compact portable unit, designed to be easily handled, it has a 1200-w/sec capacity which gives sufficient light intensity to cover an area up to 2 sq ft with 1- μ sec exposure. The duration of the flash can be controlled to correspond to the writing time of the camera. Waveform of the light pulse is square to provide even illumination on all frames. Duration settings are 8.70, 11.15, 14.75, and 22.25 msec. Rise and decay times of the pulse are in the order of 40 msec. The flash unit may be triggered from a normally open or normally closed switch, positive pulse, or photoelectric cell. An additional feature is a modeling light which operates at 60 flashes/sec for use in framing, focusing, and light arrangements. Operation is from a 115-v, 60-cps, 5-amp integral power supply. The flash unit is priced at \$1950.



A system of processing motion-picture film within the camera, based on the use of chemically presaturated paper material, has been announced by Specialties, Inc., Skunks Misery Rd., Syosset, L.I. The system, called Rapromatic processing, involves the application of a processing solution to an emulsion by sandwiching the photographic material with a paper web saturated with chemicals. This paper web is called Raproroll. The process was developed specifically to enable quick access to recorded data, instrumentation records and other industrial photographs. It is presently available on a production basis for 16mm film. In the magazine-processor, the Raproroll and exposed film or photographic paper are pressed together in intimate contact under nominal pressure. The paper releases its liquid under pressure and the liquid is accepted by the emulsion. The required quantity of solu-

tion is carefully controlled by web thickness and composition to prevent dripping. The film is immediately developed and can be projected on a screen in less than 60 sec after shooting. The process is distributed in the west by Traid Corp., 17136 Ventura Blvd., Encino, Calif.

A magnetic tape system capable of recording and reproducing both analog and pulse signals has been announced by Minicom Division of Minnesota Mining and Manufacturing Co., 2049 S. Barrington Ave., Los Angeles 25. The 7-track system, called the CM-100 Video Band Recorder/Reproducer, is packaged in a single, standard-size rack and offers selection of six speeds ranging from 7½ to 120 in./sec on single ¼-in. tape. Each of the seven video tracks covers an overall bandwidth of 400 cycles to 1.0 mc with greater frequency response. Examples given in the announcement: 1.0 mc at 120 in./sec; 500 kc at 60 in./sec. Compactness of the system is achieved by combining electronics for both recording and reproducing in a single unit for each track.



The Sonocolor SCF 2 Striping Machine for the coating of magnetic tracks on motion-picture film is a product of Sonocolor, 54 Avenue de Choisy, Paris 13, France. The machine, designed for heavy industrial service, is used to apply full coating on unprocessed films and single- or multi-tracks on processed films after development. Requiring only one operator, the machine has an interchangeable coating head assembly so that films of all widths can be coated and one or several tracks can be deposited. The machine is completely self-contained and requires less than 11 sq ft of floor space.

The Communications Idea Center located at 5137 Broadway, Chicago, is a development of Wilding Inc., 1345 W. Argyle St., Chicago, producers of industrial motion pictures, and its subsidiary, Commercial Picture Equipment, manufacturer of portable equipment for business communications. The Center is equipped

SMPTE Lapel Pins. Gold and blue enamel reproductions of the Society symbol, with screw back. Available to all members from Society headquarters. Price \$4.00 incl. Fed. Tax; in New York City, add 3% sales tax.

with an 18-ft turntable for demonstrations and presentations. Recent demonstrations include a punched-tape device for automatic control of a sales presentation by opening and closing curtains, turning lights on and off and starting and stopping projectors. Called Automatic Program Control (APC), it is designed primarily for field use. Among other presentations is the two-projector motion-picture technique on a wide screen, synchronized with right and left images, each with separate sound to permit conversation to be carried on between actors in both images. Other presentations include Trigger-Strip slide-film to provide animation; Vista-Strip, a slidefilm device producing images that seem to flow across the screen, and Vista-Sell, a device for use in markets, railroad stations, airline terminals, using a moving color filmstrip.

