

## BLOODHOUND!

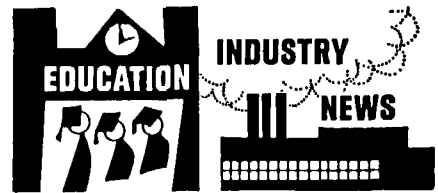
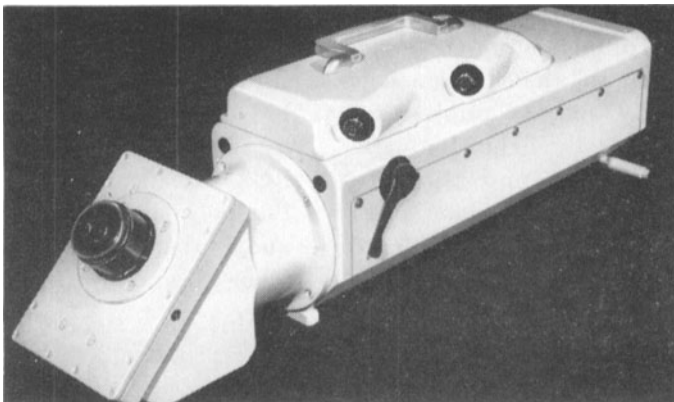
TAYLOR HOBSON COOKE's new ZOOM TELESCOPE has been developed primarily for missile tracking. The telescope embodies the proven TAYLOR HOBSON COOKE unique 10:1 dual range zoom system which covers an object field varying between 23° and 2.3°. The eyepiece, which carries a dioptic scale, gives an apparent field of view of 60°. The zoom telescope has an unusually large exit pupil on each range. At magnifications between 4 and 20, the pupil is 8mm diameter . . . at magnifications between 8 and 40 it is 4 mm.

These features, coupled with the extended eye clearance, clarity of image, and precise collimation between zoom ranges make the instrument the perfect solution to tracking problems. If you're trying to spot a fly in the sky, get on the right track and write Albion Optical Co., 260 N. Route 303, West Nyack, N.Y. 10994 . . . or call Jim Tennyson or Roy Leavesley at (914) 358-4450 (collect, of course).



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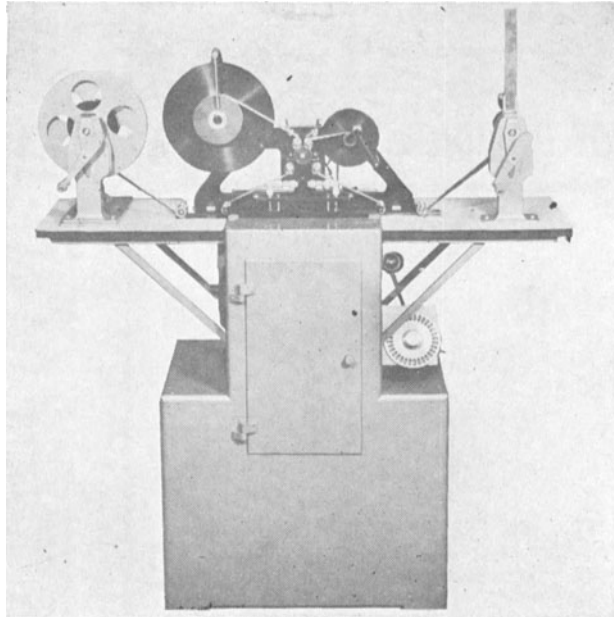
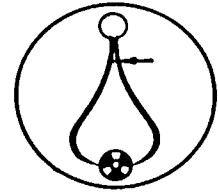
Arthur W. Hansen joined the Society's staff as Test Film Engineer on December 1. He succeeds Joseph R. Stiffler who resigned in November to accept a position at the newly organized division of AT&T, the Bell System Business Communications Seminar Theater. Mr. Hansen comes to SMPTE from the Du Pont Photo Products Department in Parlin, N.J., where for 22 years he was employed as a Technical Assistant in their control and research operations. He has an extensive background in photography and is familiar with all phases of the commercial photography field from manufacturing to laboratory work. He is also experienced in portraiture, commercial photography and finishing.

Mr. Hansen is a member of a number of photographic organizations. His membership with SMPTE dates from 1953, and he has been actively involved in the work of several other societies. A Senior Member of the Society of Photographic Scientists and Engineers, he is currently serving as Director of its New York Chapter and Chairman of its Audio-Visual Committee for Conferences. He is also a member of the executive board of the Techniques Division of the Photographic Society of America, Director of the Industrial Photographers Association of New Jersey, President of the New Jersey chapter of the Society of Photo-Optical Instrumentation Engineers, and a member of Professional Photographers of America.

In his new position at SMPTE, Mr. Hansen is responsible for all aspects of the test film program. Working with the Engineering Vice-President and Staff Engineer, he will be primarily concerned with quality control and calibration procedures.

The 50th anniversary of the establishment of the National Research Council by the Government of Canada was celebrated at meetings held September 21-23 in Ottawa. The anniversary ceremonies were launched by General The Right Honourable Georges P. Vanier, Governor General of Canada. An address was also given by B. G. Ballard, President of the National Research Council. The following day was given over to three lectures on medical research. On September 23 three lectures were given at NRC's Radio and Electrical Engineering Division. W. O. Baker, Vice-President of Research, Bell Telephone Laboratories, Murray Hill, N.J., spoke on "Information Processing Machines and Modern Science." A. Maréchal Délégué général à la Recherche scientifique et technique, Paris, France, spoke on "L'organisation de la recherche scientifique en France." W. Libby, Department of Chemistry, University of California, spoke on "Space Chemistry."

# HFC COLOR SCENE TESTER



## FEATURES

1. The exposure of the negative being tested is always precisely controlled. This is accomplished by use of the Xenon flashtube whose light output is directly proportional to the electrical energy supplied to it.
2. A 16 frame exposure gate permits a range of 6 different exposures with the standard color pack combination and 10 frames with a range intensity and hue differences.
3. The platen, color positive raw stock and guides are moved down to the negative in the exposure gate by a pneumatic cylinder thereby eliminating physical labor.
4. When the positive film and the platen contact the negative in the flat gate, there is no shifting of the negative position and contact is firm.
5. After each exposure the positive film is advanced by a time controlled motor. The time control is adjustable therefore spacing between exposed strips can be changed.
6. Each frame of the exposure gate is provided with guides so that proper filter combinations can be inserted without difficulty.
7. The basic color pack which has to be adjusted for emulsion changes, is easily accessible through an opening at the front of the machine.
8. To meet conditions of developer modifications and emulsion changes, the overall light output is adjusted by a 30 point switch. This switch controls the energy supplied to the lamp by changing the amount of capacitance across the lamp, this direct control of energy input to the lamp, by discrete amounts of capacitance, with the voltage held constant, provides excellent, simple, control procedure.
9. The power supply has been conservatively designed so that when the unit is connected to a regulated A.C. supply, the light output at a given capacitance setting is accurately reproduced.
10. A characteristic of the Xenon flashtube is that the color quality of the light is not changed during the life of the tube.
11. The basic Xenon flashtube with its electrical circuitry is inherently simple and dependable.
12. The power supply has been designed to allow rapid charging of the capacitor bank so that no time is lost between successive exposure of strips.
13. The negative film is guided over the flat exposure gates on rails which are spring loaded to float above the engraved glass in the exposure gate, thus eliminating possible negative scratches. Firm negative/positive contact at time of exposure is accomplished by the spring loaded platen.
14. In this tester there are no meters, no shutters, no optics, no motors and no moving parts between the light source and the negative positive plane.

