

- | | |
|---|--|
| 4. PH22.42-1955
16mm Sound Focusing Test Film. | 9. Z22.54-1946
Freedom from Travel Ghost in 16mm Motion Picture Sound Reproducers. |
| 5. PH22.43-1953
16mm 3000-Cycle Flutter Test Film. | 10. PH22.57-1955
16mm Buzz-Track Test Film. |
| 6. PH22.44-1953
16mm Multifrequency Test Film. | 11. Z22.80-1950
Scanning-Beam Uniformity Test Film for 16mm Motion Picture Sound Reproducers (Laboratory Type). |
| 7. PH22.45-1955
16mm 400-Cycle Signal-Level Test Film. | 12. Z22.81-1950
Scanning-Beam Uniformity Test Film for 16mm Motion Picture Sound Reproducers (Service Type). |
| 8. PH22.53-1953
Method of Determining Resolving Power of 16mm Motion Picture Projector Lenses. | |

PH22.91-1955

Revision of American Standard

A proposed revision of American Standard Z22.48-1946, Picture Printer Aperture for Contact Printing 16mm Positive from 16mm Negative, is published on the following page for a three month period of trial and criticism. All comments should be sent to Henry Kogel, SMPTE Staff Engineer, prior to July 15, 1955. If no adverse comments are received, this proposal will then be submitted to ASA Sectional Committee PH22 for further processing as an American Standard.

This proposed revision differs from the 1946 version in two ways: one, a shortening of the title, is merely editorial in nature; the other and much more basic is a change in the value of Dimension A. With the previous value of A, 0.412 ± 0.002 in., it was discovered that the tolerances of the soundtrack, specified in Z22.41-1946, could combine with the tolerances of this value in an unworkable manner. The difficulty comes from the fact that with the given tolerances, it is possible for the perforations on the track side of the negative to be within the printing aperture. Prismatic refraction of picture printer light would then introduce flare into the soundtrack area and a consequent "motor boating" effect in the sound. To eliminate this potentiality, the Laboratory Practices Committee decided to decrease the value of A to 0.409 ± 0.003 in.

Both proposed modifications have now been approved by the Laboratory Practices and Standards Committees.—H.K.

Reaffirmation of American Standard

Z22.49-1946, Printer Aperture Dimensions for Contact Printing 16mm Reversal and Color Reversal Duplicate Prints, was reviewed by the Laboratory Practice Committee, Standards Committee, PH22, and on January 14, 1955, it was reaffirmed without change by the ASA as PH22.49-1946. Copies of this standard are available at twenty-five cents each on order from the American Standards Association.—H.K.

Letter to the Editor

Re: The Motion-Picture Laboratory

In my paper entitled "The Motion-Picture Laboratory" (*Jour. SMPTE*, 64: 13-34, Jan. 1955) I omitted reference to the excellent article by G. Mareschal entitled "L'Evolution des Machines à Développer les Films Cinématographiques Depuis 50 Ans" (Evolution of Motion-Picture Developing Machines During the Past 50 Years) which was published in *Bulletin de l'Association Française des Ingénieurs et Techniciens du Cinéma*, No. 11, p. 3, 1952.

Although there is some duplication in the two papers, Mareschal gives very complete details of the work of the French pioneers.

March 1, 1955

J. I. Crabtree
Eastman Kodak Co.
Kodak Park
Rochester 4, N. Y.

Proposed American Standard

A Proposed American Standard, PH22.101, Magnetic Coating of 16mm Film Perforated Along Both Edges, is published on the following page for a three-month period of trial and criticism. All comments should be sent to Henry Kogel, Staff Engineer, prior to July 15, 1955. If no adverse comments are received, the proposal will then be submitted to ASA Sectional Committee PH22 for further processing as an American Standard.

This proposal originated in the Magnetic Recording Subcommittee in the latter part of 1952. The first two drafts contained sound specifications which were the basis of major disagreements. The importance of having a coating standard, whether or not there was agreement upon the sound specifications, led to a deletion of these specifications in the preparation of the third draft.

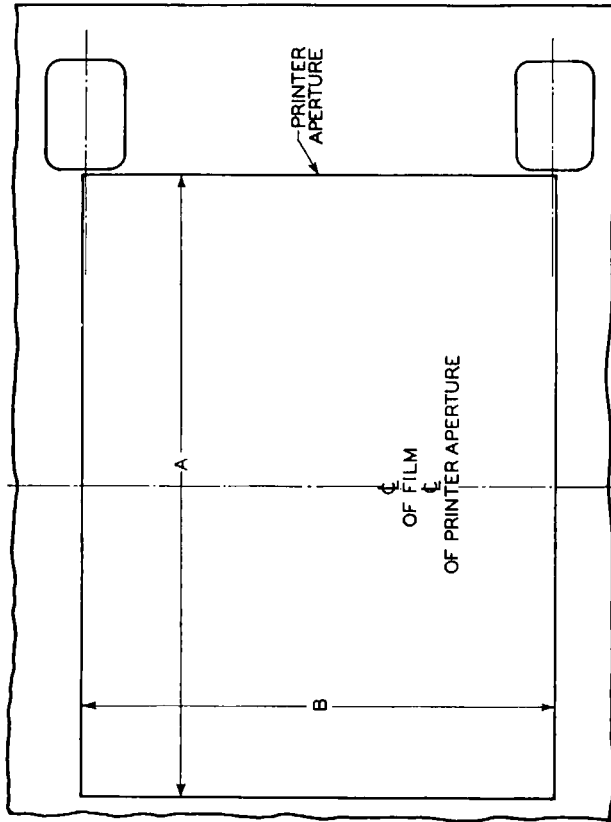
There was but one objection to the

third draft and this was based on the premise that the balance stripe is desirable and should therefore be specified as mandatory rather than optional. The subcommittee took exception to this view on the grounds that the balance stripe is not necessary for making film track through the projector gate or to facilitate winding on reels, although a balance stripe may be advisable when winding film of over 400-ft lengths onto film cores. Another consideration was the unwarranted doubling of costs in applying a balance stripe where operating conditions do not require one. The optional specification, therefore, permits the necessary flexibility without adversely affecting factors of interchangeability.

The third draft, which is the one now published, was subsequently approved by the Magnetic Recording Subcommittee, the Sound Committee and the Standards Committee.—H.K.

