



**John L. Courcier**

John L. Courcier died unexpectedly on January 6, at the age of 63, a week after his appointment as General Manager of the Eastman Kodak Motion Picture Products Sales Department's West Coast Division in Hollywood.

Mr. Courcier started in the motion-picture field in 1917 as a laboratory technician with Famous Players-Lasky. He later was a technician and cameraman for Paramount, Fox, Goldwyn Studios and Rothaker-Aller Lab. After overseas assignments with First National and MGM, Mr. Courcier joined the J. E. Brulatour Co. in 1928 as a salesman and technician, rising to

the office of vice-president in the early 1940's.

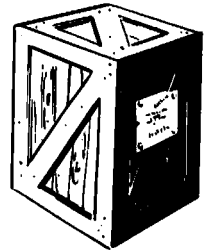
He remained with W. J. German, Inc., when that company took over the Brulatour firm and was made General Manager of W. J. German, Inc. in Hollywood in 1961. Mr. Courcier joined Kodak on December 30, 1963.

He was a Fellow of this Society and an Associate Member of the American Society of Cinematographers.

**Louis Alan Hazeltine**

Louis Alan Hazeltine, a pioneer in the development of radio, died on May 25 at his home in Maplewood, N. J. He was 77 years of age. In 1919, while experimenting with radio, he developed a technique for shielding one coil of an electrical circuit from another coil, a method that led to what he called "coupling neutralization." From this he developed the neutrodyne receiver which eliminated the noises that plagued early radio receivers.

He was graduated from Stevens Institute in 1906 with a degree in mechanical engineering and began his career as a tester in the laboratory of the General Electric Co., Schenectady, N.Y. In 1908 he joined the faculty of Stevens Institute. At the time of his retirement in 1944 he was Chairman of the school's Physics Department. He then became consultant to the Hazeltine Corp., 59-25 Little Neck Parkway, Little Neck, Queens, N.Y. The firm was named for him after his invention of the neutrodyne receiver.



**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.

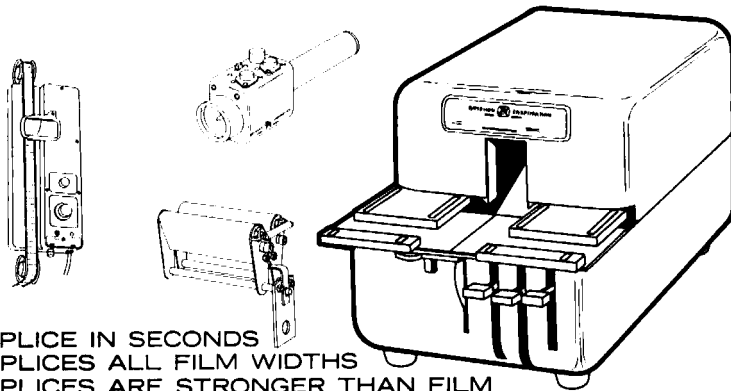


The DV-200 video-tape recorder introduced by Dage Television Co., Div. of Harvey-Wells Corp., 455 Sheridan Ave., Michigan City, Ind. 46360, has been designed to make possible a complete, high-quality, closed-circuit television system from a single source. Features of the new recorder include a built-in video monitor, which also provides a pulse cross feature to permit accurate adjustment of skew and tracking without need for an oscilloscope, and a VHF tuner to permit recording either directly off the air or from a closed-circuit r-f distribution system, without auxiliary equipment. The recorder has variable-speed slow-motion in both forward and reverse direction and features an automatic program stop to permit pre-programming a tape for automatic stop at any required location. A separate stop-frame control permits instantaneous stopping. A low-impedance microphone input (250-ohm) is included to permit direct use of any standard broadcast microphone without need for matching transformers or pre-amplifiers. The machine also has the capability of monitoring the picture during rewind and fast forward, allowing accurate and rapid location of a given portion of a taped program. The recorder is 12 in. high, 15 in. deep, 25.5 in. wide, and weighs 147 lb. Tape width is 1 in. and tape reel diameter is 7 in. The price is \$12,450.

The firm has also announced a High Resolution Television System designed to provide resolution capabilities in excess of 1000 lines horizontal resolution. The system uses 1.5-in. vidicon and 32-mc bandwidth video amplifiers. Vertical resolution is increased by the use of higher line scan rates. Nuvistors are used in a wideband non-microphonic preamplifier.

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# ARRIFLEX at work — ONE OF A SERIES\*



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Director Vincent Vaitiekunas called it "directing the undirectables." Cameraman Joseph Seckeresh listed three major problems and a barnful of minor ones... namely, "Kookie the Cat," "Rupert the Rat," "Bessie the Bunny," and the supporting cast, a variety of fowl, fish and four-legged creatures. Filming "Animal Farm," an enchanting segment of Independent Television Corporation's new "Mr. Piper" TV children's series, starring Alan Crofoot, proved a hectic, harried and often hilarious assignment.

"When shooting 'Animal Farm,'" Director Vaitiekunas relates, "we had to change the speed of frames per second to acquire the desirable pace of animal movement (lazy, excited, etc.). Then we had to compose, find focus and shoot in a split second. Then follow unpredictable small animal movements in close-ups and medium shots while pulling focus.

"We needed a very flexible and responsive camera. Often, using wide angle lenses, we shot scenes inside stove pipes, garbage cans, crevices, overturned boxes, under a car, inside a harvesting combine—and somehow we always managed to squeeze our Arriflex into the most unlikely places.

