

ployed which, to be economical, must be continuously analyzed and replenished. In recent years the use of film in television created a need for the on-sight rapid processing of relatively small daily footages to standards of quality comparable with those of the large commercial laboratories. These requirements were coupled with a desire for compact, economical daylight-operated machines, a minimum crew and a simplified system of sensitometry. These needs have been largely satisfied by the combination of machines such as the Lawley Junior, high activity developers such as Ilford Cinephen and the "total loss" system of sensitometric control established by the B.B.C. and published in their Engineering Monograph No. 33. This paper is based upon (this) Monograph.

**Quality Control in Black-and-White Laboratory Operation**, G. E. E. France, *Brit. Kinemat.*, 43: No. 2, 52, Aug., 1963.

The basis of (the) control system (at Pathe Laboratories) can be simply stated: it is to feed all relevant information to one central point or control center. The center is staffed by personnel trained basically in sensitometry but with a general all-round knowledge of laboratory procedures. It serves to establish standard processes and procedures and to set their tolerance limits, as well as to diagnose and correct faults by continuous evaluation of the established processes. Furthermore, it ensures that the processes so established are capable of reproducing consistent high-quality results

with as little variation from the agreed standard as possible. Finally, it undertakes to test and assess the value of any new product or process which will improve the quality or increase the speed of any operation within the laboratory.

#### LENSES

**Long Lens Survey**, *35mm Phot.*, 6: 297-300, 312, No. 5, Sept. 1963.

Details of lenses of focal length from 85mm up to 135mm are listed.—N.W.

**The Pentovar Objective with Variable Focal Lengths** (in Russian), V. Naundorf, *Nemetskij Eksport*, 22-3, No. 5, 1963; *Referativnyj Zhur.*, *Fotokinotekhnika*, Abstract No. 8.46.54, 1963.

A description is given of the Pentovar objective for the Pentaflex-8 motion-picture camera. It has a range of variation of focal length of 8 to 32mm and an aperture of  $f/2$ . The objective comprises 17 separate cemented lenses arranged in five groups. Between the first two fixed groups (counting from the film) lies a semi-automatic diaphragm, and the following two movable groups served to change the focal length, while the front fixed group is for photography at distances down to 0.5 m, counted from the plane of the film. The objective is well-corrected for chromatic aberration and is suitable for both black-and-white and color photography.—S.C.G.

(Translated from *Referativnyj Zhur.*, *Fotokinotekhnika*.)



## new products

(and developments)

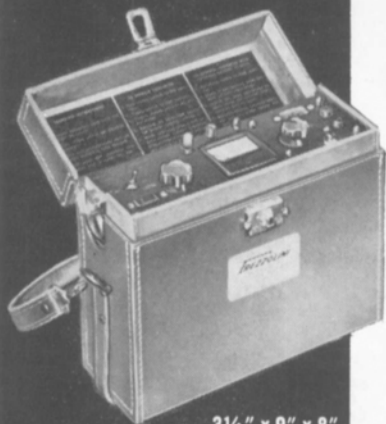
.....  
Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.

**Erratum:** Wow and flutter content of the EMT Studer C-37 tape recorder is  $\pm 0.04\%$ . It was erroneously given as  $\pm 0.4\%$  on p. 918, November, 1963, *Journal*. The recorder was announced by Gotham Audio Corp., 2 W. 46 St., New York 36.

**Projection and schlieren lens assemblies** for the first production of the Talaria color projector (*Journal*, Apr., 1963, p. 332) will be supplied by the Kollmorgen Corp., Northampton, Mass., according to a recent announcement. The projector, developed by General Electric Corp., will be used by National General Corp., a 220-theater exhibitor, in a nation-wide theater television network, according to present plans. Telephone lines are used to transmit closed-circuit television shows in color projected on motion-picture screens by the Talaria. Features of the new projector include a special control fluid; a novel light-gathering system utilizing the very high light output of a 5-kw xenon arc lamp; and a simplification of the projection optics so that all three primary colors are projected with only two output light beams. The projector has a high-power light source and an optical projection system similar to that of a motion-picture projector; but in place of the printed motion-picture film a thin layer of viscous fluid is used. The control fluid is continuously scanned by an electron beam in the same manner as the phosphor on the face of the picture tube in a conventional TV set. Instead of producing a picture directly on the control layer, the scanning process controls the light from the lamp which passes through the control layer in such a manner that the picture is produced on a large screen.