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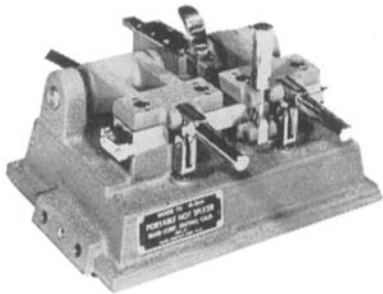


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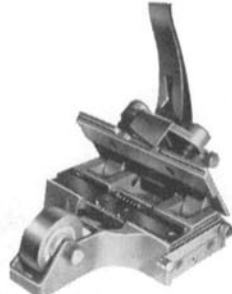
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Model 116 - 16mm or 8mm ....\$249.00  
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### CM 602 CIR GUILLOTINE SPLICER

Recessed channel splicing block. Drop-in film positioning on pins. Quick-action butt, overlap, or diagonal splice. Rebuilds torn sprocket holes. Repairs negatives. Uses any type of pressure sensitive tape. (Mylar or Cellophane.)

16mm...\$185.00      35mm...\$225.00



### CM 603 STANCO CINE SPLICER

Automatically removes emulsion. Dual film registration pins permit perfect film alignment. Correct platen temperature at splicing point permits faster stronger splices. Heavy duty construction.

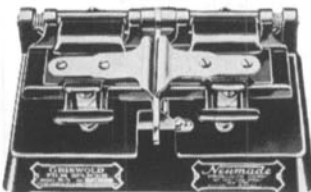
8/16mm .....\$249.50



### CM 604 RIVAS MYLAR SPLICER

Constructed to professional specifications for 16 or 35mm film. Registration pins align the film perfectly while the serrated cutter holds the tape firmly over the film during the splicing operation.

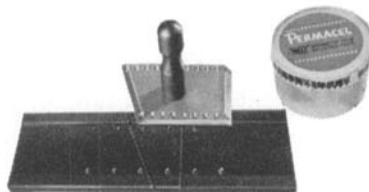
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### CM 606 SPLICING BLOCK KIT

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The ceremonies closed with a dinner meeting. The chairman of the meeting was The Honourable C. M. Drury, Chairman of the Committee of the Privy Council on Scientific and Industrial Research, and the speaker was The Right Honourable Lester B. Pearson, Prime Minister of Canada.

The IEEE 9th Annual Symposium on Electron, Ion and Laser Beam Technology, will be held May 9-11 at the Institute of Electrical and Electronic Engineers, Berkeley, Calif. The annual symposium is the outgrowth of meetings originally organized by Alloyd Corp. and concerned with the generation and control of radiant energy for the purpose of modifying the shape or nature of materials, including processes such as melting, refining, welding, machining and evaporating. In subsequent years, nonthermal interactions with materials have also been included, notably, such topics as scanning electron microscopy, electron-probe microanalysis, and high-precision measurements, as well as novel instrumentation and the applicable physics. Other examples of topics to be covered include microelectronic fabrication and examination and information storage (e.g., thermoplastic recording).

By agreement with the IEEE Conference on Laser Applications and Engineering, to be held in Washington, D.C., in June, papers pertaining to the use of laser beams for the transmission of information and its recording (holography) will be shifted to that conference. However, applications of holography (e.g., in the fabrication of printing masters for holograms) are to be covered at the Berkeley symposium. Symposium Program Committee Chairman is Dr. R. F. W. Pease, Electrical Engineering, University of California, Berkeley, Calif.

The Physics of Selenium and Tellurium is the subject of an international symposium to be held October 12-13, 1967, in Montreal, Canada, at Le Chateau Champlain, a new hotel which will be completed before the start of Expo '67. The meeting is sponsored by the Selenium-Tellurium Development Association, Inc. The symposium will feature invited speakers from a number of countries where research work on both Selenium and Tellurium is in progress. The two elements are primarily obtained as by-products of copper refining. During the symposium researchers from various countries will cover their current work in fields such as crystal growth, optical properties and electrical properties.

The Council on International Nontheatrical Events (CINE) presented Golden Eagle Awards and a record number of international prizes to more than 100 American film producers at ceremonies held November 18 in Washington, D.C. Eight teenage filmmakers, two from Los Angeles, were present to receive awards. *Skater-dater*, produced by Byway Productions of New York and distributed by United Artists received four major awards, including an Oscar from the Academy of Motion Picture Arts and Sciences in the short subject category. The film received the grand prize for technique at Cannes

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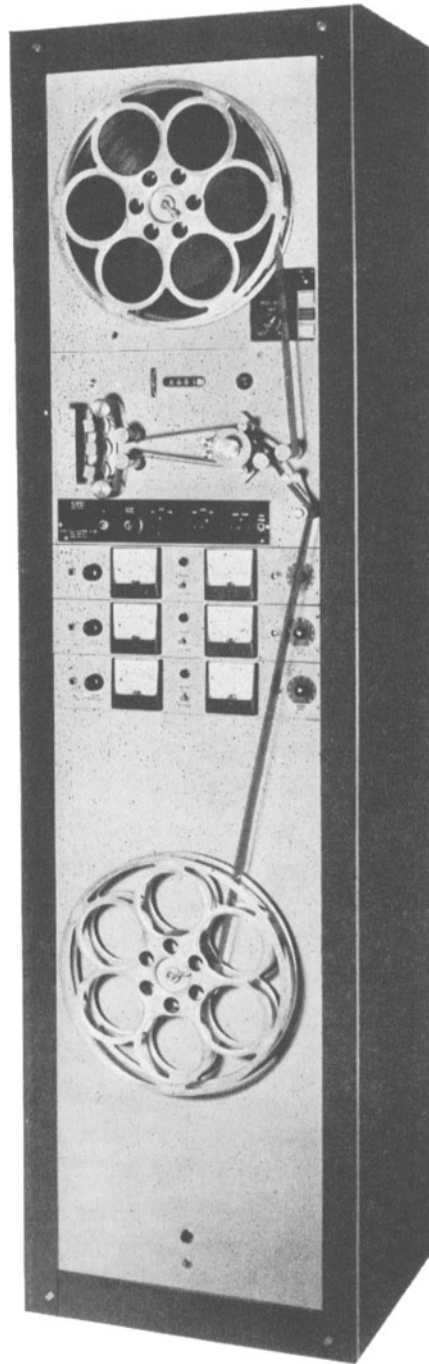
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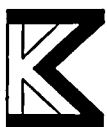
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and won two awards at Cork, the St. Finbarr Award (first prize) and the Waterford Glass Award of St. Genesis (the patron saint of entertainment). It received the Diploma of Merit at the Edinburgh Festival and a certificate of participation at Krakow, Poland. *The King of Madison Avenue*, by Emily Films, Inc., of New York, took two prizes, a first at the Rome Electronic and Nuclear Film Festival and a second at Guadalajara, Mexico. Other films which received top honors included four television documentaries, 16 nontheatrical films in various categories, and one theatrical short subject. Diplomats from seven embassies awarded prizes on behalf of their nations: Argentina, Italy, Great Britain, Canada, Germany, Ireland and France.