"Then too," he added, "the main set was a barn. Plenty of pulverized straw, dust and animal hair (a cameraman's nightmare) went flying after a good fight between cats and rats. Yet with care we managed to shoot around 100,000 feet of film with no 'hair in the camera gate' difficulties. Perhaps these were the outstanding features of the Arriflex that helped us immensely..."

Thank you, Director Vincent Vaitiekunas. Need any more be said?

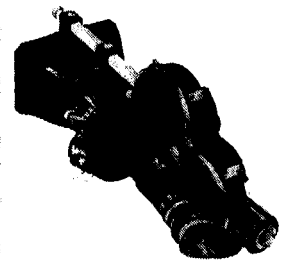


From the microscope to the missile range... from spot locations to sound stages... Arriflex professional motion picture cameras are the dominant choice of filmmakers in science, industry, and entertainment. They're lightweight, rugged, tremendously versatile—uniquely suited to a range of applications virtually without limits. Here are some of the features that give Arriflex cameras their remarkable capabilities:

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**ARRIFLEX CORPORATION**  
OF AMERICA

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The Ampex VR-2000, a color-compatible television tape recorder, has been introduced by Ampex Corp., 401 Broadway, Redwood City, Calif. Featured is a "high band" record/reproduce standard introduced as an optional operating mode to permit improved signal-to-noise ratio, reported at 46 db for both monochrome and color recording. A "low band" standard which has a signal-to-noise ratio of 45 db for monochrome and 40 db for color is also incorporated to permit interchangeability with present recorders. The VR-2000, equipped with a built-in Intersync\* (\*TM Ampex Corp.) television signal synchronizer, is available in 525-line 60-c

and 625-line 50-c versions with both "high band" and "low band" standards. The recorder is 61 in. high, 63 in. wide and 30 in. deep and weighs 1,100 lb. Prices start at \$62,500.

Ampex also announced that stop motion is now a standard feature of the VR-1500 and VR-660 portable video-tape recorders. A pushbutton disengages the capstan motor from the capstan shaft on the recorder and the tape stops. By manually rotating the pinch roller, the tape may be moved to any desired position or video frame for inspection on a monitor. When the button is released, normal reproduce mode is re-established. The VR-1500, used in educa-

tion, industry and medical applications, is priced at \$11,900. The VR-660, designed for mobile and studio use, is priced at \$14,500.

A vidicon camera built by Marconi Company, Ltd., of England for Ampex Corp., 401 Broadway, Redwood City, Calif., is designed primarily for closed-circuit use in educational, medical and industrial applications. Called the 322, the camera is automatic, all solid-state and self-contained. Weighing only 19 lb, its dimensions are: 6.75 in. wide, 4.375 in. high and 15.25 in. long. The camera can be integrated

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tion of those in "allied" fields and repeat, for the benefit of those who have not been with us in the past, S.P.I.E. TECHNICAL SYMPOSIA ARE OPEN TO ALL WHO FIND AN INTEREST IN THE PROGRAM CONTENT.

Robert P. Murkshe  
S.P.I.E. Symposia Vice President

For additional information:

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## MONDAY - 10:00 - 12:30

### IMAGE INTENSIFICATION/ENHANCEMENT

Chairman: Dr. George L. Clark, E.O.S., Inc.

ADVANCES IN IMAGE ENHANCEMENT TECHNIQUES AT THE E.T.R.

Walter Manning, MTGSS Patrick A.F.B.

ATV IMAGERY SIMULATION -- PRACTICAL APPLICATION IN IMAGE ENHANCEMENT

Rostyslav Shavlock, RCA/DEP

ENHANCEMENT OF PHOTOGRAPHIC SPEED BY ELECTRIC FIELDS

David Wiley, Kine-X Corp.

PHOTO RECORDING FRONTS OF SOLID PROPELLANT ENGINES BY KINE-X DATA PROCESS (X-RAY INTENSIFICATION)

Robert Wiley, Kine-X Corp.

### 2:00 - 5:30

### TOP MANAGEMENT VIEWS OF PHOTOGRAPHIC INSTRUMENTATION

Chairman: L. L. Endelman

PHOTO-INSTRUMENTATION AND MANAGEMENT OR WHO NEEDS IT?

Robert S. Scott, Aerospace Corp.

(To be announced)

Dr. John A. Leermakers, Kodak

### 8:00 - 9:30 SPECIAL KEYNOTE SESSION

#### "FOCUS ON THE FUTURE"

Guest of Honor and Principal Speaker:  
Brigadier General Harry J. Sands, Jr., USAF  
Commander, Air Force Missile Test Center

## TUESDAY - 9:00 - 12:30

### BIOLOGICAL OR MEDICAL APPLICATIONS OF PHOTO-OPTICS

Chairman: Dr. Michael F. Pernoud,

Vice-Chm.: Russell Bunting, McDonnell Aircraft

CINE-PHOTOGRAPHIC STUDIES OF THE VASCULATURE OF THE BRAIN SURFACE

Drs. L. M. Thomas and E. S. Gurdjian

Wayne State University

RESEARCH AND DEVELOPMENT OF THE LASER PHOTO COAGULATOR

Dr. K. Koester, American Optical Co.

SOME APPLICATIONS OF PHOTO-OPTICS IN MEDICAL INFORMATION HANDLING

Allan A. Staley, IBM Corporation

(To be announced)

Dr. Mason Sones, Cleveland Clinic, Ohio

### 9:00 - 12:30

### AUTOMATED DATA PROCESSING AND REDUCTION

Chairman: Stephen M. Lee,

A FULLY AUTOMATIC FILM READING SYSTEM

D. Lovenwirth, Informational International, Inc.

THE FOSDIC SYSTEM (Film Optical Sensing Device for Input to Computers) AND REQUIREMENTS FOR CLEAN ROOM FILM PRINTING AND PROCESSING.