**The Plumbicon closed-circuit color TV camera** (*Journal*, Nov., 1963, p. 917) and the Eidophor large-screen color television were linked for a series of demonstrations conducted at the Pentagon, Washington, D.C., November 25-26 by Theatre Network Television, Inc. (TNT). The Plumbicon camera is about one-fourth the size of the image-orthicon type of cameras and is said to be more sensitive to light than vidicon cameras, requiring only about one-third of the lighting level required by color vidicon cameras. Developed by Philips of the Netherlands and imported by North American Philips, the camera is available in color and in black-and-white.

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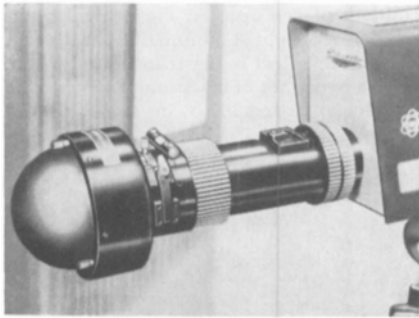
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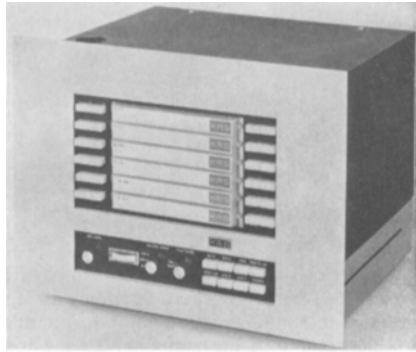


**The Spectra TV Optoliner, Model 2000**, for image-orthicon cameras has been announced by Photo Research Corp., 837 N. Cahuenga Blvd., Hollywood, Calif. 90038, as a companion unit to the Model 1000 for vidicon cameras (*Journal*, p. 894, Nov. 1962). The Optoliner has been designed for quick and efficient testing of TV camera and tube parameters. The unit is attached to the lens mount of any TV camera for checking the optical-mechanical alignment and calibration by means of various types of test patterns on special slides which can be inserted in the unit. The new model incorporates a movable slide test pattern to accommodate the wider tolerance of image-orthicon installations. Each model is priced at \$1,213.25.

**Tele-Measurements, Inc.**, 45 West 45 St., New York, N.Y. 10036, has announced the availability of two new film strips of test patterns for evaluating TV studio camera chains and closed-circuit systems. In 18-ft lengths, the TM-102 35mm and the TM-114 16mm film strips are \$20 each. This company also offers test slides and slide illuminators (Tele-Pat); the Mark VI Special Effects Generator for horizontal, vertical and corner wipes and keyed inserts; and the Tele-Beam Large-Screen TV System for projecting pictures up to 12 by 16 ft.

**The Mark 10 Visual Image Orthicon Zoom Camera and the KRS Stact-Broadcaster** are among products recently introduced by Visual Electronics, 356 W. 40 St., New York, N.Y. 10018. The camera has a 10:1 built-in zoom lens and viewfinder. Solid state circuitry is employed throughout. The camera weighs about 85 lb and is 19½ in. wide, 19 in. high, and 36½ in. long. A single lever is used for control of focus and zoom. The remote control panel contains necessary operating controls including iris, contrast pedestal, intercom volume and private switch and lens cap switch. The panel also includes a switch to provide an external video feed to the cameraman's viewfinder, so that special mixed signals can be routed to the cameraman to assist him in positioning the camera. Pictures of superior quality are said to be obtained under varying lighting conditions. The price of \$15,500 includes the camera, control unit with power supply and the remote control panel with its cable.

The KRS Stact-Broadcaster contains in one 14-in. rack package six reversible continuous-loop cartridge recorders. The system may be treated as if it were six recorders in one and used as an integrated, automated programming source. The cartridge decks can also be separated and used as independent recording or playback sources.



The system uses one hysteresis-synchronous motor and two extended capstans in a rugged, integrated cartridge transport unit to provide independent forward and reverse tape motion in each of the six cartridges under local, or remote, pushbutton control. Selections from 10 sec to 30 min long can be loaded, played, automatically stopped and cued, and reloaded without touching or threading the tape. Tape guides and a selection of erase, record and play heads are mounted on a precision mounting bracket to provide accurate tracking of recorded material. Momentary or extended reverse tape motion is accomplished by pressing the Reverse push-button on each deck so equipped. Forward or reverse tape motion on any of the six decks may be effected independently of the other five. The Stact-Broadcaster is available in various models. Model SB6R6, a 6-deck reversible unit, is priced at \$2,975.