Films are now being submitted to CINE for selection of films to represent the United States at foreign film festivals. Films made during 1966 are eligible and consideration is also given to films released during the last half of 1965.

Further information is available from Jim Culver, CINE, 1201 Sixteenth St., N.W., Washington, D.C. 20036.

**Audio-visual materials** are now imported duty-free into the United States provided they have been certified as of international educational character. The duty-free importation is the result of the signing, by President Johnson, of a treaty proclamation respecting the *Agreement for Facilitating the International Circulation of an Educational, Scientific, and Cultural Character* (known as the "Audio-Visual Agreement of Beirut") which brings the United States into full partnership with 18 other countries in providing for duty-free importation of audio-visual materials. Educational materials which come under the provision of the treaty include motion pictures, recordings, filmstrips, slides, maps, charts, posters, models and recorded video tape.

**Testimony about international standardization** in support of H.R. 17424 and H.R. 17598 which provide for government aid to further United States representation in international standardization was presented by F. K. McCune, Vice-President of the USA Standards Institute, in behalf of the Institute, before a subcommittee of the House Committee on Science and Astronautics on September 21. Provisions of the bills include authorization for the Secretary of Commerce, in cooperation with private United States standards organizations and Federal and state agencies to make grants and enter into contracts or cooperative arrangements with public or private organizations to carry out functions of the bills. The institute also supports, according to Mr. McCune's testimony, a provision for the establishment of a clearinghouse service. Such a service would provide centrally both domestic and international standards data, including industrial standards as well as government procurement specifications. Copies of Mr. McCune's testimony are available upon request from USA Standards Institute, 10 E. 40th St., New York, N.Y. 10016.

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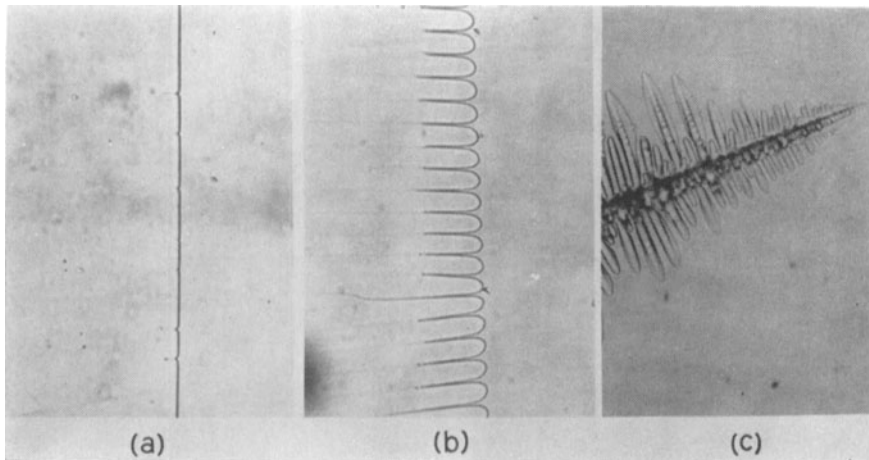
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**A technique for observing the internal structure of molten metals during the process of solidification** has been devised at Bell Telephone Laboratories. It has been found that by freezing certain transparent organic materials, such as camphor and carbon tetrabromide, it is possible to duplicate the internal growth dynamics of metals as they cool and crystallize. Basic to the development of the new technique was the discovery that the solidification characteristics of a material depend on a thermodynamic quantity known as the entropy of fusion. A dozen or so organic compounds have a small entropy of fusion, similar to that of metals, but with the singular property of transparency. The atoms in these few organic compounds behave

like the atoms of metals in that during solidification the atoms attach themselves randomly to the growing crystal while forming highly symmetric structures. Each grain of a metal is a single crystal in which atoms are symmetrically arranged.

Before the development of the new technique, attempts to see what takes place during solidification have been hampered because of the opacity of the metals. This technique is relevant to all metals and allows simulation of many of the phenomena associated with metal growth. The various forms of growth of metal crystals — planar (a), cellular (b), and dendritic (c) — have been studied in detail for the first time.

**A sealing technique** said to give silicon

semiconductor devices greater reliability than the usual vacuum-tight encapsulation has been developed at Bell Telephone Laboratories. The seal — a materials system consisting of a metal-insulator-semiconductor combination — is formed by applying a layer of silicon nitride along with beam lead contacts to the silicon dioxide layer of the semiconductor device. With this new technique thousands of devices can be encapsulated simultaneously while they are still on a single silicon slice. The new structures have been tested by contaminating epitaxial silicon transistors with the new seal with sodium ions. The tests, which are continuing, indicate that the new method of sealing increases the life of transistors.

**Development of a lithium-bearing silicon cell** that may be 50 times more resistant to radiation damage than the solar cells that convert sunlight to electricity in most present spacecraft has been reported by Radio Corp. of America. The lithium atoms are much smaller than the silicon atoms. They do not enter into a chemical bond with the silicon but are left free to roam through the crystal structure of the cell in the manner of a gas. Radiation damage occurs when a high-speed electron, proton or gamma ray bursts into the orderly rows of silicon atoms and knocks one of them out of position, leaving a gap. Such gaps act as electron traps and reduce the flow of current from the cell. When enough gaps have been made the current