Picture Printer Aperture For Contact Printing 16mm Positive From 16mm Negative

PH22.48
Revision of Z22.48:1946



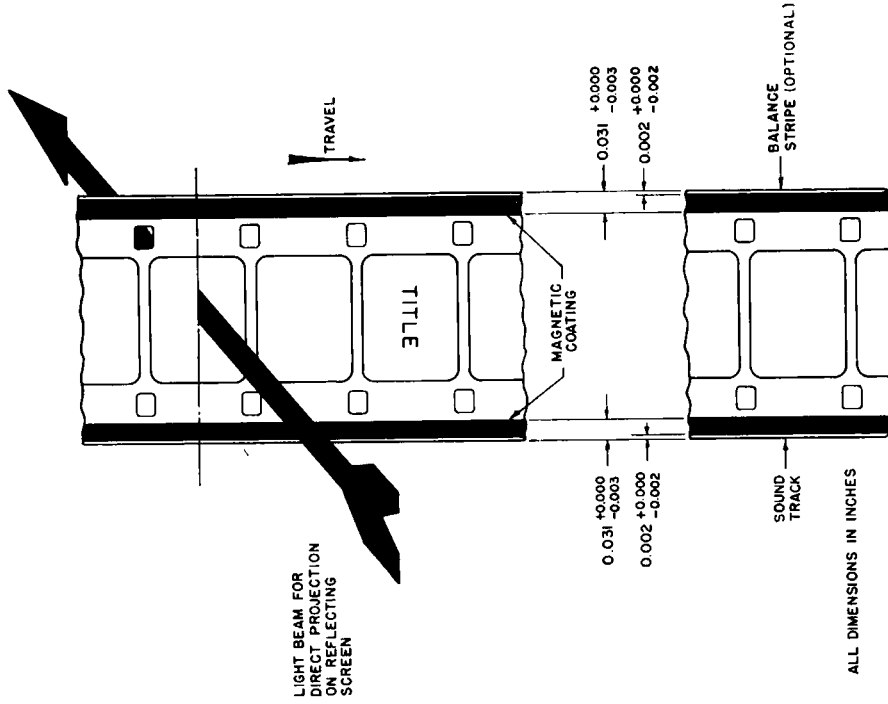
DIMENSIONS	INCHES	MILLIMETERS
A	0.409 ± 0.003	10.39 ± 0.08
*B	0.306 ± 0.002	7.77 ± 0.05

*This dimension is only applicable when using this aperture for contact printing by the step process.

Aperture corners may be rounded with a radius of 0.020 inch or less.

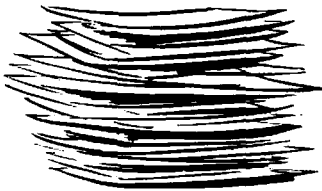
Proposed American Standard Magnetic Coating of 16mm Film Perforated Along Both Edges

PH22.101



The magnetic coating is on the side of the film toward the lamp on a projector arranged for direct projection on a reflection type screen.

Note: The balance stripe may be used as a secondary track.



The Society's New 16mm Jiffy Test Film

To meet the needs of the Navy for performance checking of their 16mm projection equipment on shipboard and at shore stations, the Society began work a year and a half ago on development of a new type of picture and sound test film of particularly high quality. The finished result is short in length and running time, but long on performance.

A real challenge was presented by the prime requirement — that the film be able to demonstrate to relatively inexperienced operators, untrained in the use of test instruments, when sound and picture performances are below par. This meant that all tests had to be subjective, yet provide, among other things, a reasonably accurate indication of picture steadiness and frequency response.

All of these things and more have been provided in the new Jiffy Test Film which costs \$10.50 and is available to military and civilian users alike.

Included in the finished film that is 135 ft long with a running time of just under 4 min, are an orchestral selection, a spliced-in length of original buzz track, with title printed over, a section of 5000-cycle sound-focusing track that has had its center third removed, reversed as to emulsion position, and reinserted to indicate directly, by audible changes in the level of the reproduced signal, whether the sound optics are focused on the track in the standard, or nonstandard emulsion position, or half-way between; there is a length of piano music as a sensitive indication of flutter, a rather rapid frequency run in seven steps from 50 to 5000 cycles, and a short bit of dialogue that provides a final test of intelligibility.

Visual tests include a measure of the projector's picture steadiness and an indication of picture brightness uniformity. — L.F.W.

SMPTE Membership Promotion

An intensive two-year membership drive is at last underway under the able direction of John W. DuVall, Technical Representative of E. I. du Pont de Nemours & Co., Hollywood, Calif. This program has been taking shape over the past few years, but it wasn't until Mr. DuVall accepted the chairmanship of the National Membership Committee that practical steps were taken to carry it out.

Mr. DuVall has set up a well-organized committee with 60 representatives throughout the nation to give as complete coverage as possible. His aim, and that of the Board of Governors, is to see that "every engineer, engineering executive, educator, tech-

nician and student in the United States who maintains a serious and professional interest in motion pictures, television and high-speed photography" is invited to fill out a membership application form within the next two years.

The committee is divided into three membership regions, each with a chairman. Chairman for the 16 states of the Eastern Region is Ed Warnecke of Eastman Kodak, New York City. Mr. Warnecke has appointed 21 committeemen in his region who will report directly to him. Among these are the membership delegates in the Western New York and Atlanta Subsections. These two men are responsible for making certain that a membership message is presented at every meeting of his group and that a committeeman is on hand with application forms, booklets and ready answers to questions about the Society and the privileges and responsibilities of membership.

The Central and Western Regions are organized in the same way. Central Regional Chairman is Harry Lange of Sarra, Inc., Chicago. Twenty-eight committeemen in the 18 central states, including the delegate in the Southwest Subsection, report to him.

Western Regional Chairman is Lou Vincent, Acme Films, Hollywood, Calif. Eleven committeemen in the 14 states of the Western Region, including the delegate in the San Francisco Subsection, report to him.

It is hoped that there will ultimately be as many as 40 or 50 committeemen in each of the three regions. This number will offer full national coverage. Such a large group should not prove unwieldy, however, as all information and materials needed will be supplied each committeeman by headquarters, and their reporting procedures will be brief and direct. A list of all committeemen is given in the Roster of Administrative Committees elsewhere in this *Journal*.—S.G.

section reports



The **Atlantic Coast Section** meeting on February 16, at CBS Color Studio No. 72, proved to be one of the most successful meetings ever held by the Section. A capacity crowd was in attendance. The meeting was staged with network precision by a full production crew.

After greetings by Chairman Everett Miller, John Koushouris, Engineer-in-Charge of Color Technical Operations,

spoke on "The Evolution and Design of Studio No. 72." Studio No. 72 is the main East Coast point of origin of CBS color TV network presentations. He was followed by E. Carlton Winckler, Production Manager of CBS-TV Program Dept., who spoke on production considerations in designing Studio No. 72. There was a color film and slide demonstration by Richard Cranc, Supervisor of Technical Operations. Finally, there was a live camera demonstration complete with beautiful models and elaborate settings, conducted by Jonathan Winters, who proved to be a delightful professional entertainer, but who, nevertheless, was expert in demonstrating the versatility of the color cameras and lighting effects.