**The Woodruff/Albert 35AVI All-Format Automatic Camera** has been designed for audio-visual and industrial applications including stripfilm production, 2 X 2 slide production and animation and title production. It can also be used for microfilm and for microcopy or macrocopy. The carriage is dynamically balanced on ball bearing support. The lights are detachable and adjustable horizontally and vertically. The riser stands 6 ft and permits a 30 X 40 in. photographic field. The magazine goes backwards and forwards automatically with the changes in the direction of the camera run. No belts are needed. The film is locked into position when the magazine is removed and an automatic dark slide covers the film aperture. The bellows extends automatically to a 1:1 ratio and an automatic diaphragm control can be preset and still project a field during a shooting sequence. The price of \$5,875 includes camera and stand and one each single- and double-frame 400-ft magazines.



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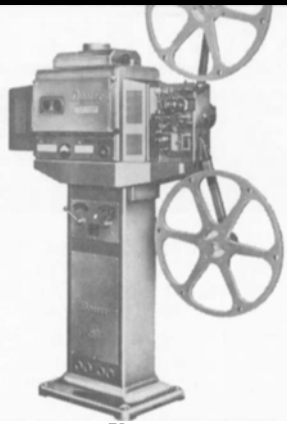
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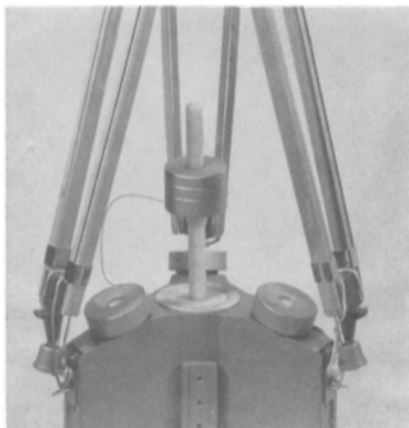
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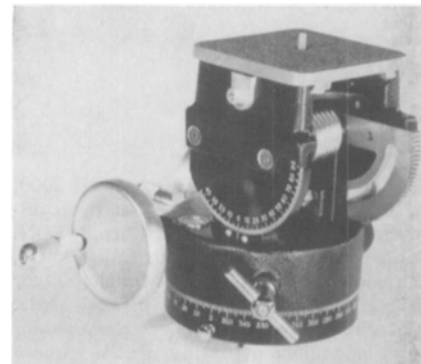


The Cine-Sync system designed to provide portable camera power and synchronizing signals for double-system, motion-picture production has been announced by Cine Service Laboratories, 51 Kondazian St., Watertown 72, Mass. The system requires no radio or wire link between the camera and tape recorder and the maximum error in sync between film and tape is said to be only one frame in a single 30-min take. Built of solid state components, the system uses missile-type tuning forks of high accuracy and stability for precise 60 cycle/sec signal generation. The closely matched generators allow filming and sound recording of more than 30 min duration with lip sync and full double-system maneuverability. The camera power supply, an inverter with snap-on battery case, provides 115-v a-c at 60 cycles/sec. The camera sync power supply weighs 17½ lb, including battery, and the recorder signal supply weighs 2 lb including battery and charger. The power supply can also be used for single-system filming or for driving an a-c operated tape recorder. The system is priced at \$1,750. It is also available for rental at \$30.00 per day, \$150.00 per week, or \$450.00 per month. Longer rental periods or lease-purchase plans are also available.



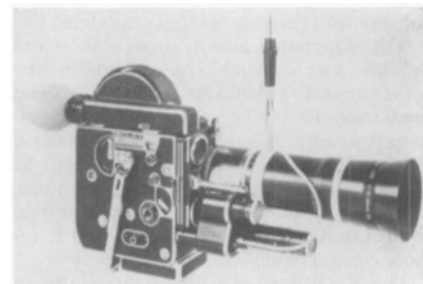
The Danelean Camera Stabiliser, developed by Danelean Ltd. for mobile film making, has been announced by The Rank Organization, Rank Studio Equipment, Woodger Rd., London W.12, England. The stabilizer, designed to help the camera operator to steady his camera when filming from a moving surface, may be used without attachments if the total weight of the camera together with head and tripod is not greatly in excess of 60 lb. Accessory fittings are available to enable the stabilizer to take a total weight of 150 lb. The system used is similar, by analogy, to gimbals mounted on springs, with a counterbalance weight which opposes inertial tilting or jolting of the camera. The stabilizer is built very low and the camera and tripod as-

sembly is placed upon it. The central counterbalance weight is mounted in an upright position, its effect being transmitted to the camera by means of levers and springs. The mechanism is enclosed in a substantial metal casing.