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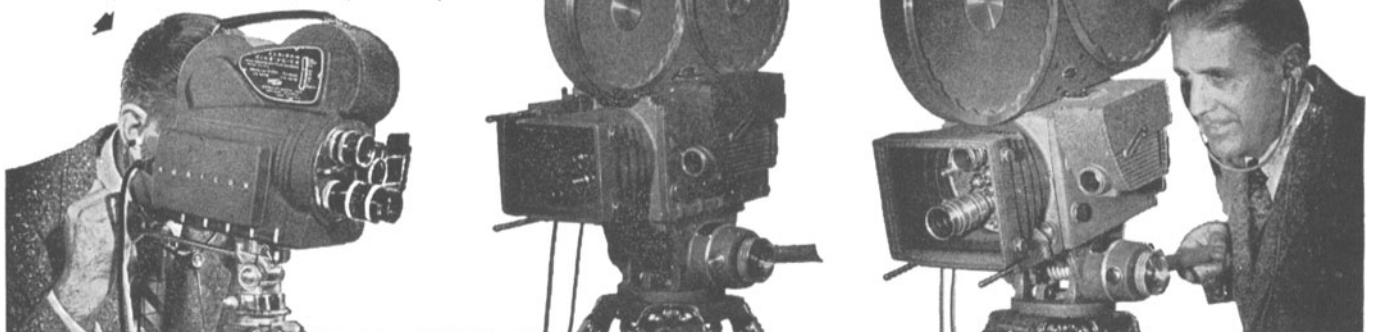


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is halted and the cell becomes useless. However, when lithium is present in such cells, its mobility is such that when one of these gaps occurs the lithium atoms tend to fill it or otherwise neutralize it so that there is no electron trapping, and therefore, no degradation in the performance of the cell. It is possible that these "self-healing" cells will be able to operate indefinitely in the Van Allen belt, the report stated.

**Silicon transistors** with a cutoff frequency of more than 7 GHz, said to be the highest reported so far, have been fabricated at Bell Telephone Laboratories. The new transistors are reported to have a power gain of greater than 4 dB at 4 GHz. Improved fabrication techniques, which allow

the internal dimensions of the transistors to be reduced, are responsible for the high gain and cutoff frequency. The improved devices are called "double-diffused n-p-n" transistors, meaning that the silicon crystal is doped by diffusion with a p-type impurity and an n-type impurity. To fabricate an n-p-n transistor, arsenic-doped silicon (an n-type material) is first diffused with boron (the p-type impurity). This part of the silicon substrate becomes the p-type base layer of the transistor. A strip in the top of the base layer is then diffused with phosphorus to convert it to an n-type emitter region. To obtain high emitter efficiency, the concentration of phosphorus in the emitter strip is at least 100 to 200 times the boron concentration in the rest

of the base layer. The final structure thus has a collector substrate of arsenic-doped silicon, a boron-diffused base layer, and a phosphorus-diffused emitter region.

**Essa 3**, the latest and most sophisticated weather satellite in the Tiros and Essa series provides full weather coverage of the entire earth once a day, storing its pictures on magnetic tape for a readout to ground stations in the United States. The 320-lb satellite, built by Radio Corp. of America for NASA, is equipped with RCA's Advanced Vidicon Camera System (AVCS). The two AVCS cameras are mounted on opposite sides of the satellite, taking pictures at 26-s intervals when one of the cameras is pointing down. The Essa 3 cameras are redundant and independent, either being capable of providing the required daily coverage. The 10 Tiros and the two previous Essa satellites have sent to earth more than 730,000 usable pictures of the earth's cloud cover, tropical storms, ice floes, snow cover, and other data vital to modern weather forecasting.

The extraordinarily impressive pictures of the Lunar Crater Copernicus sent to earth by Lunar 2 were transmitted over a communications system installed on the unmanned space ship by Radio Corp. of America, which also built the power supply system. Both subsystems were built by RCA's Astro-Electronics Div. at Princeton, N.J. The second Lunar Orbiter (like the first) carried a film camera system for taking both high and medium resolution pictures of the lunar surface. The film was developed on board the space ship and then scanned by a narrow light beam which produced corresponding electrical signals which were radioed back to earth.


**Film Sound Services**, 4 New St., Toronto 5, Canada, is a new studio established by Fred Sengmueller, former sound engineer at Cinesound Ltd. Described by Mr. Sengmueller as the "smallest sound studio in town," the new facility specializes in location recording, mixing, transfer, sound editing and narration recording. There is also a music library available for films and television. The transistorized dubbing studio has three 16mm dubbers, a 16mm recorder which is selsyn interlocked and a complete line of Nagra equipment.

**Zoomar, Inc.**, Glen Cove, N.Y., has acquired Kilfitt Optischwerke, an optical company in Munich, Germany, which will be operated by the newly formed Zoomar GmbH in Munich. Products to be distributed throughout the United States, Canada and South America by Zoomar, Inc., will include a new series of high-speed lenses for 35mm reflex and TV cameras.

A new all-day processing service for Commercial Ektachrome ECO-2/7255 motion-picture film has been announced by Bebell & Bebell Color Laboratories, Inc., 108 W. 24 St., New York, N.Y. 10011. The service, which makes available processing during the morning and afternoon, instead of only in the evening, is possible because of the installation of an additional color processing machine, the announcement stated.