Robt. J. Milliken, U. S. Weather Bureau

PHOTOGRAPHIC INSTRUMENTATION FOR DRAFTING AND PLOTTING WITH AN AUTOMATIC DIGITAL COORDINATOGRAPH

Robt. C. Stirling, U. S. Oceanographic Office

OPTICAL CORRELATION APPLIED TO CLOUD PATTERN ANALYSIS

S. S. Viglione, H. F. Wolf, R. D. Joseph

Astropower Labs.

### 2:00 - 5:30

### PROGNOSIS FOR PHOTO-OPTICAL INSTRUMENTATION AND TECHNIQUES IN THE NEXT DECADE OR BEYOND

(Panel)

Col. James P. Warndorf, MATS/Orlando A.F.B.

Dr. C. W. Bemiss, Patrick A.F.B., Florida

(Recess)

### 7:30 - 9:00 (Tuesday Continued)

A PHOTOGRAPHIC INSTRUMENTATION SYSTEM FOR JOHN F. KENNEDY SPACE CENTER, NASA

Charles Aitsworth and John Nicola

AFMTC Field Office, NASA, Cocoa Beach

AIR FORCE SYSTEMS COMMAND BRIEFING

Major Joseph J. Smyth

RELATIONSHIP BETWEEN THE OPTICAL SYSTEMS WORKING GROUP AND THE SPIE

C. A. Clement, Pan Amer. World Airways

### WEDNESDAY - 9:00 - 12:30

### INDUSTRIAL AND RESEARCH APPLICATIONS OF PHOTOGRAPHIC INSTRUMENTATION

Chairman: S. L. Atkinson, RCA Missile Test Proj.

APPLICATIONS OF HIGH SPEED PHOTOGRAPHY IN OIL INDUSTRY

Dennis Crow, Esso Res. & Eng. Co.

SOLVING GLASS PROBLEMS WITH MOTION PICTURE CAMERAS

S. R. Hetrick, Brockway Glass Co.

PEERING INTO A ROCKET NOZZLE

Peter A. Kranenburg, Sr., OQAMA, Hill A.F.B.

ULTRA HIGH SPEED PHOTOGRAPHY A PROGNOSIS

T. J. Healey, W. J. Schenck, S. M. Hauser

Electro-Optical Instruments

### 9:00 - 12:30

### SATELLITE BORNE PHOTOGRAPHIC INSTRUMENTATION

Chairman: Dr. J. S. Courtney-Pratt, Bell Labs.

Vice-Chm.: Richard Hayes

MARINER MARS 1964 PHOTOGRAPHIC SYSTEM

J. Denton Allen, Jet Propulsion Labs.

MECHANICAL DESIGN CONSIDERATION FOR SATELLITE TV CAMERAS

R. Jordan and R. J. Schmicker, RCA/DEP

VIDICON APPLICATIONS FOR SPACE BORNE TV CAMERAS

M. H. Mesner, RCA/DEP, Princeton

SATELLITE RECONNAISSANCE: OBJECTIVES AND TECHNIQUES

Jerome S. Goldhammer, Chgo. Aerial Industries

### 2:00 - 5:30

### INDUSTRIAL AND RESEARCH APPLICATIONS OF PHOTOGRAPHIC INSTRUMENTATION

Chairman: S. L. Atkinson, RCA Missile Test Proj.

THE ROLE OF OPTICAL INSTRUMENTATION IN RESEARCH ENGINEERING AND INDUSTRY

John D. Hayes, Xerox Corp.

PHOTO-DRAFTING: A NEW ENGINEERING TOOL IN INDUSTRY

Clarence L. Hill, Monsanto Chemical Co.

APPLICATIONS OF PHOTO INSTRUMENTATION IN AUTOMOTIVE ENGINEERING

Richard O. Painter, GM Proving Grounds

APPLICATIONS OF FIBER OPTICS TO SOME SPECIAL PROBLEMS IN PHOTOGRAPHIC INSTRUMENTATION

Dr. Walter P. Siegmund, American Optical Co.

SEEING IS BELIEVING

Dr. L. Lippitt

### 2:00 - 5:30

### SATELLITE BORNE PHOTOGRAPHIC INSTRUMENTATION

Chairman: Dr. J. S. Courtney-Pratt, Bell Labs.

OPTICAL TECHNIQUES OF VISUAL SIMULATION FOR SPACE TRAVEL

Thomas Neuberger, ACF Industries, Inc.

PARAMETRIC STUDIES OF IMAGE MOTION AND RESOLUTION FOR SATELLITE-TO-SATELLITE PHOTOGRAPHY

Irving Spiro, Aerospace Corp.

SPACECRAFT FILM SYSTEM FOR PLANETARY RECONNAISSANCE

Albert W. Spitzak, Jet Propulsion Labs.