Hercules and Gibraltar Pan Heads are now available with calibrated azimuth and altitude scales, according to an announcement from Quick-Set, Inc., 8121 Central Park Ave., Skokie, Ill. Standard scales are graduated in degrees and numbered every 10 degrees, with either plain index or with vernier index readings to 15 min. Scales are engraved with white graduations on a black background. The azimuth scale is adjustable to zero at any point. The altitude scale is set to zero when the top plate is level. Special graduations and/or verniers are available on special order.

The Universal Fibre Glass Blimp, a lightweight blimp designed to accept either the standard Arriflex-16S or the new Arriflex-16M, has been announced by Arriflex Corp. of America, 257 Park Ave. South, New York, N.Y. 10010. The blimp weighs 31½ lb and overall measurements are about 22 × 11½ × 20 in. The shell is fabricated from moulded glass fiber. Interior acoustic insulation holds residual noise level to less than 30 phons. It is wired for both a-c and d-c and internal connectors and cables are provided to carry 60-cycle control signal from the camera to a convenient socket on the outside of the blimp. Both remote follow-focus and remote diaphragm control are provided. A special 3-way scale presents bold, clear distance scales and f-stops for three lenses. Lenses as long as 85mm may be accommodated without modification. The blimp is priced at \$2,890; various accessories are also available.



An automatic 16mm zoom reflex motion-picture camera designed to provide automatic diaphragm control under all lighting conditions, thus making the use of an exposure meter unnecessary, has been introduced by Paillard Inc., 1900 Lower Rd., Linden, N.J. The lens and camera com-

bination consists of the H-16REX-3 camera, a modified and improved version of the reflex-viewing 16mm camera introduced by Bolex in 1956, and the Vario-Switar zoom lens which has the built-in electric eye apparatus. The equipment is designed for use with film speeds from ASA 10 to 400 and at filming speeds from 12 to 64 frames/sec. The camera and lens combination is priced at \$978, and the lens alone is available at a price of \$520.

**A 1-in. vidicon television pickup tube** with resolution capability of about 1,000 lines at the center of the picture and about 700 lines at the corners has been announced by RCA Electronic Components and Devices, Harrison, N.J. Designated the RCA-8507, the tube is primarily intended for industrial black-and-white applications and is expected to lead to new camera designs for use in commercial broadcast service. It can be used for live black-and-white pickups as well as for film pickups and color TV broadcast service. The high resolution is obtained when the vidicon is operated with a grid-No. 4 voltage of 750 v and a grid-No. 3 voltage of 450 v.

**Three new television tape machines** have been introduced by the Radio Corp. of America. One machine is designed exclusively for playing back tape; another is a transportable tape recorder compatible with TV broadcast standards; and the third is a complete recording-playback system in compact form. The three units are fully transistorized and designed for color as well as for black-and-white. The tape playback machine, the TR-3, provides a professional yet economical device for playback of tape-recorded programs and commercials for broadcasting and as well as for previewing and editing. The transportable tape recorder, the TR-5, is contained in a small cabinet which can be wheeled into a station wagon or other vehicle for travel to a remote recording location. Because of the compatibility feature, the tapes can be played back on any standard broadcast-type recording equipment at the TV studio. The compact TV tape recording-playback system is called the TR-4.

**Stop-motion controls** for freezing a recorded television picture as long as 10 min are now standard equipment for PI-3V portable TV recorders produced by Precision Instrument Co., 3170 Porter Dr., Palo Alto, Calif. The firm also announced that some of the recorders already in use could be retrofitted. The stop-motion device is transistorized and only two controls are required. One stops the tape drive while allowing the record/reproduce heads to continue revolving at high speed and the second is a knob for precise positioning of the exact segment to be viewed. It was also announced that the firm's standard model recorder can be switched in the field to operate from 50-cycle as well as 60-cycle current.

**Electronic animation of color television tape** was demonstrated at the National Broadcasting Company's television studios in Burbank, Calif., using the Ampex Editec

time element control system and Electronic Editor. A special demonstration tape was then prepared for showing at a joint meeting of the Society's Hollywood Section and the Hollywood Section of the Audio Engineering Society held November 26. The Editec-Editor system had previously been used with monochrome tapes. Further development has made possible color animation as well. The Editec system operates by placing marker tone bursts on the cue track. The markers electronically gate the recording and monitoring circuits. As a result, splice time base errors are said to be reduced to less than 1  $\mu$ sec. The Editec system is priced at \$9,500; the Electronic Editor, at \$3,850.