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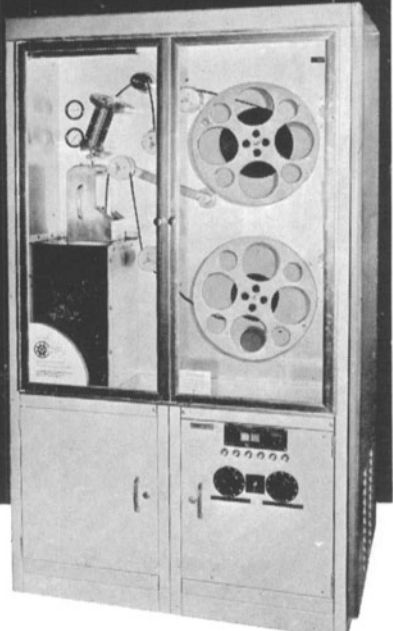
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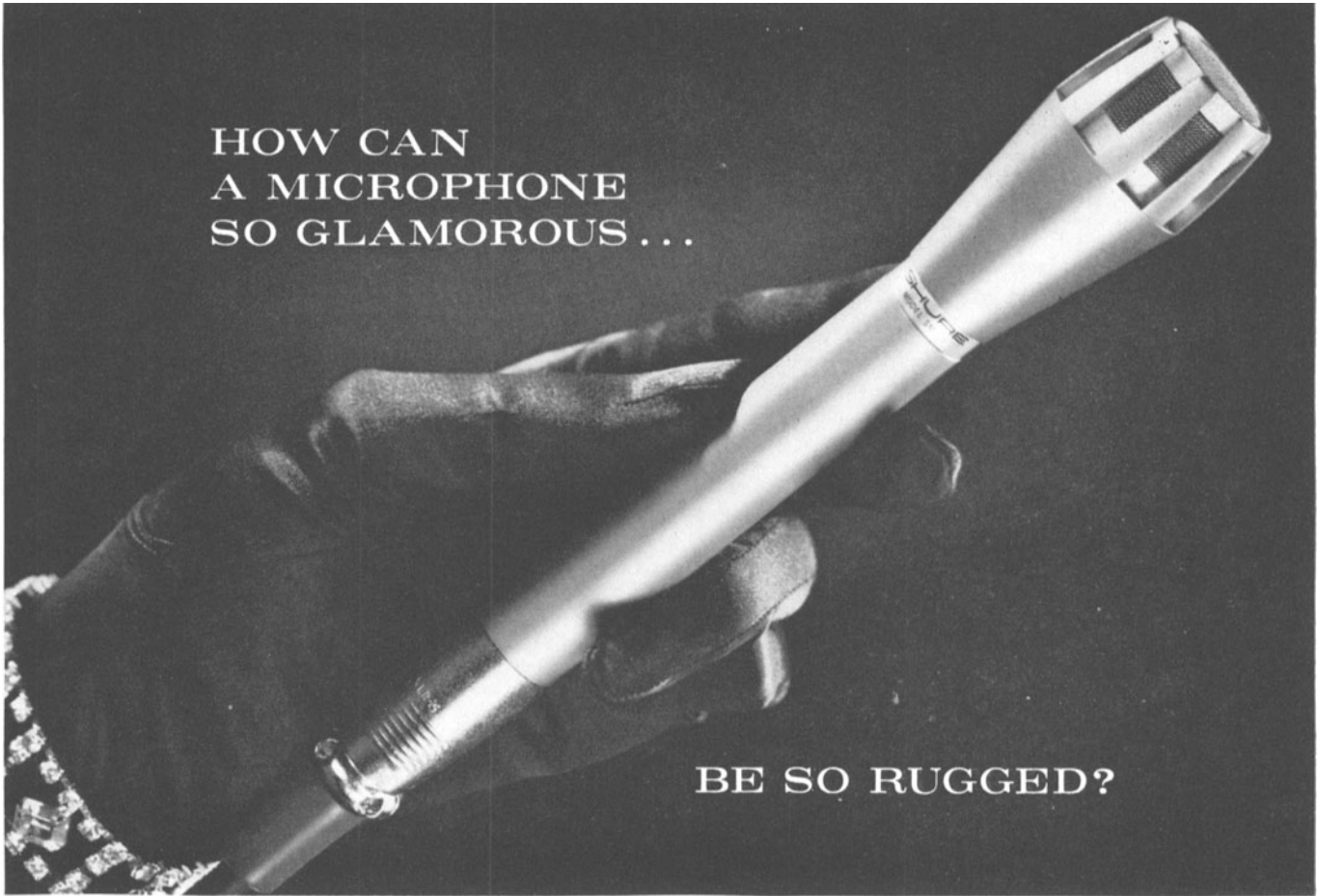
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damage to the internal structure. (In actual lab tests we drop the SM60's over and over from a height of 6 feet.)

**PERFORMANCE:** Built-in wind and "pop" filter eliminates or minimizes breath and wind noise. *Windscreen and front end instantly removable for cleaning.* Smooth and natural sound for both voice and music. Goes from stand to hand instantly.

**ECONOMY:** Priced competitively with conventional "workhorse" microphones. Why not check one out now? See your Shure Professional Products Distributor or contact Mr. Robert Carr, Manager of Professional Products Division, Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Ill. 60204 — Phone 312 - 328-9000.

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Because its cardioid directional pattern is uniquely uniform with frequency and symmetrical about its axis, the SM5 is singularly independent of the effects of environment. Even in extreme shooting situations (such as with tight sets, low ceilings, hard walls, low microphone angles, traffic or air-conditioner noise and rumble and changing distance) the SM5 minimizes sound coloration and ambient noise pickup.



**MODEL SM76  
3/4" OMNIDIRECTIONAL  
DYNAMIC**

Ideal for interviews and audience participation, yet unusually smooth wide range response (40-20 KC) for critical music reproduction. Instantly detachable from stand. Steel case with Cannon connector.



**MODEL SM50  
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DYNAMIC**

Self-windscreened and pop-free for news, sports, remotes, and interviews. Also ideal for many studio and control room applications. Comfortably balanced for hand or stand use. Natural response.



Rhodesia, much in the news of late, is the home of one of the Society's newest Sustaining Member companies, Central Film Laboratories, of Salisbury. Originally set up by the government when Rhodesia was part of the Central African Federation, the laboratories became a private company when the Federation was dissolved.

Now that it has been in operation just over two years, the company has been kept busy processing film from various

parts of Africa, at least until the recent Rhodesian political problems cost it much of its African market. To fill the gap, the company has gone into film production and recently made the first film on Rhodesian history ever made in the country. Called *Historic Rhodesia*, it is a 16mm documentary which runs for 15 minutes and traces Rhodesian history from stone-age man to modern times. Advertising commercials are also being produced.

Central Film Laboratories has a staff

of 30 Europeans and Africans. The Managing Director is Theo Otto, who was previously consultant to the National Film Board of South Africa. A description of the facilities offered is found under "New Sustaining Members" elsewhere in this issue.

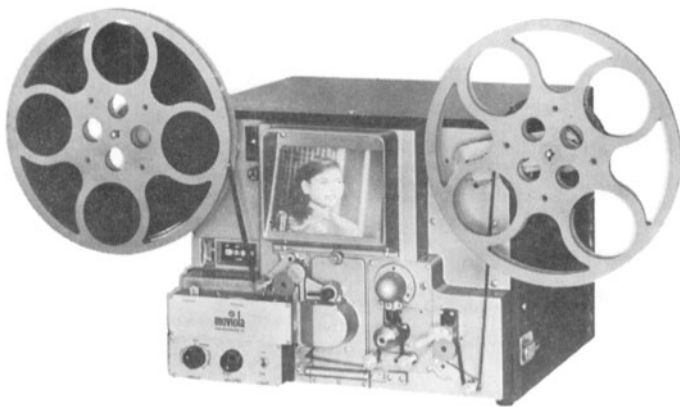
Lane Films, 1601 N. Gower, Hollywood, Calif. has been reactivated for the production of industrial motion pictures, it was announced by Bill Lane, head of the firm. The firm has signed an initial contract with Technicolor Corp. to produce a sales film, the announcement stated. The reactivated firm will concentrate on planning and production of audio-visual marketing programs with some emphasis on the use of both sound and silent films in super 8. It will also offer an audio-visual consulting service to companies who have in-plant production units and also to those who require services of a producer.

The Board of Directors of National Entertainment Workshop, a Boston organization formed to expedite the use of 3D photography, met October 27 in the offices of Century Projector Corp., a Division of United Industrial Syndicate, Inc., 729 Seventh Ave., New York, N.Y. 10019. Purpose of the meeting was to formulate plans to activate the firm's motion-picture, theater and studio division. The 3D development noted in the announcement of the meeting is said to involve a system that can mathematically predict the exact placement of 3D images.