A television recording of the entire proceedings was made under the supervision of Karl MacIlvain, Engineer-in-Charge of Television Recording for CBS. Mr. MacIlvain is also one of the Managers of the Atlantic Coast Section and was responsible for initiating the entire meeting. Prints of this recording have been sent to H. W. Pangborn, Chief of Technical Operations for CBS-TV in Hollywood, and to Everett Miller. We understand that Mr. Koushouris intends to use a print for instructional purposes at CBS.

Following the speakers and demonstrations, the members were divided into groups and taken on a tour of all the facilities of the studio. Operating personnel were on hand at all points to describe the operation and answer questions.

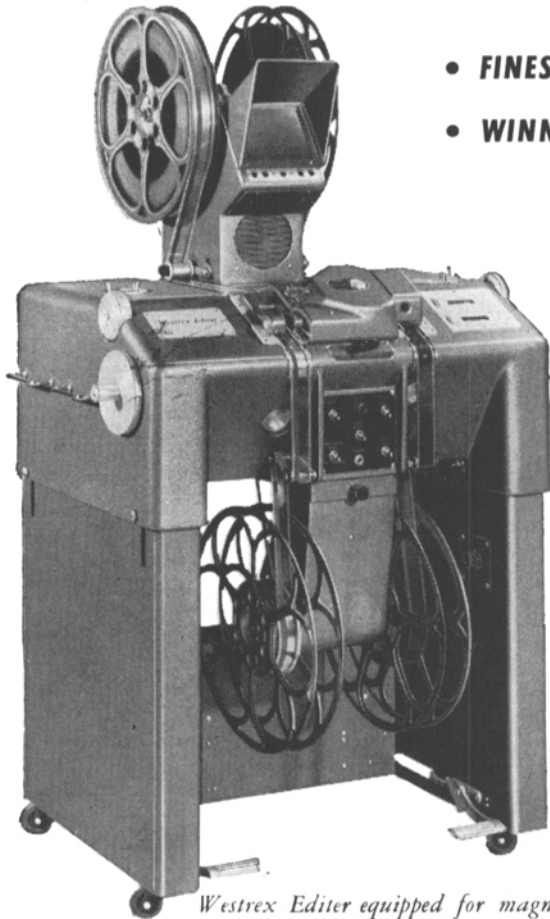
An unfortunate consequence of the capacity attendance at this meeting was the necessity of turning away at least a hundred people because of fire regulations. The Board of Managers tenders its sincere apologies for any inconvenience caused. The attendance simply exceeded all expectations. — *George Lewin*, Member, ACS Board of Managers, 1573 E. 35 St., Brooklyn 34, N.Y.

The second technical meeting of the **Western New York Subsection** was held on March 9, 1955, in the auditorium of the Rundel Library in Rochester, N. Y. Before the meeting, officers and members of the Board of Managers met for cocktails and dinner with John Nash Ott, speaker of the evening.

Mr. Ott is internationally famous for his work in time-lapse photography. Starting as an amateur with an interest in horticulture and photography, Mr. Ott combined these two hobbies in the time-lapse photography of growing flowers and plants. These pictures were so beautiful and so greatly admired that Mr. Ott soon left the bank where he was employed as a teller to devote all his energies to this work. While many people have seen his pictures at his lectures, Mr. Ott is probably most widely known for his work in *Nature's Half Acre*, produced by Walt Disney. His activities

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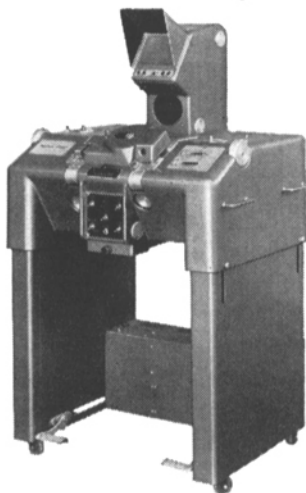
Westrex Editer equipped for magnetic and photographic sound tracks. 3-3/4" x 5" translucent screen shows bright, clear picture.

Designed and engineered by the Westrex Hollywood Laboratories—in cooperation with leading studios—the new Westrex Editer is an advanced machine that meets every film editing need.

The Westrex Editer can handle both standard and the new small-hole perforated 35mm films—film strips—motion picture films—magnetic or photographic sound films (single or multiple)—composite release prints—and for the first time it makes possible “projection viewing” of an enlarged image on a wall or screen without extra attachments.

The Westrex Editer is quiet in operation—no intermittent, hence less noise and less film damage—speedy and efficient. Among its advanced features are simplified threading—automatic fast stop—synchronization while running—improved sound—lower flutter.

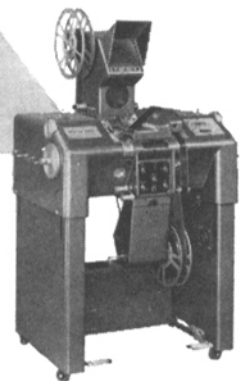
The Westrex Editer—available in 35mm model—is the latest in a long line of notable Westrex contributions to the motion picture industry. A new illustrated folder that describes in detail its many technical and operating advantages is yours for the asking.



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The Westrex Editer features “projection viewing” on wall or screen without disturbing the adjustments of the normal optical system.



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have been described in such diverse publications as *Home Movies*, *Business Week*, *Atlantic Monthly* and *Time*. Mr. Ott currently has his own half-hour television show in Chicago Sunday afternoons and in addition has recently contracted to produce five 10-min time-lapse films every week for the next five years!

Mr. Ott described to the 115 members and guests present at the meeting some of the problems encountered in time-lapse photography. He showed a 45-min film illustrating his work and provided a running commentary throughout. After the screening, Mr. Ott answered questions from the audience and told several hilarious stories about the difficulties he faced in germinating plants in hothouses out of season in

order to get them to blossom. One of these stories had to do with his Herculean efforts to prevent a lady pumpkin vine from perishing a spinster. This involved an urgent radio and television appeal to owners of healthy male pumpkin vines, and an emergency plant flight from Florida to Chicago, appropriately covered by the newsreels, television and the press.

After the technical meeting, the Board of Managers met to plan future programs and to pass on important business.

The next meeting is scheduled for 8:00 p.m., May 5, 1955, at the Dryden Theater, Rochester, N.Y., when Norman McLaren of the National Film Board of Canada will speak and show some of his most unusual abstract, animated and synthetic

sound films.—*John G. Scott*, Chairman, c/o Color Technology Div., Eastman Kodak Co., Kodak Park, Bldg. 65, Rochester 4, N.Y.