**The S.O.S. Tel-Amatic Mixer, Model MX-1**, is a 2-position mixer weighing less than a pound, including the cable and attached Cannon connector, and measuring 2½ × 3 × 5 in. A product of S.O.S. Photo-Cine-Optics, Inc., 602 W. 52 St., New York 19, it was designed to be used with Auricon film recording amplifiers, but can also be used with any other professional tape or film recorder. It provides two low-impedance microphone inputs with volume controls. When used with the Auricon, it can be plugged directly into the phono input receptacle. Three microphones may then be used. The mixer uses RCA transistors and a self-contained 9-v battery. It is priced at \$84.50.

**A 50mm Macro-Switar lens**, designed for Bolex H-16 reflex cameras, has been an-

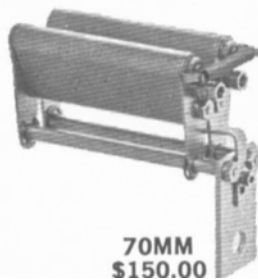
nounced by Paillard Inc., 1900 Lower Rd., Linden, N.J., U.S. sales organization for the Swiss-made Bolex equipment. The lens features a built-in Macro-mechanism extension tube to permit focusing as close as 15 in. without additional accessories. Incorporated with the optics is a mechanical index for the three zones of focus (general, close-up and macro-arcs), color-coded to give a visual check to the cameraman. The six-element lens with f/1.4 to f/22 diaphragm range is said to be particularly suited to filming under difficult lighting conditions.

**An exposure meter** designed primarily for use with Bolex 8mm and 16mm reflex movie cameras has been made available in the United States by Paillard Inc., 1900 Lower Rd., Linden, N.J., sales and service organization for the Swiss-manufactured Bolex products. The instrument is also adaptable for use with nonreflex Bolex equipment and other motion-picture and still cameras. The meter, together with a useful conversion table, is priced at \$45.

**A portable tape recorder** said to provide broadcast quality reproduction has been announced by Karl Heitz Inc., 480 Lexington Ave., New York 17. The recorder, called the Fi-Cord 202, measures 9 × 6½ × 4½ in. and weighs 6¾ lb including batteries. It operates at either 7½ or 3½ in./sec. It has two inputs for low-impedance microphones, two outputs, a VU meter, fast forward and rewind and a digital counter, all located on the front panel. It is priced at \$339.

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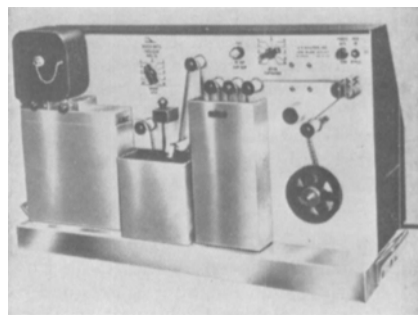
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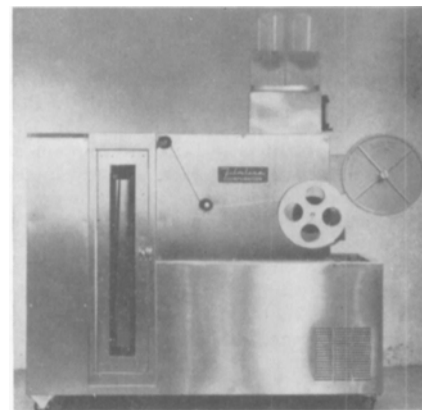
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The UltraAudio Stereo Positioner, announced by the UltraAudio division of Oberline, Inc., P.O. Box 921D, Beverly Hills, Calif. 90213, is designed to permit positioning of any sound source from left to right and back again, or anywhere in between, in a two-channel stereo sound or recording system. The device, called the Hollywood Phantom H-122, measures 4 × 6 × 2 in., is self-contained and fully transistorized. It is said to provide about 60 db of gain, sufficient to bring a low-level microphone up to a standard 1-v output level. The positioner may be directly connected to any high-impedance, high-level 2-channel audio input, even those not equipped with their own volume controls. It is priced at \$59.95.



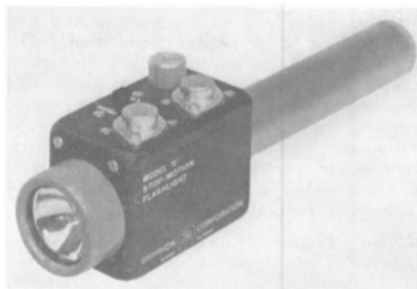
The Maurer-Matic portable film processor has been announced by Gordon Enterprises, 5362 N. Cahuenga Blvd., North Hollywood. The unit uses a monobath solution and is said to handle most of the available negative or positive film emulsions as well as most of the pre-hardened types. Features include constant recirculation and filtration of the process solution, which is temperature controlled; constant film take-up and automatic shutoff at the film end; and simplified threading of perforated or unperforated film. Either positive or negative film can be processed to a negative at speeds up to 15 ft/min. The unit is self-contained, needs no plumbing, and can be operated on a 50- or 60-cycle, 115-v a-c line. It is available for 16mm and 35mm film or for 35mm and 70mm film.