The International Trade Fair (April 9-26) at Osaka, Japan, features a color Ampex Videotape Recorder in constant operation throughout the Fair, recording and playing back immediately the appearance of Japanese and American celebrities and representatives of other countries attending the Fair. The studio at the Osaka Fair utilizes a General Electric color camera as the program source for the recorder. Closed-circuit demonstrations are scheduled for broadcast over television stations in Osaka. In addition to recordings made within the studio, a number of prerecorded color tapes are being used for closed-circuit playback for visitors to the Fair.

A magnetic tape recorder that automatically changes tape cartridges was demonstrated by the inventor, Marvin Camras, senior engineer at the Armour Research Foundation of Illinois Institute of Technology, at the annual convention of the Institute of Radio Engineers, March 17, in New York. The cartridge, 3½ in. in diameter, contains a ¼-in. magnetic tape with leader tapering from 0.25 in. to 0.34 in. Its central opening fits present recorders. The cartridge is said to be universal in respect to speed, tape width, and single- or multi-channel operation. On the inner side of each flange of the cartridge, a bead is molded which holds a wide Mylar end-leader securely in place, sealing the inside to protect the tape from dust. The ¼-in. recording tape passes through the flanges with ample clearance after the leader has been unwound. A leader at the inner hub actuates the automatic reverse or rewind operation.

Protection against accidental erasure is provided by a safety groove in the bottom of the cartridge. If this groove is present, a "feeler" enters it when the machine is switched to recording position, allowing normal erasing or recording. Unrecorded cartridges are molded with this groove; recorded cartridges are not. A removable insert is provided, so that protection may be added after a cartridge has been recorded.

A member of the Society, Mr. Camras is the author of several papers published in the *Journal*, including "Magnetic Sound for Motion Pictures" (pp. 14-28, Jan. 1947), and "Magnetic Sound for 8mm Projection" (pp. 348-356, Oct. 1947).

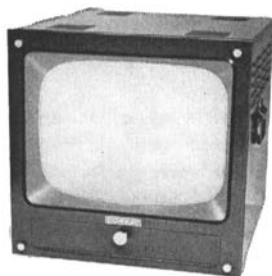
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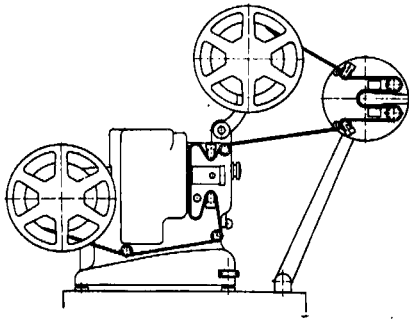
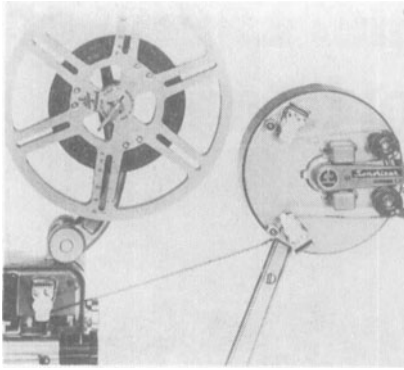
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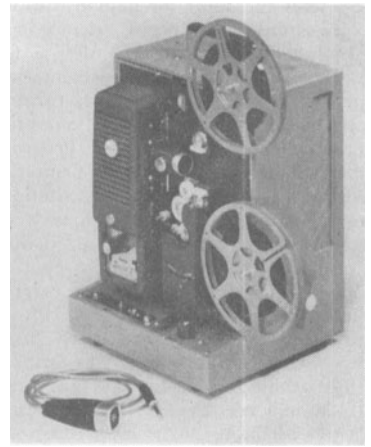
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The Bolex Sonorizer, a magnetic sound unit for recording and playing back sound directly on 8mm film has been introduced by Paillard, Inc., 100 Sixth Ave., New York 13. To be used in combination with the Bolex M-8 and many other 8mm projectors, the unit features two

separate inputs connected to a built-in mixer, and an automatic fade-out and overlay device for superimposing one sound over another on a single recording track. The unit records the sound on a 30-mil-wide magnetic stripe applied to the edge of the film outside the perforated holes after the film is processed. The point of recording and playback is at the soundhead which forms a "third reel," the film traveling through it before entering the film gate. The soundhead works on the pull-through principle. The film passes over a sound roller which maintains even pressure against it by means of a set of double pendulum rollers. The sound roller drives a dynamically balanced flywheel inside the soundhead. The unit, complete with case weighs 28½ lb and measures 10 by 12 by 14 in. It is priced at \$250.