The Central Section held a meeting on March 17, 1955, at which George W. Colburn presented his system of 8mm kine-scope recording. With the help of Lloyd Thompson an 8mm sound demonstration film was shown which had been taken off a home television receiver the previous Saturday night. Picture and sound quality were excellent for 8mm, in spite of Mr. Colburn's insistence on referring to his system as "Low-Fi."

The second paper on General Printing Procedures, was prepared by Harold Kinzle, laboratory superintendent at Wilding Pictures, and presented in Mr. Kinzle's absence by Jerome Diebold. The paper contained much good basic knowledge for laboratory personnel.

Ken Mason took over the job of moderator on the panel and Robert Colburn, Ralph Sherry, Lloyd Thompson and Paul Ireland were on hand to answer questions. It soon became evident that there were variations in standards from laboratory to laboratory and, as Ralph Sherry put it, "from printer to printer," and the discussion was so interesting that the meeting ran overtime.—*James L. Wassell*, Chairman, c/o Ansco, 247 E. Ontario St., Chicago 11, Ill.

The Pacific Coast Section met on March 22 at CBS-Television City, Hollywood. Because of space limitations the meeting was limited to SMPTE members only and a total of 175 were present.

The subject was "The Vidicon — An Improved Method of TV Film Transmission." Ed Benham, Chief Engineer at KTTV Los Angeles, was the principal speaker. Mr. Benham projected slides showing the effects of printer light, projection print density and other variables on the transfer characteristics of the iconoscope and vidicon. These transfer characteristics were followed from original image through the TV print and vidicon to the receiver. The advantages of improved linearity and improved black rendition of the vidicon were shown. Demonstrations were given of several fine-grain kinescope and standard TV prints from current TV shows. It was demonstrated that the vidicon gave improved quality even when the original films were made for the iconoscope.

The remainder of the program consisted of a panel discussion with Cameron Pierce of KABC network as moderator and the following panel members: Herb Pangborn, CBS; Oscar Wick, NBC; Jim Tennyson, KTTV; Harlan Baumbach, General Film Laboratories. The panel discussion included reports on current experience with the vidicon and other linear pickup devices and answers to various questions raised by members of the audience.

The Society is greatly indebted to Messrs. Les Bowman and Herb Pangborn of CBS for making arrangements for the use of the large audience-participation studio at CBS-Television City for this meeting and for the studio facilities which were made available for the demonstrations. — *E. W. Templin*, Secretary-Treasurer, c/o Westrex Corp., 6601 Romaine St., Hollywood 38.

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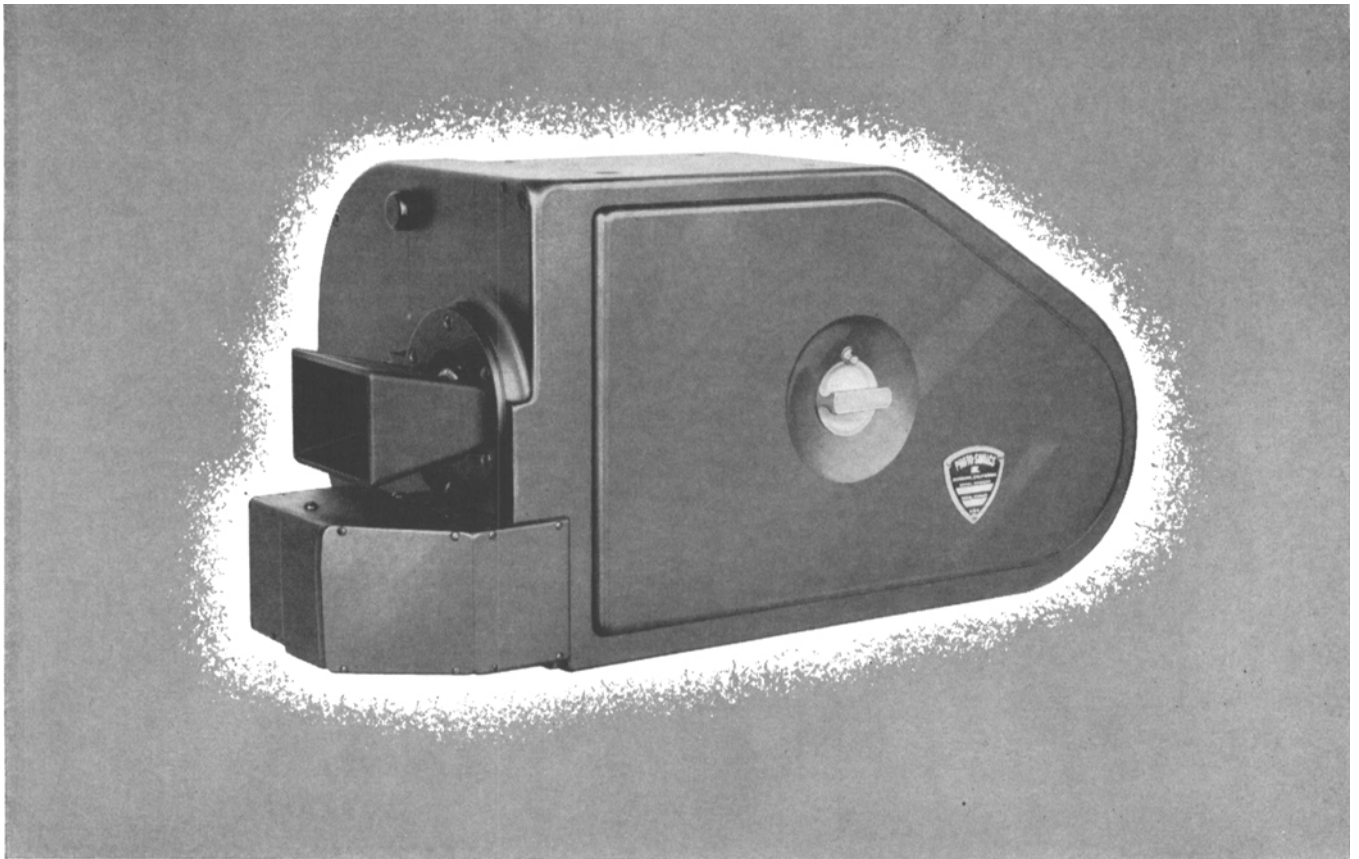
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70MM-5B

FRAME SIZE: 1.156 x 2.25 inches

MAX. FRAME RATE: 80 frames per sec.