A 16mm negative/positive processor, basically designed for TV stations, has been announced by Filmline Corp., Milford, Conn. Designated the ND-100, it develops negative film at 50 ft/min and positive film at 50 to 75 ft/min at 80 F. The unit in-

corporates the Filmline Overdrive film transport system to eliminate damage to the film caused by breaking or scratching. Features include dry-to-dry cycle of 4½ min; self-contained replenishment system with flow meters; impingement drybox; Temp Gard precision temperature control for cooling and heating; and heavy-duty air compressor. The processor is 60 in. long, 48 in. high and 22 in. wide. It is priced at \$12,750.

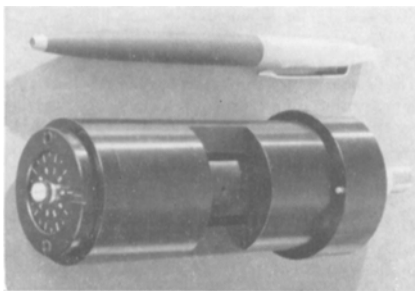
**Cine Reversal Liquid Concentrates** for automatic processing of black-and-white films have been announced by FR Corp., 951 Brook Ave., Bronx 51, N.Y. The concentrates are designed for all types of black-and-white reversal films with maximum blue-black tonal values. The concentrates include a first developer, bleach, clearing bath, second developer and fixing bath, each formulated to complement the others thus eliminating the need for bulk chemicals. The concentrates also contain a special sequestering agent to clean automatic equipment as it works. The concentrates are packaged in 5-qt bottles, each making 5 gal of solution.



A **stop-motion flashlight** designed for maintenance and inspection use in film laboratories has been announced by Gryphon Corp., P.O. Box 854, Burbank, Calif. Designated Model S, the unit is a fully transistorized, battery-powered stroboscopic device for examining objects in slow motion or apparently stopped condition. Low-intensity red-orange light permits its use in darkrooms. Uses suggested by the manufacturer include checking printers for steadiness of motion; checking processing machines by viewing film perforations or frames in stop-motion; examining intermittent movements of cameras and printers by viewing action in slow or stop-motion; and locating the source of wows or pitch variations in sound recording and reproducing equipment. The flashlight measures 2½ X 3½ in. and is 11 in. long. It weighs 2 lb and is powered by two D cell batteries. It is priced at \$60.

An **outer space photography** system has been developed by the Military and Special Products Div. of Ehrenreich Photo-Optical Industries, Inc., 701 Welch Rd. (Suite 303), Palo Alto, Calif., for obtaining high-resolution photographs directly from satellite television signals. Photographic data are recorded by direct exposure to electrons. Television signals generated in space, for example, from a lunar probe, are fed into the camera system. The exposed film is programmed automatically through the special processing and drying stage at a rate

of from 1 to 7½ ft/min. An enlarged hard copy electron-beam-type printer then produces continuous tone photographic prints that are also automatically processed and dried. The system is said to be capable of resolution at least 10 orders of magnitude greater than photographs taken from a high-resolution monitor screen.



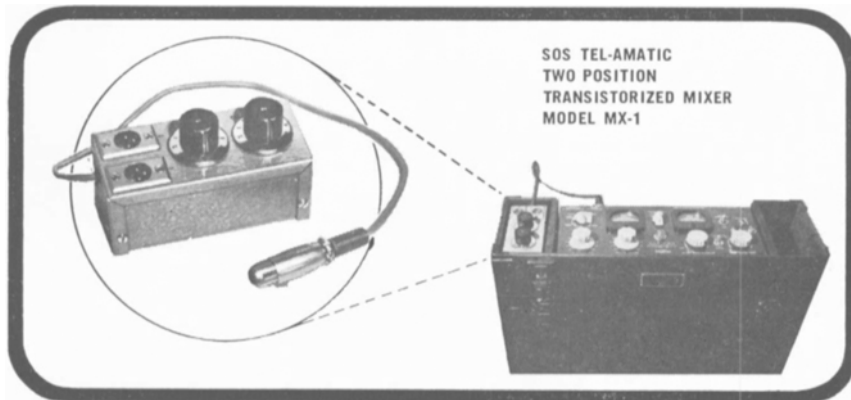
A **rotating prism laser Q spoiler, Model 404**, has been introduced by Beckman & Whitley, San Carlos, Calif. Designed to minimize light loss and obtain a very high Q cavity, it will spoil Q laser beams up to ¼-in. in diameter. To provide the shortest possible shuttering times and also to eliminate critical alignment problems, a total internal reflection prism is rotated on an axis parallel to the prism hypotenuse and perpendicular to the roof edge. The rotational speed of the prism is infinitely variable from 300 rps to 3,000 rps. It is rotated by a compact turbine which will operate from either a small compressed-air or