An 8mm sound motion-picture projector incorporating a complete system for recording and playing back magnetic sound on both old and new 8mm film has been announced by Eastman Kodak Co. and is the subject of a paper scheduled for presentation at the forthcoming Convention in Los Angeles. The projector has a number of unusual features. The magnetic head used in the sound system is made of a new metal called Alfenol which has an estimated life span of thousands of hours. The magnetic head is only 20 mils wide — less than the width of the magnetic striping — to eliminate "edge tracking" and to assure better sound quality. A non-axial



500-w projection lamp is used to provide illumination for screenings five feet wide, and a lower light level of 250 w can be used when recording. The operator can erase, re-record, or playback sound at will.

There are two basic controls for the sound system, a play/record switch and a volume control knob. For projection, separate switches are supplied for motor and lamp, and a single rotary switch controls forward and reverse projection, "stills," and power rewind. The projector is priced at \$345.

A new Kodak Sonotrack Coating service for processed 8mm Kodachrome film has also been announced. The magnetic oxide coating is applied between the film edge and perforations of the processed film.

Also announced is a self-threading 8mm projector, the Brownie 8 Movie Projector (Model A15). A pulldown claw and a fixed film guide assembly lead the film through the gate and onto the 200-ft take-up reel. The projector is priced at \$54.50.

A variable-focus lens with a range of 20mm through 80mm has been announced by Traid Corp., Box 648, 17136 Ventura Blvd., Encino, Calif. The lens will fit any 16mm camera with a "C" mount. The lens is 4½ in. long with a diameter of 2 in. The iris is constant at f/2.5 for all focal lengths. The focusing scale is 48 in. to infinity. Price of the lens is \$335.00.

A line of projection lenses for 8mm and 16mm projectors is designed and manufactured by J. H. Dallmeyer, Ltd., Willesden, London, N.W. 10. Ranging in length from 20mm to 102mm, and with some two dozen different mounts, the lenses are described in a set of leaflets available upon request from the firm. The London firm is now in its one hundredth year. In 1860 the founder of the firm, John Henry Dallmeyer, was granted a patent for a Triple Achromatic lens consisting of three cemented doublets.

The Rondo 8mm Movie Editor has been announced by Service Photo Suppliers, Inc., 33 E. 17 St., New York 3, distributor for Rondo Products, Japan. The editor features winding arms, folding flat against the housing for easy storage, with a full 400-ft reel capacity. The forward crank has a 1:1 ratio and the rewind crank has a 3:1 ratio. It is priced at about \$34.95.

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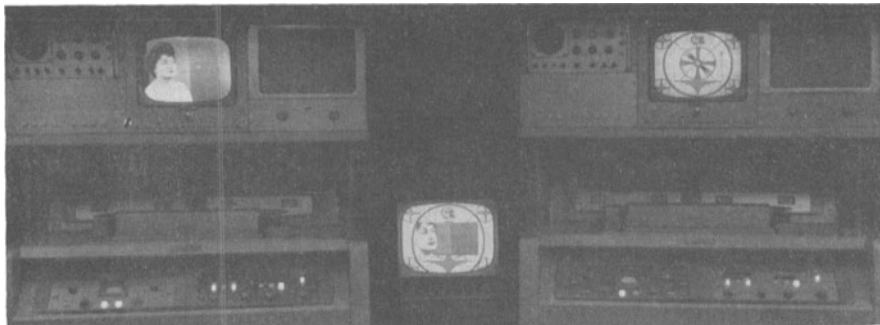
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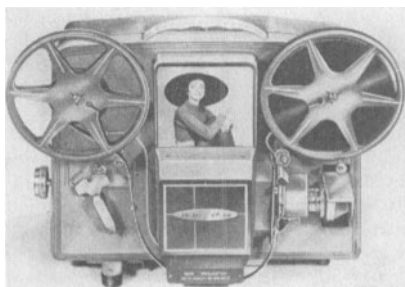
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A device called **Inter-Sync** is used to combine the output of two or more Ampex Videotape Recorders in precise synchronization. Announced by Ampex Professional Products Co., Video Products Div., Redwood City, Calif., the unit replaces the standard drum servo unit in the Ampex recorder. In addition to combining the output of the recorders, the Inter-Sync will