SPACE AND THE MOON -- PHOTOGRAPHY'S CHALLENGE FOR TOMORROW

John R. Brinkman

## THURSDAY - 9:00 - 12:30

### NEW DEVELOPMENTS AND APPLICATIONS IN PHOTOGRAPHIC INSTRUMENTATION

Chairman: C. A. Clement, Pan Amer. Airways

IMPROVED TRAJECTORY RECORDING WITH LASER RANGEFINDER

Truman G. Bergman

DEVELOPMENT OF DAYTIME BALLISTIC CAMERA CAPABILITY

J. C. H. Hoge, WSMR

IMAGERY AND COHERENT OPTICS

E. N. Leith and J. Upatnieks, Univ. of Mich.

ADVANCES IN CINETHODOLITE DESIGN: MECHANICAL THEODOLITE TO OPTICAL THEODOLITE

W. E. Mimmack and W. Pabst, Jr., WSMR

MEANING OF NUMERICAL VALUES ASSIGNED TO PHOTOGRAPHIC PARAMETERS

Daan Zwick

TITAN II MISSILE PROGRAM AT ETR

A. D. Smith, Martin Company

### 2:00 - 5:00

### PHOTOGRAPHIC INSTRUMENTATION EDUCATION

Chairman: Herman C. Schepler, JPL

AREAS OF EDUCATION FOR PHOTO-INSTRUMENTATION ADAPTABLE FOR TEACHING MACHINE PRESENTATION

F. O. Ambruster, Behavioral Science Consult.

AN APPROACH TO PHOTO-OPTICAL EQUIPMENT OPERATOR TRAINING

Alden W. Beckley, Dynallectron Corp.

EDUCATION FOR A CAREER IN OPTICS

Dr. James A. Eyer, Univ. of Rochester

PHOTOELASTICITY

Paul D. Flynn, Frankford Arsenal

PHOTOGRAPHIC INSTRUMENTATION EDUCATION

Bernard G. Pongeggi, NASA/Ames

### FRIDAY - 9:00 - 12:30

### OPTICAL SATELLITE TRACKING

Chairman: J. E. Durrenberger, WSMR

THE USE OF IMAGE ORTHICON SYSTEMS IN ASTRONOMY

G. G. Barton, Dearborn Observatory

REQUIREMENT AND DESCRIPTION OF AN "ATTITUDE" CAMERA

F. K. H. Ching

THE USE OF LASERS IN ELECTRO-OPTICAL SYSTEMS

Arthur Lubin, RCA/DEP

DATA COMPRESSION FOR PLANETARY PHOTOGRAPHY

Leonard R. Melling

THE PRAIRIE METEORITE NETWORK

Dr. Richard E. McCrosky, Smithsonian Astrophysical Observatory

BRIGHT SPOT DETECTION AND LOCATION IN A SCANNED SCENE

S. Morrison and N. Gutlove, Republic Aviation

THE USE OF POLY-OPTICS AND IMAGE TUBE SENSORS IN SATELLITE AND MISSILE TRACKING INSTRUMENTS

Walter E. Woehl, WSMR

### FRIDAY - 2:00 - 3:00

### ADVANCED TECHNIQUES FOR HIGH SPEED PHOTO DATA RECORDING

A UNIVERSAL BINOCULAR BEAM SPLITTER FOR ROTATING PRISM CAMERAS

H. G. Patzke, Impulsphysik, BmbH

HIGH SPEED MICRO PHOTOGRAPHY

W. Thurwart, Impulsphysik GmbH

GHE USE OF HIGH SPEED PHOTOGRAPHY IN BIOMECHANICS

Dr. Verne L. Roberts, Wayne State Univ.

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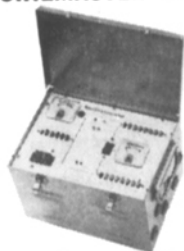
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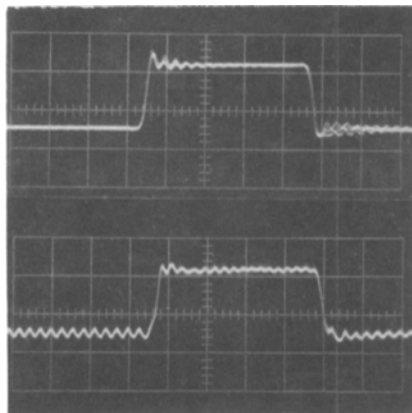
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into a closed-circuit recording system with the Ampex VR-1500 tape recorder and is also capable of operating on broadcast standards with or without a viewfinder accessory. The vidicon scanning yoke is said to be identical with those found in the more expensive 321 series of television cameras manufactured by Marconi. Standard length 6-in. or short 5-in. vidicon tubes may be used and the camera also accepts separate mesh vidicon or standard vidicons with filament requirements ranging from 0.095 amp to 0.6 amp. Features include a control system to overcome black level drift caused by variations of vidicon dark current as well as an automatic target voltage control in the form of a voltage regulating circuit. In normal operation, the only control needed is an "On-Off" switch which is the only exposed electrical control. The unit is priced at **\$2,000**.



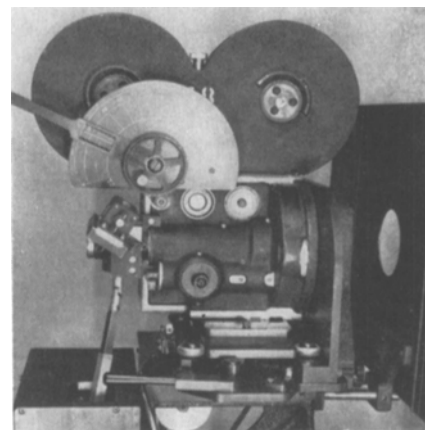
Upper: E-E input: one microsecond per division horizontal. Lower: The same, off tape.