nitrogen supply. So that the laser can be pumped in synchronization with the prism position, a built-in pick-up coil, rotatable through 360°, generates a sine wave proportional to the rotational speed of the prism. The signal can also be used to monitor prism speed. The Model 404 is 4¾ in. long and 1¾ in. in diameter. It is priced at \$2,500.

A **series of nine power supplies** designed to extend the life of xenon and xenon-mercury arc lamps has been announced by Hughes Electronics Co., 5271 Jefferson Blvd., Los Angeles 16. Utilizing solid-state circuitry throughout, units in the series have output ratings ranging from 30 to 5000 w. Performance and operating characteristics include inherent, self-regulating volt-ampere characteristics; d-c output ripple less than 1%; automatic current limiting; adjustable output range selector; and protection against high voltage igniter starter. Free convection cooling eliminates noisy fans and blowers and permits continuous operation in temperatures ranging from 0 C to 50 C. Prices begin at \$405, ranging upward according to the output rating.

A **new light source for 16mm and 35mm motion-picture projection** has been announced by Strong Electric Corp., 79 City Park Ave., Toledo, Ohio 43601. The lamphouse, called the X-16, utilizes an Osram xenon bulb to produce a uniform white light announced as comparable to carbon arc lighting. Three models for

## NEW SOS TEL-AMATIC MIXER



### NEWEST MIXER A MIGHTY MIDGET!

Although a midget in size (2½" x 3" x 5") and weighing less than a pound (including cable and attached cannon connector), the new mixer will provide two low impedance mike inputs with volume controls.

Especially designed for use with Auricon Sound-on-film amplifiers, the SOS Transistorized Mixer can also be used to advantage with Magnasync and other high-quality recording equipment.

Easy to operate—even dialogue equalization may be cut in or out with a flick of the switch. Plug directly into the Auricon Amplifier and use three mikes. SOS TEL-AMATIC Mixer uses low-noise RCA transistors and a self contained 9 Volt Battery.

WRITE FOR FURTHER DETAILS!



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16mm projection are rated at 450, 900 and 1600 w for screens up to 24 ft wide and three models for 35mm projection are rated at 900, 1600 and 2500 for screens up to 36 ft wide. The light source is said to require almost no attention by the operator because of a lack of moving parts. Prices range from \$1,140 to \$1,350, depending on the model.

**An automatic threading version of the Bolex 18-5 motion-picture projector** has been introduced by Paillard Inc., 1900 Lower Rd., Linden, N.J. The 8mm projector retains features of the earlier models while adding automatic loading and threading of film. The threading mechanism does not come into contact with the picture area thus assuring safety for the film. The film is positioned over the sprockets and filmgate and loops are formed automatically. The machine accommodates 400-ft reels. Also, manual loading and film removal anywhere during the projection of a reel are possible. In addition, the filmgate and projection lens swing aside to permit marking of the film for editing and cleaning of the pressure pad and filmgate. The projector is priced at \$169.50.

**A background music and sound effects album** made especially for 8mm amateur film makers has been released by Thomas J. Valentino, Inc., 150 W. 46 St., New York 36. The album has background music on side 1 and sound effects on side 2. It is priced at \$3.95.

## employment service

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 These notices are published for the service of the membership and the field. They are inserted three months, at no charge to the member. The Society's address cannot be used for replies.

### Positions Wanted

**Director of Cinematography.** 25 yrs experience with largest electrical manufacturing company desires challenging opportunity. Experience includes motion-picture directing with working knowledge all phases production including cost estimating. Aircraft pilot with single engine land and sea ratings. Own two aircraft. Resume on request. Robert W. Rehbaum, 112 Jay St., Scotia 2, N.Y.