FILM LOAD: 400 or 1000 ft. magazine

70MM-10A

FRAME SIZE: 2.25 x 2.25 inches

MAX. FRAME RATE: 60 frames per sec.

FILM LOAD: 400 or 1000 ft. magazine

Additional information on request

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2704 West Olive Avenue, Burbank, California

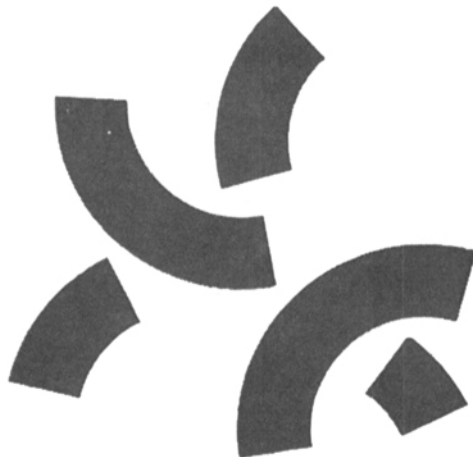
Education, Films and TV

University of Miami and WTVJ Television and Film Institute: Concentrated short courses in practical live and film program planning and production will be available at the University of Miami from July 11 through July 31, 1955, with the full cooperation of station WTVJ. In the live production section participants will work their way through a series of practical production projects in ascending order of difficulty. Each member will have an opportunity to work in each production position. Throughout the three weeks, work will go forward on planning and preparing a final program for on-the-air production.

This program will be kinescoped, and the final session of the Institute will be devoted to a critique of the results.

In the film production section participants will be introduced to all the film-handling and laboratory processing procedures as well as to camera operation. Besides short practice subjects, the film section will produce a complete documentary feature story to be integrated with the live on-the-air production at the close of the Institute.

Applicants should write for information to Radio-TV-Film Dept., University of Miami, Coral Gables, Fla., indicating which section of the Institute they are interested in. Tuition fee is \$120.



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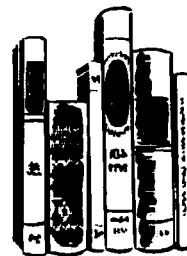
In everything there is one best...in film processing, it's **Precision.**



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The National Association of Educational Broadcasters will hold the Second Television Engineering Workshop at WKAR-TV, Michigan State College, East Lansing, Mich., September 12-16, 1955. Travel, food and lodging are provided by NAEB. The number of participants is limited to 25 representatives of accredited institutions or organizations who have an educational television station, who hold a construction permit for such a station, or who are engaged in the production of educational television programs. Information may be obtained from Cecil S. Bidlack, NAEB TV Engineer, 14 Gregory Hall, Urbana, Ill.

From August 14 to September 3, 1955, the NAEB is holding its Third Educational Television Production Workshop at the State University of Iowa. Food and lodging are provided, but not travel. Qualifications for admission are similar to those for the Engineering Workshop, and participation is limited to 30. Information may be obtained from Dr. Harry Skornia, Executive Director, NAEB, 14 Gregory Hall, Urbana, Ill.



books reviewed

Theatrical Lighting Practice

By Joel E. Rubin and Leland H. Watson. Published (1954) by Theatre Arts Books, 224 W. 4th St., New York 14. i — xiv + 126pp + Appendix A (Bibliography) + Appendix B (Directory of Manufacturers) + Index pp. 127-142, 24 illus. 6 × 9 in. Price \$3.75.

In *Theatrical Lighting Practice*, the authors have produced a book that should find wide use for graduate students. The specialist, who is already familiar with the subject, will find the presentation refreshingly brief and interesting and well worth following in detail even though he is familiar with the principal conclusions. The book should be of particular value to those responsible for planning theatrical facilities as well as those who want a quick survey of the field without going into more detailed considerations of the problems.

The lucidity and succinctness of the text make the book easy reading. There are few, if any, sources which contain the amazing amount of information which is crowded into the 126 pages of material and 16 pages of the appendices. The book is divided into two main sections. One is devoted to "Specialized Types of Theatrical Lighting" and includes, among others, chapters on:

- (a) Collegiate Practices;
- (b) Commercial Indoor Production Proscenium Style — for drama and musicals, ballet and modern dance, the opera stage;

- (c) Arena Production for musical production, legitimate drama, and ice show;
- (d) Open Air Production including the amphitheatre and the aqua-theatre;
- (e) Puppetry; and
- (f) Television.

The second section is devoted to a "Survey of the Theatrical Lighting Field" with particular emphasis on job opportunities in the commercial, and semiprofessional theater as well as in education and non-producing areas.

While all of the subjects merit serious consideration, this report is concerned primarily with the book's relation to television. The particular appeal of this volume to those in the television field lies in the similarity of the problems which exist in the allied arts and which have to be met too frequently by television programming without the time to arrive at the most artistically satisfactory or economical solution. Unfortunately, only passing mention is made of the many contributions by the motion-picture profession to television lighting. The references to this phase are noticeably meager.

In the discussion of equipment used in television studios, the point of view appears to be parochial, leaning toward the practices and techniques employed in the authors' own experience. While this attitude is understandable, it is questionable reasoning for underestimating other recognized methods in the field, particularly since the stated purpose of the volume is to serve as a handbook to the industry. For

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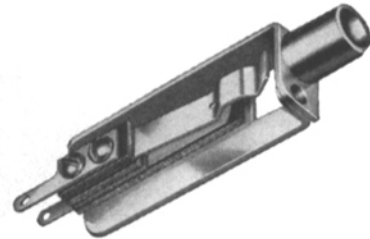
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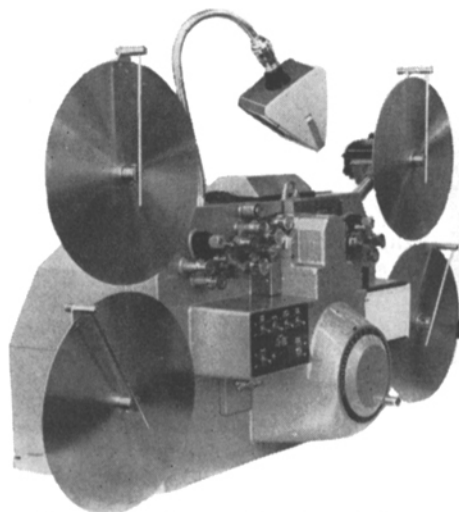
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example, the preference for light weight and portability vs. durability is held by many and is the subject of considerable controversy. Similarly, the use of an adjustable grid and/or battens in preference to a fixed grid with catwalks has too many adherents to summarily reject as undesirable. Furthermore, the services of light direction engineers are in a great many cases included in the overall cost of the studio facilities and are not added as an extra charge as stated by the authors. It is interesting to note in the final portion of the book that the job opportunities for lighting specialists are highest, both at present and in the future, in television. A more objective analysis and more complete

report of the television lighting practices and requirements accordingly appears justified.