The **PI-3V television tape recorder**, announced by Precision Instrument Co., 3170 Porter Drive, Palo Alto, Calif., is used to record and reproduce high-frequency signals thus making it possible to study a variety of transients, including radar and communications signals, without need for loop recorders, printed readout devices, or related equipment. According to the announcement, repetitive reproduction of recorded segments of 16.7 msec duration can be observed for as long as 5 to 10 min without signal degradation. The 75-lb recorder will accept positive going transients and may be adjusted for full-scale output for 0.5-v peak (or greater) input pulse. It is reported that a step function input will be reproduced with a rise time of about 0.25  $\mu$ sec with peak-to-peak noise less than 10% of full-scale signal. The illustrations are Polaroid pictures taken from the face of the oscilloscope of a line of a television video signal. The input to the recorder was an "off the air" television program. Recording was at a speed of  $7\frac{1}{2}$  in./sec on 1-in. magnetic tape. A single field of the program was selected and reproduced stop-motion so that 16.7 mcs were displayed on a Tektronix 545A oscilloscope. The delayed sweep was used to display only one line of the field so the photographs show a waveform that occurred only once in real time. Due to the change in relative head-to-tape velocity between continuous and stop-motion operation, the picture will exhibit about 1%

static time base error. (The scale in the accompanying photograph is 10  $\mu$ sec per horizontal division.) With the recorder's helical scan, information is recorded continuously in 16.67 msec increments. About 94% of the total data is available for reproduction.

The **Newschief** is a cordless transistorized portable TV camera produced by Sylvania Electric Products Inc., 730 Third Ave., New York, N.Y. 10017. Features include a solid state transmitter and a rechargeable nickel cadmium battery. The entire system weighs less than 30 lb and is designed especially for televising news events where the camera must be moved frequently and rapidly in large crowds. Other components in the system include plug-in modules, a complete EIA synchronizing generator, and video and sound amplifiers. An omnidirectional antenna is included to assure reception from any direction. The camera is a modification of Sylvania's 800-line closed-circuit camera. It measures 3 by 4 by 8 in. and weighs about 5 lb, including lens and viewfinder. The transmitter employs frequency modulation and operates in the 2,000-mc band. Video and audio signals can be transmitted up to one mile using a solid state microwave transmitter. The Newschief was used to televise the 1964 Olympics in Innsbruck, Austria.

The **linear Model 12-500S Power Inverter**, announced by Linear Systems Inc., 605 University Ave., Los Gatos 2, Calif., is intended for widespread application to problems involving the operation of a-c equipment from storage-battery power. The unit has a frequency stability of  $\pm 0.5$  cps over the input range 12- to 15-v d-c and/or the load range to 500 w taken compositely. The operating temperature range is said to be  $-25$  to  $+60$  C. Output frequency is adjustable for a minimum of  $\pm 5$  cps. The 500-w unit is priced at **\$200**. Other models are available in a price range from **\$60** to **\$450**.

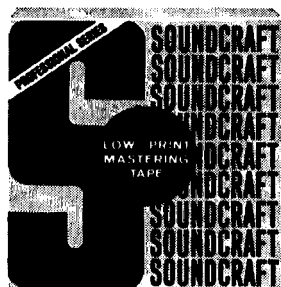


A **Rack-Over, Single-, Double- and No-Frame Conversion Unit** for the Bell & Howell 2709, Acme or Oxberry cameras has been announced by Richmark Camera Service, Inc., 516 Timpson Pl., Bronx 55, N.Y. The shuttle of the pilot-pin camera is altered to allow it to receive interchangeable keyed apertures from the front of the shuttle. These apertures may be had in double-frame, film-strip and no-frame as well as conventional Academy or full-

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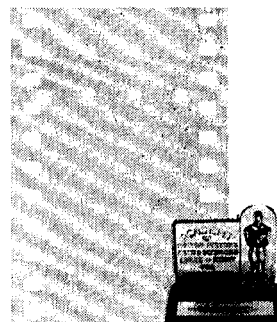
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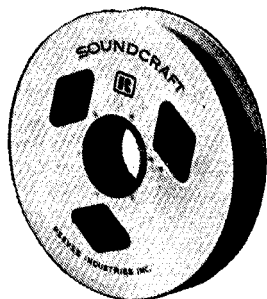
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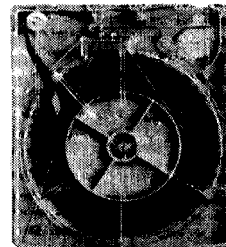
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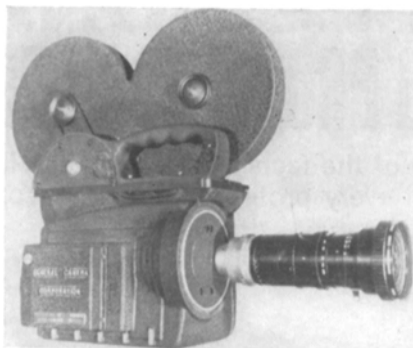
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frame. This allows one camera to interchange instantly to the desired aperture format. The reticle ground glass represents the outline of all the formats. The Rack-Over is ball-bearing mounted and is actuated by a cammed lever arm which permits it to stop at either the film center or the sound center. Alignment between the camera aperture and the viewfinder is said to be within 0.001 in. The unit is priced at \$1,200.