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## for 16mm motion picture films

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You can zip through film at up to six times sound speed, run at governed sound speed, slow to frame-by-frame speed or stop for still frame analysis . . . at variable speed forward or backward.

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It is now possible to scan a 16mm motion picture film in a manner similar to scanning a book from a library shelf. And just as quietly, and as easily.

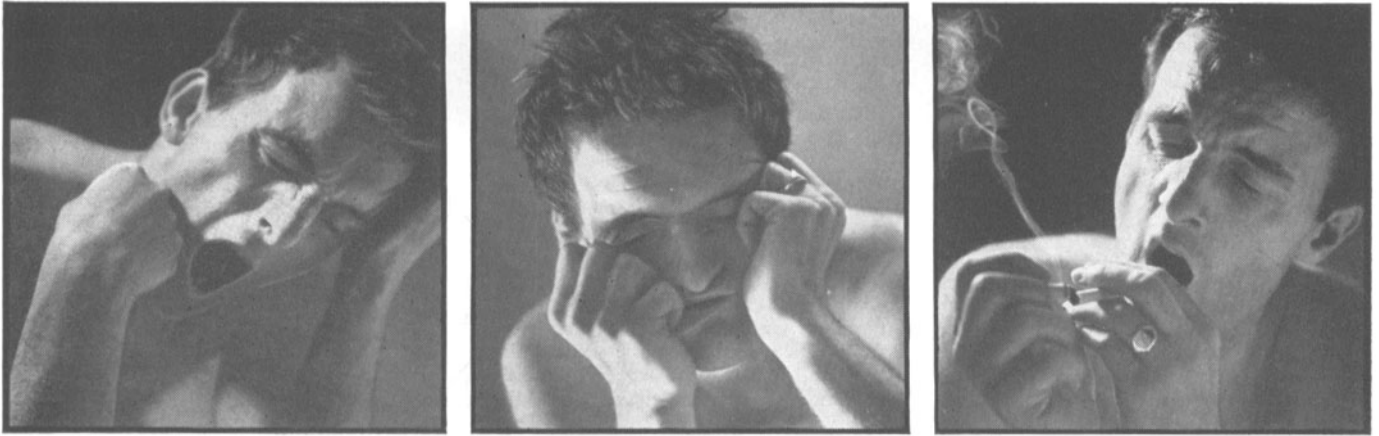
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Three new appointments and certain expansion activities, especially in the Sound Department, have been announced by Ken Cameron, R. K. T. Scrivener and R. I. C. H. Warren, Directors of Anvil Films Ltd., Beaconsfield Studios, Beaconsfield, Bucks, England. Lord Archibald, Chairman of the Federation of British Film Makers since 1957 and a leading figure in the British film industry for many years, has been appointed Chairman of the Anvil Film and Recording Group. Rowland Wright, former director of various companies within the Rank Organisation, has been appointed Financial Director. Eric Tomlinson, who has recorded scores for many major productions, has been appointed Music Recording

Supervisor for Anvil's Sound Dept. The company has also taken over the lease of the Sound Dept. at Denham Studios, and has re-equipped the music recording stage, built a new re-recording and a new cutting room and office block.

Telonic Industries, Inc., Beech Grove, Ind., has announced the opening of an office at 43 Via Messina, Milan, Italy. This is the third office to be opened in Europe in recent months, the other two being in Maidenhead, England, and Frankfurt, Germany. The opening of the Milan office completes the firm's plans for establishment of European facilities, the announcement indicated. The Milan office will be managed by Remo Toigo,

who was formerly a sales and application engineer with an Italian electronics firm.

The Arena Stage in Washington, D.C. used more than 1,000 ft<sup>2</sup> of aluminum foil supplied by Reynolds Metal Co., for a recent production of Macbeth. Stage and fixtures were completely covered by aluminum foil to create an impression of an armor-plated world as a background for the bloody violence of the play. After numbers of tests by Arena's technical departments a hammered aluminum foil technique was developed for the desired effect. First, a layer of granulated asbestos was glued to plywood. The aluminum foil sheets were bonded to the asbestos with glue and the metal was hammered to give the look of wrought armor plate. The foil was then painted black. After the paint dried the metal surfaces were rubbed with steel wool to remove much of the black paint which left a surface resembling weathered medieval armor. Every visible part of the set was covered with the foil. Aluminum foil was also used, together with copper and brass, in the shields designed for the production.

The deeply curved D-150 screens will be supplied to 61 theaters in the United States and to 10 in Europe by Andrew Smith Harkness, Ltd., a company within Rank Audio Visual Ltd., Woodger Rd., Shepherds Bush, London, W. 12, England, through an exclusive contract with D-150 Inc., of San Francisco, according to a recent announcement. *The Bible* is the first film to be photographed in the D-150 ultra-wide-screen single-lens system. The system is designed to accommodate all projection processes on one deeply curved screen to make unnecessary the changing of screens to fit various film formats. The screen can be installed in a small theater or in one requiring a screen width of 120 ft. For a typical screen of 70-ft width, the D-150 curvature would be 120°, or average 20-ft curve on the chord.

Although Harkness is said to be one of the world's largest manufacturers of wide screens, this is the company's first large-scale entry into the American market, the announcement stated. More than 70% of the firm's total production is distributed overseas.

The Spectra range of photometric instruments is now distributed in the United Kingdom, Italy and Holland by Rank Studio Equipment, Woodger Rd., Shepherds Bush, London, W. 12, England, according to an arrangement with the manufacturers, Photo Research Corp., of Hollywood. Models currently available include Spectra Combi 500 exposure meter; Spectra Professional 250 with 14 ASA exposure index slides for direct f/stop readings; Spectra Candela foot-candles meter, Model LD 300; Spectra 2, color temperature meter; and the Spectra Photospot, an optical brightness attachment for the Combi 500 meter.

Louis K. Eilers has been elected President of Eastman Kodak Co. He was formerly an Executive Vice-President. He succeeds William S. Vaughn, President since 1960. Mr. Vaughn is now Chairman of the Board



# A STAR IS BORN

## FILMLINE'S MODEL FE-50

### A Processor for Ektachrome Film

Processes 16mm Color Emulsions at 50 FPM.



Model FE-50  
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Milford, Conn.

Who knows more about building film processors than Filmline? Nobody. And everything we've learned has gone into our newest Ektachrome processor, the FE-50. It is top quality equipment at a sensible price . . . the result of Filmline's productive know-how. Designed and engineered to fulfill the requirements of both large and small TV stations the FE-50 is the most versatile, fully automated Ektachrome processor ever built.

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Now available: Filmline FE-30 Ektachrome Processor. Speed — 30 FPM. Complete with Replenishment System . . . \$15,750. F.O.B. Milford, Conn.