synchronize the playback of one or more recorders with the output of camera, film chain, network feed or other signal source. The device is said to lock the playback of a tape machine horizontally, line for line, to other TV sources as well as vertically, field for field. This permits electronic editing of TV tape and suggests numerous special effects applications.



A two-purpose 8mm projector called the Kalart VP-88 shows movies on a built-in viewer as well as on a projection screen. Introduced by Kalart Co., Plainville, Conn., the device has a control lever which is used for forward and reverse when projecting on a screen, and forward, reverse and still when projecting on the built-in viewer. The picture can be switched from screen to viewer while the projector is in operation by means of a viewer lever. It is priced at \$89.50.

A 70mm lens attachment for the Camex 8mm single-lens reflex camera has been announced by Karl Heitz, Inc., 480 Lexington Ave., New York 17. The attachment, called the Retro-Zoom is used to convert the varifocal Angenieux-Zoom lens from 17.5-70mm $f/2.2$ to 12.5-50mm for a zoom range from standard lens to a telephoto lens of 6X magnification. The attachment permits focusing from infinity down to 2½ ft. It is priced at \$99.00.

The **Weston Master IV**, an exposure meter designed to combine sensitivity with rugged construction, has been announced by Weston Instruments Division of Daystrom, Inc., 50 Church St., New York. Features include a simplified exposure dial using only numbers found on modern cameras; on-off pointer lock, and a converter for incident light readings. While the meter can be used conventionally with free pointer movement, the on-off button permits locking the pointer when taking incident light readings, for instance, in extremely low light locations.

A storage cabinet for video tape has been announced by Neumade Products Corp., 250 W. 57 St, New York 19. The units accommodate 6-, 8-, 12½- and 14-in. tape reels. Facilities for library storage, transient editing and "on the air" program filing are included.

Accessories for home or amateur use produced by Kalimar Inc., 1909 S. Kingshighway, St. Louis 10, include the Minette 8mm Viewer-Editor and the Kalimar Auto Memo Exposure Meter. The viewer-editor features a 2½ by 2-in. frame area, simplified threading and built-in marking device. It is priced at \$34.50. The exposure meter features a built-in "memory" indicator that holds the light reading as long as desired. It is priced at \$14.95.

Two models of a "thin-trim" inconspicuous professional microphone have been introduced by Electro-Voice, Inc., Buchanan, Mich. The E-V 652 and 652A are dynamic-type microphones with a length of semirigid tubing to bring the microphone close to the user while the stand remains out of the way. The microphone can be tilted through a 120° arc with respect to the stand coupler. Two clear plastic baffles that fit on the head of the microphones are provided to add directivity and boost brilliance at the 6000-cps range. Model 652 has an overall length of 24 in. and weighs 10 oz. The 652A is 15 in. long and weighs 8 oz. The long necks are of a nonreflecting Nicaloy finish and are 1⅝ in. in diameter. Both microphones have an output level of -60 db and are designed to match all low-impedance inputs. A UA3-12 cable connector, 20 ft of three-conductor shielded cable and Model 300 stand coupler are included. Each of the microphones is priced at \$120.00.