**Two pin-registered, high-speed factory conversions, operating between 4 frames/sec and 400 frames/sec, are available for the Mitchell 16 HS and the Mitchell 16 HSC, according to an announcement from Mitchell Camera Corp., 666 W. Harvard St., Glendale 4, Calif. Camera components affected by the modifications are dynamically balanced and the modified camera is said to have the same image resolution and steadiness at 400 frames/sec as at the standard 24 frames/sec operation prior to conversion. A specially developed elliptical pulldown path is used to minimize sawing. Motors for both the HS and the HSC have solid state controllers for accurate speed control. Acceleration to 400 frames/sec is said to be accomplished in 2 sec with the 1200-ft film load. Deceleration from 200 frames/sec is obtained in 4 sec and from 400 frames/sec in 6 sec. For shorter frame rate deceleration a special electric brake is available. The HS camera is 13½ in. wide, 7 in. high and 12 in. long. With the 400-ft magazine it weighs 19½ lb. The HSC is 4 in. in width and is 5 in. high. It is 8½ in. long**

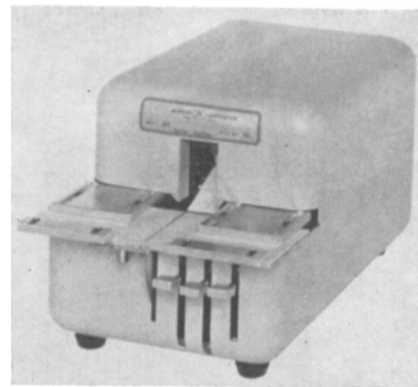
without motor and magazine. With a 400-ft magazine its weight is 15 lb.



**The Super Sync Conversion for the Auricon Cine Voice camera has been announced by General Camera Corp. 723 Seventh Ave., New York, N.Y. 10019. The conversion permits camera and magazines to be driven by one Super Sync motor to allow perfect double system sync with 400-ft or 1200-ft magazines. The basic mechanism has been modified and a carrying handle added as well as a gel filter slot behind the lens. The camera is designed to operate at below zero temperatures with a 1200-ft load of film. A noiseless counter permits quiet operation. The conversion is priced at \$695.**

**A ruggedized, miniature timing light generator built to withstand up to 30 G's has been announced by Traid Corp., 17136 Ventura Blvd., P.O. Box 648,**

Encino, Calif. The generator, model RTG-3, weighs 2 lb and is designed to trigger up to 10 neon timing lamps in high-speed cameras where it is necessary to record time between events or to determine film speed in photorecording applications. The generator is manufactured by Adtrol Electronics and distributed by Traid. Dimensions are 4½ by 6 by 2½ in.



**A new film splicer for use with continuous film processing machines and for make-up roll assembly has been announced by Gryphon Corp., P.O. Box 854, Burbank, Calif. The new Model 855 uses 1-in. wide pressure-sensitive tape for butt splices that are safe for passage through processing machines. It can be adjusted to accommodate various film widths, and also to splice either edge-to-edge or with the tape wrapped round the edges of the film. A special film cutter which maintains registration of spliced films is available for use with the Model 855 for sprocket-driven processing machines. The Model 855 Film Splicer is priced at \$390.00. The film cutter (Model 5516 for 16mm film or Model 5535 for 35mm film) is priced at \$35.00. Prices are FOB Burbank, Calif. Approximate shipping weight 15 lb.**

**The SeAQUartz Mark II Underwater Light produced by Birns & Sawyer Cine Equipment Co., Inc., 6424 Santa Monica Blvd., Hollywood 38, Calif. (Journal, p. 301, Mar., 1964) may now be mounted directly to the firm's Underwater Camera Housing (for Arriflex 16mm and 35mm cameras) to create a completely self-contained and mobile underwater motion-picture unit, independent of all external power sources. The yoke-mounted 30-v light-head, using a 250-w quartz iodine lamp and aluminum reflector, is locked to an adjustable light-bar attached to the top of the underwater camera housing. The light-head may be angled to any desired position by the cameraman. The battery housing case is mounted to the bottom of the base of the underwater camera housing, replacing the camera housing lead weights. A 6-ft waterproof cable is supplied with the 30-v light-head and connects the light-head directly to the battery housing case.**

**Two new quartz-iodine lights, the Mini-Lite and the Back-Lite, have been announced by ColorTran Industries, 630 S. Flower St., Burbank, Calif. The Mini-Lite has 4-way barndoors and 3-way mounting bracket. It weighs 1½ lb and is 2½ in. deep, 4¼ in. wide and 4¼ in. high and accepts**

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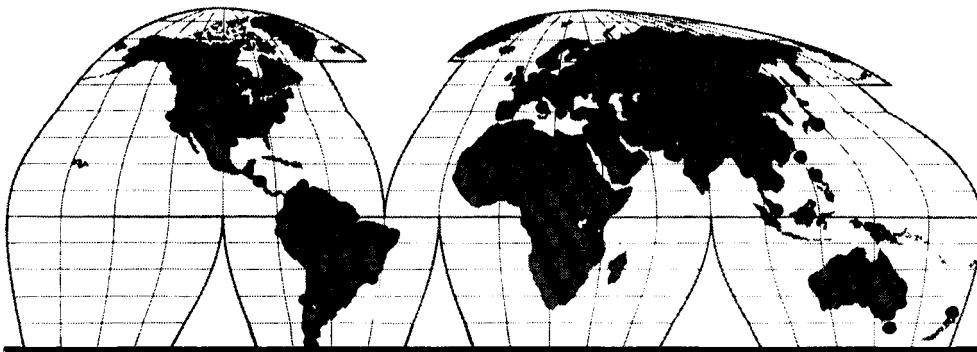
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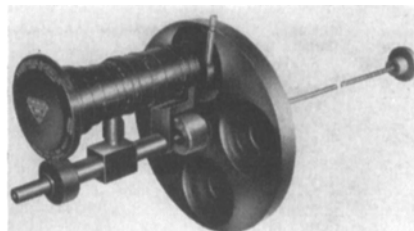
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both 400-w and 650-w quartz-iodine lamps. It is priced at \$36.95.