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**ADDITIONAL FILMLINE FEATURES:**

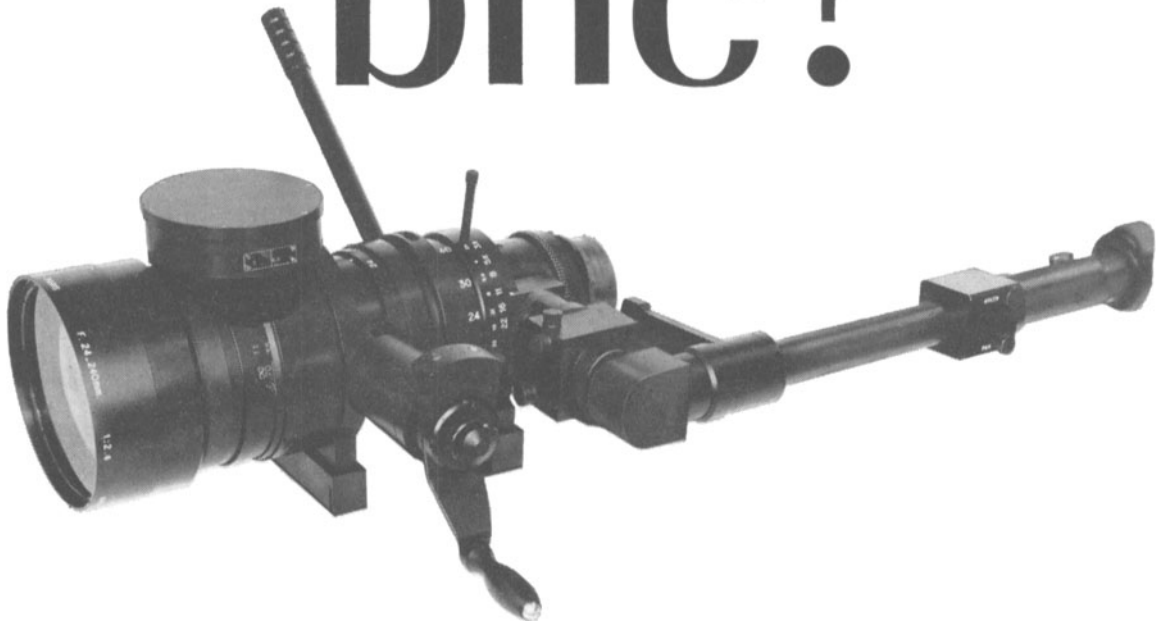
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# reflex bnc?

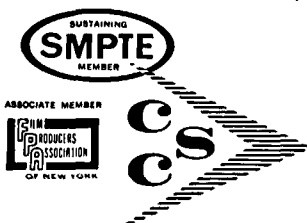


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of Directors and Chief Executive Officer, succeeding Albert K. Chapman whose resignation became effective January 1.

Dr. Eilers, now the eighth President of Eastman Kodak Co., began his career in 1934 as a chemist in Kodak Park Works where he did research on cellulose and cellulose esters. In 1954 he was appointed Assistant General Manager of Kodak Park Works and two years later he was elected a Vice-President and Assistant General Manager of the company. In 1959 he went to Kingsport, Tenn., as first Vice-President of the Tennessee Eastman Co. and President of Eastman Chemical Products. Later he became President of the Tennessee and Texas companies, Vice-Chairman of ECPI, Inc., President of Carolina Eastman Co., and a Vice-President of Holston Defense Corp. In 1963 he was elected an Executive Vice-President of Eastman Kodak and returned to Rochester in 1964.

A former President of the Rochester Chapter of the Society of Photographic Scientists and Engineers he was elected Associate Fellow of the SPSE for "outstanding contributions to the technology of photographic film manufacturing."

Dr. Chapman joined Kodak in 1919 and was elected President in 1952. Mr. Vaughn was elected President in 1960.

**William P. Lear, Sr.**, is one of 125 members of the Institute of Electrical and Electronic Engineers (IEEE) who has been elected a Fellow of the Institute. Presenta-

tion of Fellow award certificates will be made locally by IEEE Sections and recognition of the awards will be made by the President of IEEE at the Annual Banquet, March 22, during the IEEE International Convention in New York. The IEEE has some 150,000 members throughout the world. The grade of Fellow is the highest in the Institute and is awarded by invitation only.

**Joseph L. Stern** has been appointed Vice-President, Engineering Services, CBS Television Stations Division, 51 W. 52 St., New York, N.Y. 10019. Mr. Stern has been Director of Engineering for the Division since March 1964. He serves as consultant on all engineering matters to Division management and the Technical Directors of the five CBS-owned television stations. He also serves as liaison between the stations and the CBS Television Network Engineering Department and, in addition, provides engineering guidance to companies abroad in which CBS has an interest. As Vice-President he will continue these activities and will also direct the consultation project CBS has undertaken for the State of Israel in its development of a nationwide television system.

**Thomas L. Aye** has been appointed Marketing Manager, Audio Products Div., Metrotech, Inc., 670 National Ave., Mountainview, Calif. 94040. Mr. Aye was formerly Sales Manager of Tape-Athon Corp. of Inglewood, Calif. In his

new post he will be primarily responsible for expanding Metrotech's marketing operations for the firm's line of tape recorders, which includes loggers, reproducers and music systems for radio, CATV, government and industry.

**Harold P. Bolton**, formerly Laboratory Supervisor of the Technicolor Florida operation at the John F. Kennedy Space Center has been promoted to Deputy Project Manager. The Technicolor Florida operation provides motion-picture and still photographic coverage of NASA space operations and processes photographs taken in space by NASA astronauts. Mr. Bolton joined the Technicolor operation at Cape Kennedy in 1965 after completing service in the Royal Canadian Air Force where he held the rank of Squadron Leader. Technicolor headquarters are at 6311 Romaine St., Hollywood, Calif. 90038.

**Coleman Miller** has been appointed Cine/Strip Products Manager for Pako Corp., 6300 Olson Memorial Highway, Minneapolis, Minn. 55440. The firm manufactures automated processing equipment for the motion-picture, x-ray and graphic arts industries. Mr. Miller has been with the firm since 1957, first as a technical writer and later as territory technical representative in New England. His most recent assignment was that of zone technical supervisor over all Pako products in the mid-central United States.

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Solid-State Dimming Control Systems for  
Television and Theatrical Lighting...