**Magnetic Tape Specialist.** Over 10 yrs experience all phases magnetic tape and magnetic film manufacturing, including formulating, milling, coating, testing, etc. Experience covers audio, computer, telemetry and cartridge tapes. Married, family man, willing to relocate. Resume on request. P.O. Box 103, Monsey, N.Y.

**Sound Recording Technician.** 7 yrs experience in all phases sound recording, motion picture, radio and recording studios. Young man, 26,

single. Seeking free-lance work or permanent job in sound. Resume on request. Thomas J. Hammeral, 30-44 29th St., Astoria 2, N.Y. Tel: (212) RA 6-5123.

**Public Relations/Promotion.** More than 10 yrs experience motion-picture industry—lab, production, equipment promotion. Organized and directed first Animation Film Workshop-Seminar, 1960; Film Editing Workshop-Seminar, 1963, 5-day program with 50 guest lecturers and 600 attendance. In collaboration with NYU, City College and Columbia, organized "Irving & Sam Browning Memorial Award" for cinema students, 1963. Seeks challenging assignment with major film or TV production company, educational organization or manufacturer in situation demanding creative ability and knowledge of motion-picture business. Graduate USC Cinema, married, 38 yrs old, willing to relocate. Charles Lipow, 3343 Sedgwick Ave., New York 63, N.Y. Tel: (212) KI 9-6385.

**Experienced Television Studio Engineer.** Wants position with highly professional run station using engineers as cameramen. Must have above average local live programming. Resume on request. P.O. Box 14353, Tampa, Florida.

**TV Design Engineer.** Qualified TV engineer pioneering experience dating back to 1936 in a leading private television research and development laboratory. Well grounded in camera, sync generators, and all associated equipments, design, construction, and operation, from the above date to the present state of the art. Recently designed and installed a complete CCTV station complex in a leading state mental hospital with a 2500 patient population. Desires to propose, design, and follow through to completion a similar installation in another progressive, and forward looking large mental hospital, with a strong budget back-up and enthusiastic support of top management. Resume and photos on request. Write Harold A. Lockwood, c/o State Hospital, WLCF-TV, Logansport, Indiana.

**Motion Picture Equipment Sales/Manufacture.** 17 yrs diversified experience with two top companies. Knowledge of manufacturing and sales procedures of theatre and sound recording equipment for export and related administrative procedures. Wishes position with company located in New York metropolitan area. Resume upon request. Reply to R. Valle, 1480 Hancock St., Elmont, L.I., N.Y.

**Writer-Director.** Staff experience with two of Chicago's largest industrial film studios and the world's largest producer of educational films. Free-lance experience with top New York film studios and TV producers. Have independently produced shorts. Seek temporary or full-time assignment anywhere. Write to D.K., c/o Harris, 326 West 55 St., New York, N.Y. 10019.

**Producer-Writer-Director.** Presently employed as writer-director for aerospace firm. Experienced in all phases film production including planning, cinematography, editing and film processing. Extensive Multicam and educational film background; interested in educational and industrial film production or supervision. B.A. and graduate work at USC Dept. of Cinema. For resume write: Stan Follis, 15111 Graystone Ave., Norwalk, Calif. 90651. Tel: (213) 863-3475.

**TV/Motion-Picture Production.** 3 yrs experience free-lance 16 & 35mm cinematography, film editing. Graduate TV Production RCA Institutes. Assoc. Member IATSE. Seeking opportunity for advancement with TV or film production company. Willing to relocate. Allan Rosenstein, 1350 East 5th St., Brooklyn 30, N.Y.

### Positions Available

**Engineer.** Exceptional opportunity for EE or Sr. Technician experienced in CCTV, VTR or pro audio tape experience desirable. N. Y. area.

**MAJOR BREAKTHROUGH! IN**

**SPRAY DEVELOPING**

**NEW FILMLINE S-60**

**16/35MM NEG/POS SPRAY PROCESSOR**

- DEVELOPS NEGATIVE FILM AT 35 FPM
- DEVELOPS POSITIVE FILM AT 60 FPM

The S-60 is Filmline's newest Spray Processor. It is a friction drive processor, guaranteed not to break or scratch film. Absolute control of footage in each chamber insures sensitometric quality control and consistent development. And Filmline processors (unlike competitive makes) have lower film assemblies that are adjustable and remain captive in the position placed.

The S-60 is the specific answer to every laboratory's need for a Spray Processor—because it outperforms machines costing twice as much. Also available for 16mm only. For the full story on the S-60 write today to:

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World's Largest Manufacturer of Film Processors

• Film chamber doors are completely removable for easy access to entire chamber (Not found in competitive models of similar class)  
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