The Back-Lite is portable, weighing only 1½ lb. It is 3 in. deep and casts, at 10 ft, a flat, even light covering 462 sq ft, according to the announcement. It uses both 500-w and 1000-w quartz-iodine lamps. It is priced at \$59.50. Both lights operate directly from 120-v, a-c/d-c, without boosting.

**The Sylvania Precision Light, Model Q-2**, a compact lightweight studio light, was introduced at the SMPTE Los Angeles Conference by Sylvania Electric Products Inc., 730 Third Ave., New York, N.Y. 10017. The lighting unit is equipped with a newly developed 2,000-w lamp that is only 5 in. long and 1½ in. in diameter, its small size permitting new forms of reflector optics to replace conventional lens systems. The single-ended, iodine-quartz lamp is available in color balance of either 3,200 or 3,400 K. Overall dimensions of the light are 13 in. in diameter at the front, tapering back to 4 in. in diameter at the rear, and 11 in. deep. It weighs 12 lb. It is priced at about \$139.



**The ITV Angenieux-Zoomar 10 × 15 MZR vidicon lens system** has been announced by Zoomar, Inc., Glen Cove, N.Y. The unit has a manual zoom rod control similar to that used on the Zoomar lenses for image-orthicon cameras. The rod is designed to work through the turret of most vidicon cameras, push-pull to zoom and twist to focus. A special removable camera mount is supplied to allow fast simple mounting of the system to the camera turret. The lens has a focal length range from 15mm to 150mm and speed f/2.8. The unit is priced at \$1,795.

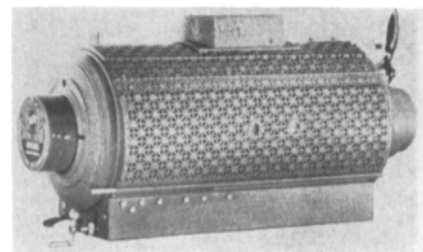
**The Pan Cinor 85 Compact**, a zoom lens which has a zoom range from 17mm to 85mm although weighing only 10 oz, has been introduced by Paillard Inc., 1900 Lower Rd., Linden, N.J. Designed for use with the Bolex H-16 Reflex camera, its small size (only 4 in. long) enables it to be mounted on the turret side by side with wide-angle and standard lenses. Diaphragm settings are from f/3.8 to f/22 and focusing range is from 3½ ft to infinity. Total cost for package including zoom lens, filter adapter for Series VII filters and sunshade combination is \$250.

**A new series of Super Baltar Lenses** has been announced by Bausch & Lomb Inc., Rochester, N.Y. 14602. The first five lenses of an eight-lens series, covering standard and wide-screen projection, are now available. The series includes 50mm lenses to cover the VistaVision format; 25mm and 35mm lenses to provide maximum coverage of the 35mm silent camera

aperture, as well as units designed for 70mm photography. The back focal length of each lens in the series will permit unrestricted operation of a reflex finder beam-splitter, rotating mirror or other image pick-off device. Each lens in the series is adaptable for cameras using black-and-white or color film. A full description of the series is presented in an illustrated catalog (F-169) available from Bausch & Lomb upon request.

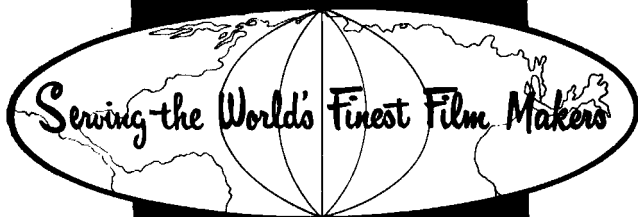
**A new five-element telephoto lens**, the 90mm Tele-Elmarit f/2.8 has been introduced by E. Leitz, Inc., 468 Park Ave. South, New York, N.Y. 10016. The telephoto construction of the new lens includes a negative rear lens group which provides a shortened back focus. The lens mount is only 2½ in. long. The lens is priced at \$192.

**An iris light controller** adaptable to fit most standard 16mm projectors has been introduced by Movielab, Inc., 619 W. 54 St., New York, N.Y. 10019. The controller can be used in conjunction with most illumination meters to maintain standard ASA-SMPTE screen brightness regardless of projector distance or lamp age. The iris helps to control and maintain more dramatic projection, better contrast and standard light intensity, the announcement stated. The iris light controller is priced at \$45.