The essential value of the book is enhanced by its uniqueness. There exists no comparable treatment of the various theatrical elements in such a unified manner and certainly not one which is quite as up-to-date. The selection of the material for this book together with the bibliography and directory of manufacturers will remain as a valuable introduction to the subject for many years after the present controversies will have long been settled. In a field which is evolving so rapidly, this book should serve as a stimulus to wider understanding and the use of the techniques for

theatrical lighting to all related fields. — *H. M. Gurin*, National Broadcasting Co., RCA Bldg., Radio City, New York 20.

Chimie Physique des Couches Sensibles Photographiques

By Marcel Aribat. Published (1954) Presses Universitaires de France, 108, Boulevard Saint-Germain, Paris. 249 pp., 4 plates, 33 figs. Paper bound, 700 francs.

The author, Marcel Aribat, through long association as the Director of "La Societe Pathé-Kodak" is well qualified to present the chemistry and physics of photographic sensitized layers. The level to which his book is directed is that of the advanced student or research worker.

The first chapter is a clear introduction to the subject of photographic materials in general. The second covers densitometry, and the third is a clear digest of the complex technique of preparation of the light sensitive material. A chapter describing the action of light deals with the Gurney-Mott theory of latent image formation. Reciprocity-law failure and other exposure effects are convincingly correlated with this theory. Two final chapters, one about sensitizing dyes and the other about development and fixation, round out the work. There is an extensive bibliography, with almost 200 entries.

The book does not stand alone in its field. *Fundamentals of Photographic Theory* by T. H. James and George C. Higgins of the Research Laboratories of Eastman Kodak (Published by John Wiley and Sons, Inc., New York, 1948) provides an almost identical subject organization and treatment, and will probably be preferred by those who are not too fluent in translating from French. It is interesting to note that both books credit their inspiration to Dr. C. E. K. Mees, and that they are written by men of similar backgrounds and interests.—*Louis Raitiere*, General Precision Laboratory Inc., Pleasantville, N.Y.

Magnetic Heads and Magnetic Recording

By William V. Stancil. Published by Stancil-Hoffman Corp., 921 N. Highland Ave., Hollywood 38, Calif., 21 pp. paper covered booklet. 9 illus. Size 5½ × 8½. Price \$1.00.

In this booklet the author has endeavored to cover in a highly condensed form the historical development of magnetic recording and the more prominent principles affecting the design of equipment utilizing magnetic tape. The principles discussed are illustrated by reference to various types of Stancil-Hoffman equipment primarily applicable to the amateur and semi-professional fields. The presentation is in a form which is highly understandable to the layman and at the same time it is not without interest to the engineer. — *J. C. Davidson*, 4213 Rhodes Ave., Studio City, Calif.