A monochrome television camera utilizing a 4½-in. image orthicon has been announced by Radio Corp. of America. Designed for stability and simplicity of operation, the camera employs only

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two main operating controls. Essentially all setup controls are located within the camera rather than in a separate master console. Even with the centralized controls the camera weighs only 130 lb. Nuvistor tubes (p. 358, May 1959 *Journal*) are used in the video preamplifier and elsewhere. The camera chain includes a self-contained intercom with its own power supply. This may be interconnected with the studio intercom system or operated independently. The big picture tube involved the use of a large target and a relatively small photocathode, the same size as the photocathode on the 3-in. tube, so that the lenses on the new camera need be no larger than those on preceding ones. Electronic magnification produces the

large image at the target, resulting in a corresponding increase in picture resolution for finer detail.

A new testing device, the ServiShops Motion Analyzer Mark III, used for testing all types of photographic equipment, has been announced by National Camera Repair School, Box 174DO, Englewood, Colo. Two other items, a collimator (lens-testing device) and a low-priced photoflash synchronization tester called the ServiShops Syncrotester have been announced.

A closed-circuit paging system, a development of Giantview Television Network, 901 Livernois, Ferndale 20, Mich., connects Convention Hall in Atlantic City, N. J. with all rooms in major hotels and motels in the area. Main use of the system is that of paging convention delegates. Paging requests are processed through a center in Convention Hall. Names of persons being paged are typed on cards bearing sponsor identification and placed on a drum. Rotation will allow for 7-sec exposure of each name being paged until the page is answered by a call to the center. The system is also used for special programs, announcements, and advertising.

Microphone Facts is a monthly newsletter written by Lou Burroughs, Vice-President of Broadcasting and Recording Equipment, Electro-Voice, Inc., Buchanan, Mich., containing discussions of individual

problems, new ideas and developments. The January newsletter discusses uni-directional microphones. Copies of *Microphone Facts* may be obtained by writing to Mr. Burroughs.

The 5th edition of the Mood Music Catalogue has been issued by Thomas J. Valentino, Inc., 150 W. 46 St., New York 36. The catalog is designed for easy reference and provides details and descriptions for each recording, including timing, specific purpose of each cut, a brief description of theme, mood and tempo, and rates. The catalog is available upon request to the company.

Space Data Inc., 8921 Sepulveda Blvd., Los Angeles, has been appointed sales distributor for the closed-circuit television equipment of the GPL Division, General Precision Laboratory Inc., Pleasantville, N.Y.

Four- and six-channel magnetic theater sound systems are described in a four-page illustrated brochure published by Ampex Professional Products Co., Audio Products Div., 934 Charter St., Redwood City, Calif., and available upon request. The brochure emphasizes the use of six-channel stereophonic sound for 70mm wide-screen production. Details are given on the compact station control units designed to simplify operating procedures. These simplified control units were the subject of a paper by George B. Goodall, "Modern Control of Theater-Sound Equipment," presented at the Society's 1959 Fall Convention in New York, and published in this issue of the *Journal*.

The Labmaster Film Processors are described and illustrated in a brochure issued by Houston Fearless Corp., 11801 W. Olympic Blvd., Los Angeles 64. The three basic black-and-white models, all of modular construction, are the negative-positive (16mm or 16/35mm); reversal (16mm), and microfilm (16mm or 16/35mm). The brochure is available upon request.

The Audio-Visual Equipment Catalog #297 is available from Genarco Inc., 97-04 Sutphin Blvd., Jamaica 35, N.Y. Various types of equipment are described and illustrated including 3000-w slide projectors and electric slide changers for 3½ by 4-in. slides.

A four-page price list for the company's line of TV broadcasting, repeating, microwave and communications systems is available from Adler Electronics, Inc., One Le Fevre Lane, New Rochelle, N.Y.

The Optics of Projection, No. 8 in the series of bulletins issued by National Carbon Co., Division of Union Carbide Corp., 30 E. 42 St., New York 17, discusses important points to be considered in correlating the light source with the optical system. The 8-page bulletin contains 19 illustrations. The discussion considers first the Formation of the Image on the Screen; and second, Illuminating the Wide Film Aperture and Film.

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