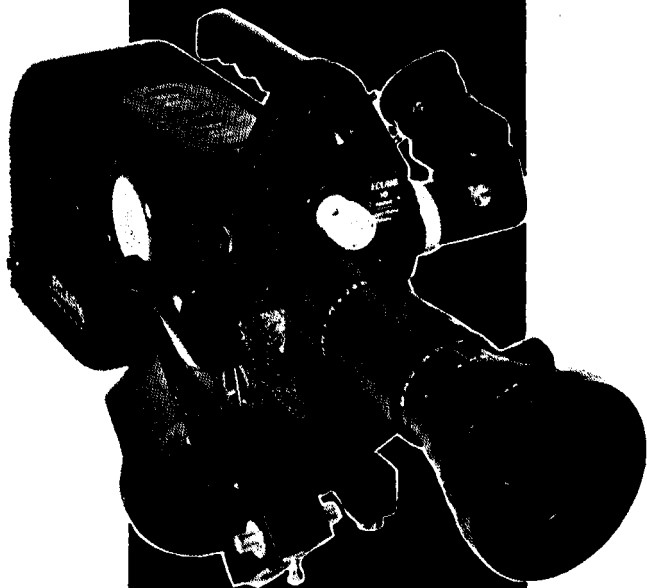


**A high-intensity reflector-type projection arc lamphouse** called the Univarc has been announced by Strong Electric Corp., 79 City Park Ave., Toledo, Ohio 43601. The lamphouse and associated rectifier equipment is designed for use with 35mm portable and semiportable projectors and for 16mm projectors. A total of 2600 lm is produced for 16mm projection and 4000 lm for 35mm projection. The lamphouse weighs 55 lb. The 40-amp type for 35mm is 29½ in. long, 14½ in. high and 11⅞ in. wide. The 30 amp type for 16mm is 28½ in. long, 14½ in. high and 11⅞ in. wide. The live parts of the lamp are insulated from the grounded line current by use of a separate primary and secondary winding in the transformer. There is also a smoothing reactor which is connected in the d-c circuit to the arc to reduce the a-c component and thus eliminate light flicker. The 40-amp Univarc is priced at \$675 and the 30-amp type is \$650.

**A new Magnecord magnetic tape recorder**, Model 1028, has been announced by Midwestern Instruments, Inc., Magnecord Sales Dept., 41 St. and Sheridan Rd., Tulsa, Okla. 74105. The new recorder can handle reel sizes up to 10½ in. and operates at tape speeds of 7½ and 15 in./sec.



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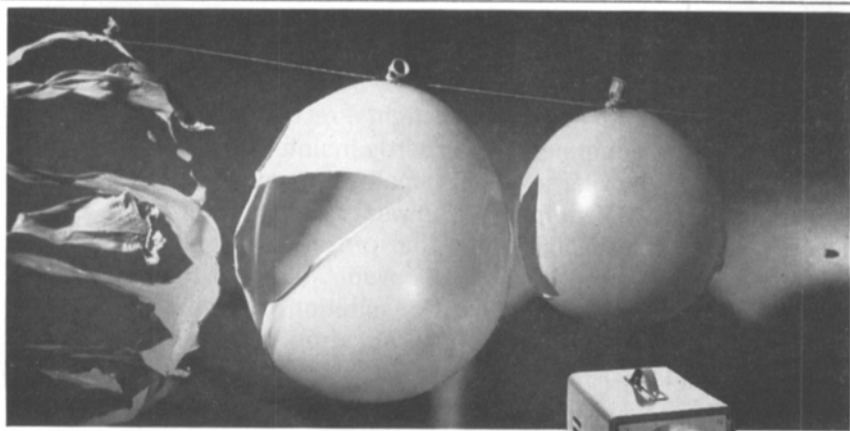
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It is available with a case for portable use or with a rack adaptor for rack or console mounting. Plug-in transformers are available as optional equipment to match impedances to studio console or speech equipment. Also available are 1/2-track or 1/4-track stereo heads. The price range is from \$995 to \$1,125.

A new magnetic tape playback deck featuring a pulse-initiated repeating program has been announced by Tape-Athon Corp., 523 South Hindry, Inglewood, Calif. The player is said to accept programs of any duration from 20 sec to 8 hr, recorded on a 1/2-track recorder at speeds of 1 1/2, 3 1/2, or 7 1/2 in./sec. A program is started by providing an external momentary pulse of 6- to 12-v, a-c or d-c, to the player via a built-in connector. The program is then played to the end of the recording when the tape reverses and immediately shuts off. The unit is available in portable, rack mounting and console styles and in monophonic and stereo versions.



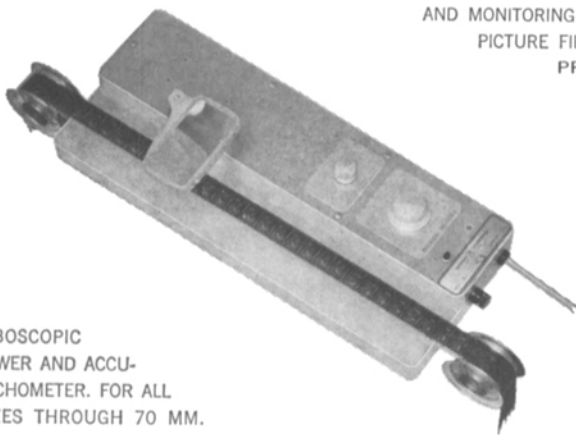
The **Detectiroscope**, Model 5500, is a self-contained infrared viewing device announced by the Commercial Infrared Products, Electronic Products Div., Varo, Inc., 2201 Walnut, Garland, Tex. Model 5500 is an active viewing device operating in the near infrared range. Operating temperature range is -25 F to +115 F. The viewer is powered by a 1.34-v d-c mercury battery converted to 12,000 v. Focus range is 1 ft to infinity; field of view is 26°. Weight including the power supply is 21 oz. The device can be handheld or mounted on a microscope. It is priced at \$425.

The **Flexipro** is an automatic film processor which features rapid access and controlled sensitometric quality. Introduced by Photomechanisms, Inc., 15 Stepar Place, Huntington Station, New York, the machine is reported to process as much as 600 ft of 35mm film per chemical loading at rates from 1/4 ft to 6 ft/min. The Rapidata technique is employed to ensure that every foot of developed film is of exactly the same sensitometric quality. The technique, developed and patented by Photomechanisms, is used to maintain a constant supply of fresh solution to the film emulsion by the use of a meniscus applicator and discards the used solution to avoid the problem of solution exhaustion. The machine is portable and pre-mixed chemicals are supplied in oxygen-free plastic containers. The unit is priced at \$2,995.

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