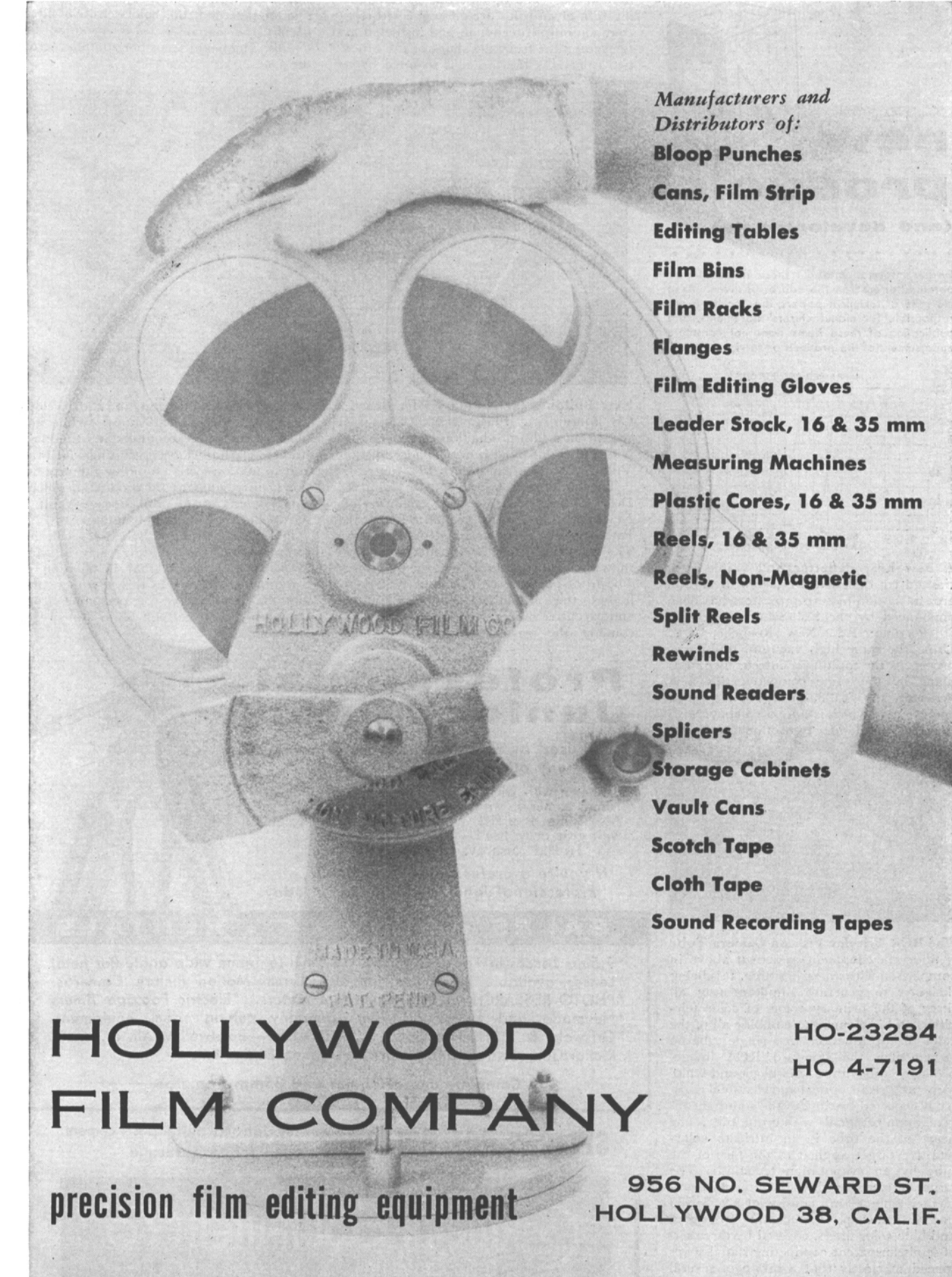


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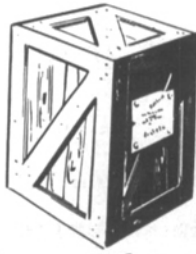
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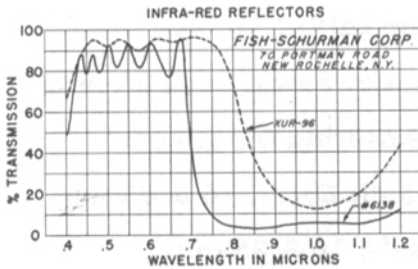
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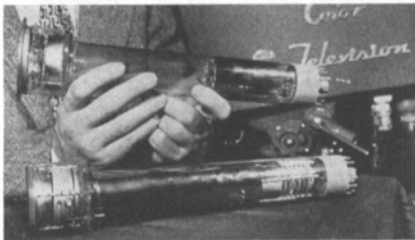
new products

(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.



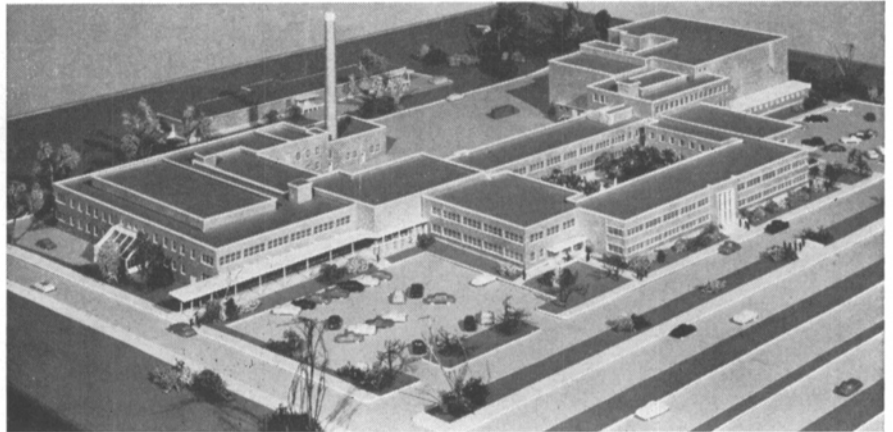
A new heat deflector and visible light transmitter designed for use with carbon arcs in motion-picture projectors has been announced by the Fish-Schurman Corp., 70 Portman Rd., New Rochelle, N.Y. Using the same high vacuum, multilayer process as the multilayer interference films made by the same company, this new deflector, the #6138, produces a spectral energy curve which is compared above with the curve of an older type of deflector.



The RCA Tricolor Vidicon Camera Tube is under development as shown above in comparison with an earlier tube. It is being designed to generate simultaneously all three of the primary colors of color television and is planned to combine all of the color pickup functions in a single tube no larger than the standard RCA image-orthicon tube used in black-and-white cameras. Precise optical and electrical registry is expected because of the simultaneous generation of signals within one tube. The heart of the tube is an intricate color-sensitive target applied to the face of the tube by an evaporation technique. The target, a rectangle whose diagonal measurement is only $1\frac{1}{4}$ in., consists of nearly 900 fine vertical strips of alternating red, green and blue color filters, covered by three sets of semitransparent conducting signal strips spaced so closely that a group of several strips would be covered by the diameter of a

human hair. The signal strips corresponding to a given color are all connected to a common output terminal, and insulated at the same time from the strips of the other two colors. As the target is scanned by a

single electron beam projected from the rear of the tube, the color-sensitive filter^s permit the signal strips to produce the signals. The beam scans horizontally across the face 30 times/sec.



New Building for National Film Board:

On March 21, 1954, construction was started on a film production center for the National Film Board of Canada in the Ville St. Laurent, a suburb of Montreal.

The building was designed by John & Drew Eberson, Architects & Engineers of New York City, in association with Ross, Patterson, Townsend and Fish of Montreal. The photograph of the architects' model shows the principal sections of the building. The front portion of the hollow rectangle houses the administration, distribution and executive offices; the block to the left contains the processing laboratory, film

libraries, science film unit, and the development and mechanical shops; while the block to the right accommodates the main studio, scoring stage, recording facilities and animation section. Joining the production facility wings are the production offices. An isolated nitrate film storage vault is shown at the rear of the building.

Present construction schedules call for completion of the building early in May 1956. It is expected that installation of equipment will begin this October and that the main move of personnel from Ottawa to Montreal will be in June 1956.

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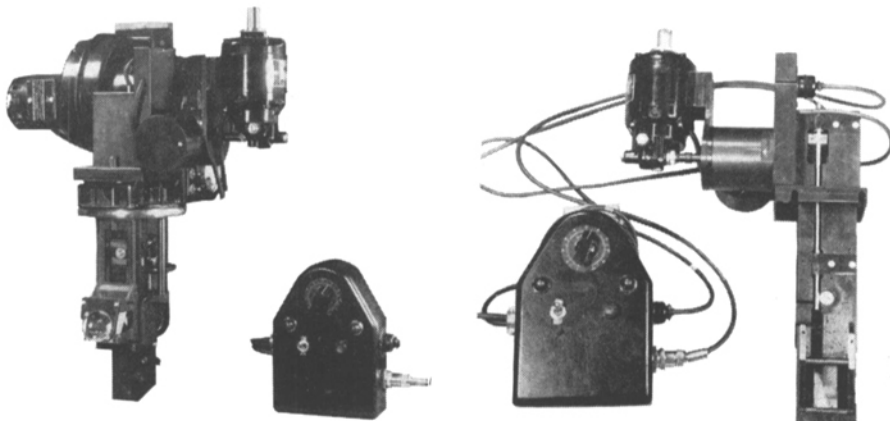