Flexible modular design to meet all lighting  
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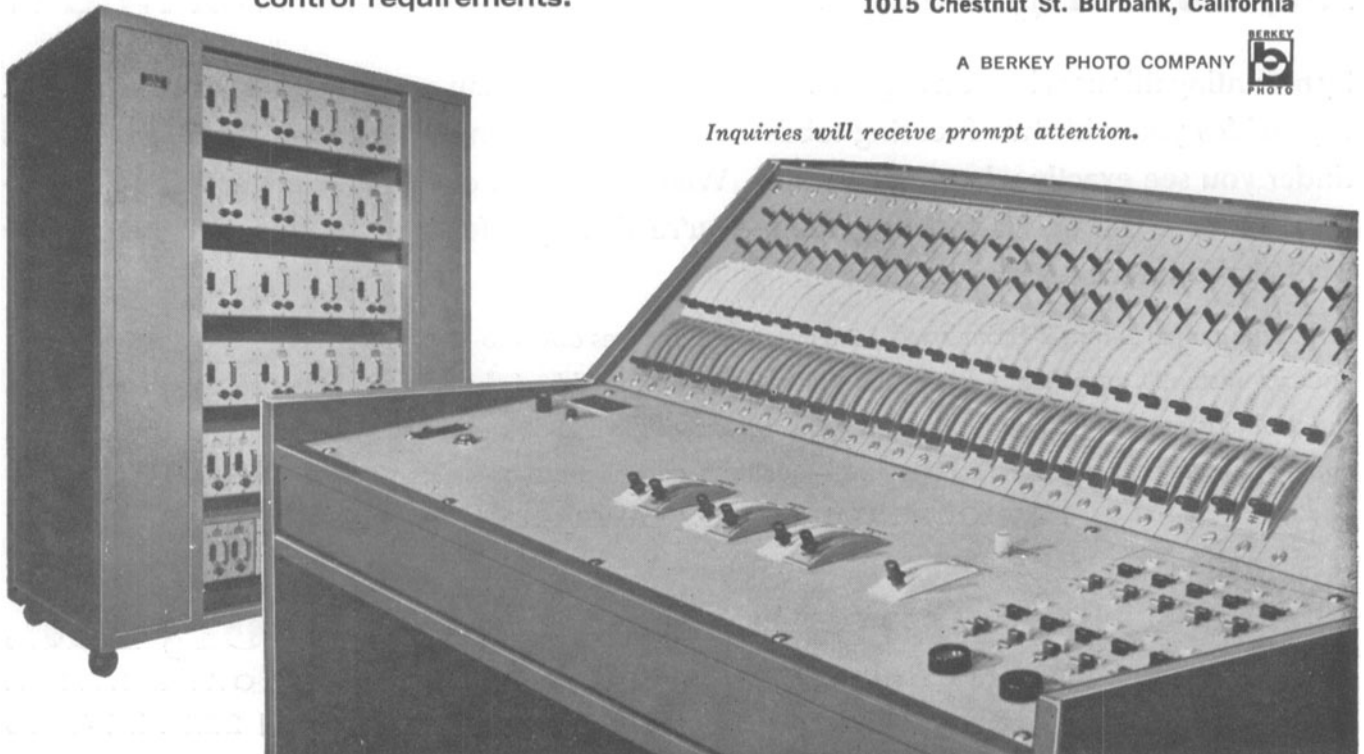


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**John R. Shearer** has been appointed to the staff of Visual Electronics Corp., 356 W. 40 St., New York, N.Y. 10018, to manage the firm's Television Color Film System activities. In the capacity of Project Manager he will have responsibility for the firm's new Color Film and Slide Scanner Equipment. Mr. Shearer was formerly with Allen B. DuMont Laboratories. More recently he was Chief Engineer and General Manager of Video-flight, Inc., a subsidiary of Sony Corporation of America.

**Newland F. Smith** has been appointed Assistant to the President, Visual Electronics Corp., 356 W. 40 St., New York, N.Y. 10018, according to an announcement from James B. Tharpe, President of the firm. Mr. Smith was formerly with Columbia Broadcasting System Television Network Engineering Department where

he was Senior Consultant in the planning of colorization programs for the network facilities. In his new post he will assist Mr. Tharpe in general administration activities and will also be responsible for the coordination of production planning with sales requirements.

**Imants (Don) Skulte** is a recent addition to the engineering staff of Visual Electronics Corp., 356 W. 40 St., New York, N.Y. 10018. He will work on the (Visual) Mark 10 Zoom Image Orthicon Camera. He was formerly with Intec, Westbury, L.I., N.Y., the firm that designed and built the camera. He will also act as Field Engineer for Norelco Plumbicon color cameras.

**Jack Horne** has been appointed General Sales Manager of the Motion Picture and

Television Div. of Berkey Technical Corp., 1015 Chestnut St., Burbank, Calif. He was formerly associated with ColorTran Industries. In his new capacity he will be responsible for directing all sales efforts relating to the firm's professional motion-picture and television products.

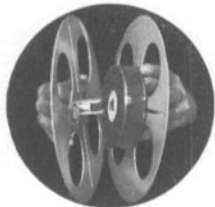
**Charles B. Wade, Sr.**, has been appointed to the newly created position of Service Manager, Red Lake Laboratories, 2971 Corvin Dr., Santa Clara, Calif. 95051. Mr. Wade was formerly West Coast representative for Fastax. Prior to that he was chief of the camera repair section in the photo branch at White Sands Proving Grounds, New Mexico.

**Edwin L. Johnson** has joined the Fred A. Niles Communications Centers, Inc., 1058 W. Washington Blvd., Chicago Ill. 60607, as Account Supervisor. He was formerly with Atlas Film Corp. as account executive. He has also been associated with Ahrens Publishing and McCann Erickson, Inc.

**Donald J. Sheaff** has been made Plant Manager of the Technicolor television laboratory at North Hollywood. He was formerly Assistant Plant Manager of the laboratory.

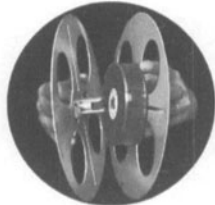
**Joseph B. Rice, Jr.**, has been appointed to the newly created post of Vice-President of Operations, Houston Fearless Corp., Los Angeles. Formerly an executive of Burroughs Corp., Mr. Rice has also been affiliated with Beckman Instruments, Inc., Bendix Aviation Corp. and Wright Aeronautical Corp. In his new post he will direct manufacturing, engineering and related activities.

**Dudley A. Warner** has been appointed to the staff of D. B. Milliken Co., 131 North Fifth Ave., Arcadia, Calif. 91006, as Field Engineer. A specialist in video film recording, Mr. Warner will have responsibility for the sale and service of the company's newly developed DBM-64A Video Film Recording Camera.



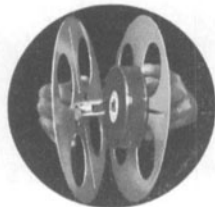
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## SMPTE Test Films

A catalog containing details and prices of all SMPTE test films can be obtained from Society headquarters.

The new SMPTE subjective color television test film and slides are now available. Details were published in the March, 1966 *Journal*, pp. 218-220.

Most SMPTE test films are prepared in accordance with ASA/SMPTE Standards. The films are used for testing picture steadiness, traveling ghosts, framing, alignment, and focusing. Sound test films are used to check sound system frequency response, magnetic head or optical train alignment, and sound optics focusing.