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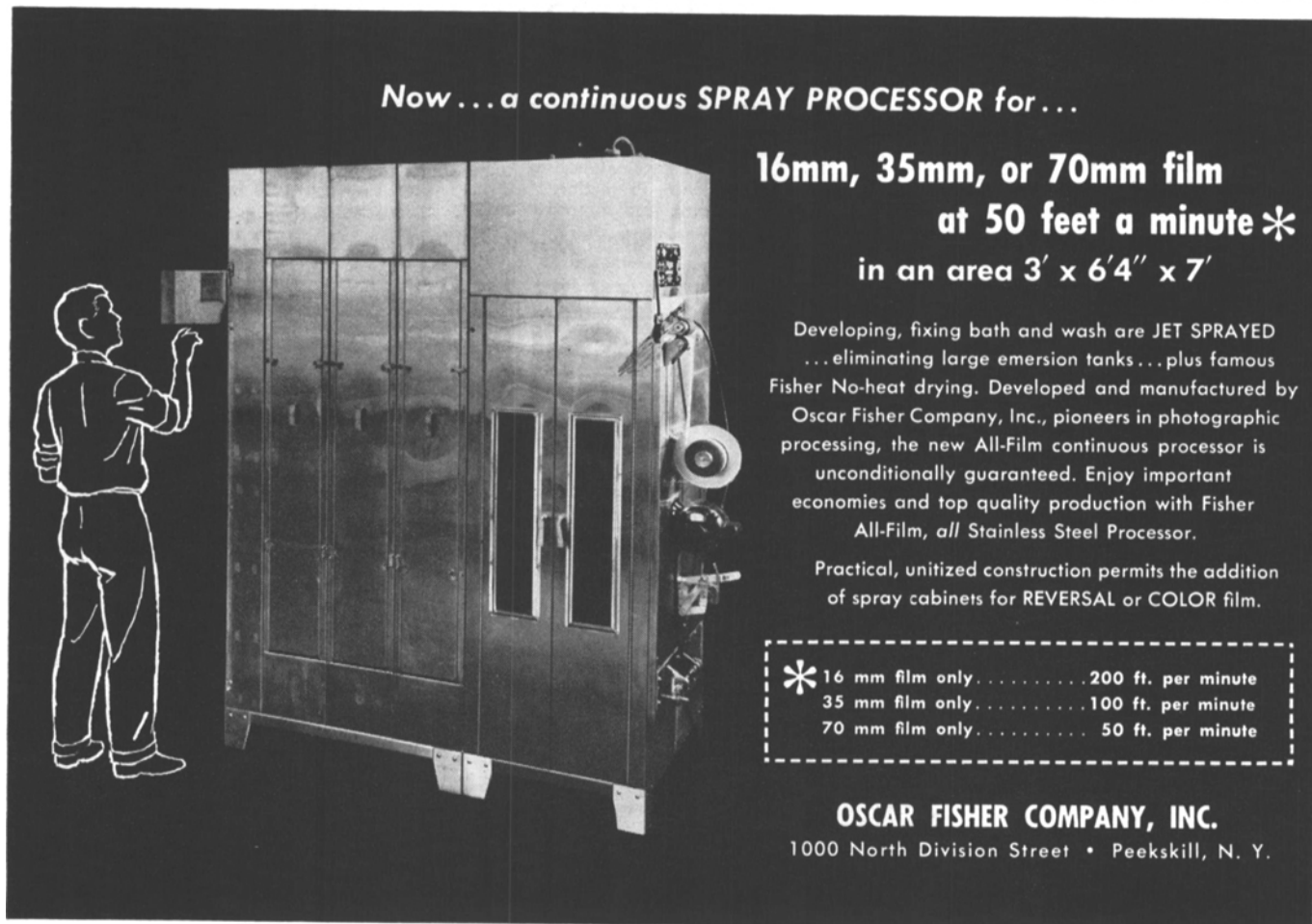
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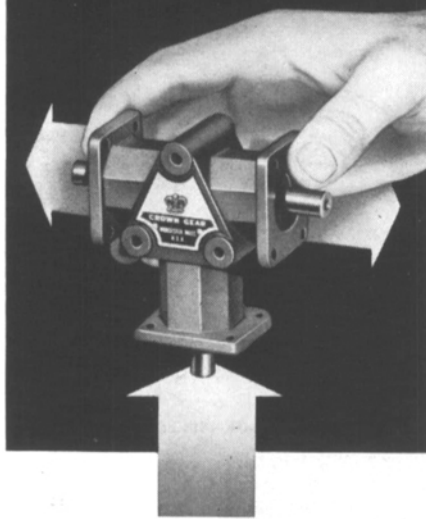
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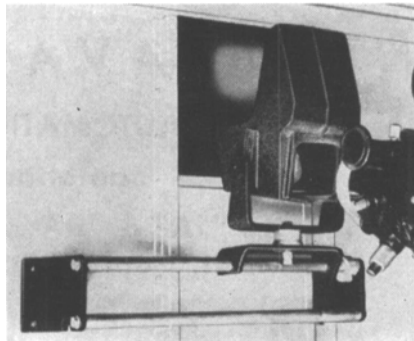
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The Delrama anamorphic system has recently been announced, with extensive descriptions and diagrams by Old Delft Optical Co., 33 W. 42 St., New York 36. Shown is a Projection Delrama unit in position for projecting an anamorphosed image. When film with non-squeezed images is to be projected, the unit is slid to one side. The Projection Delrama is made in two models, one for theaters where the projector is directed downward, say at 5° or more, onto a curved screen, and one for practically horizontal projection. The concern also has camera or taking anamorphosing equip-

ment. The Delrama is a 35mm system. The firm's 16mm system is called Vista-scope.

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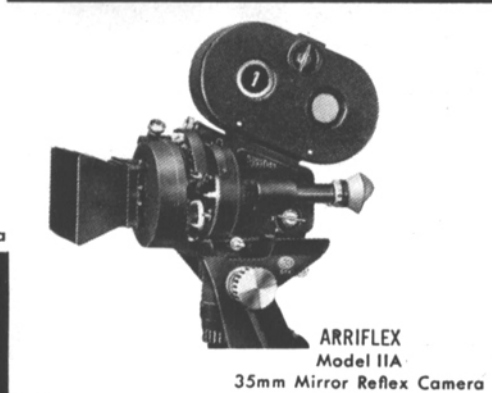
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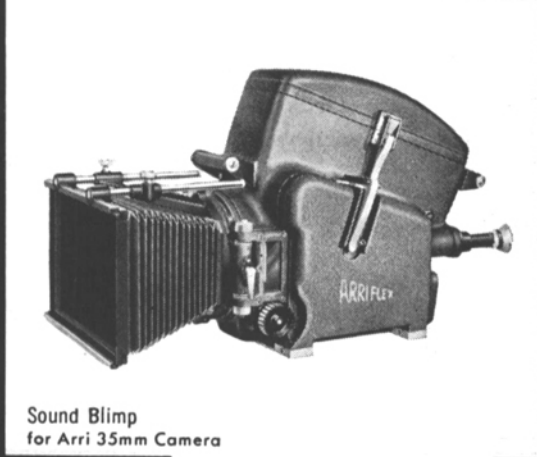
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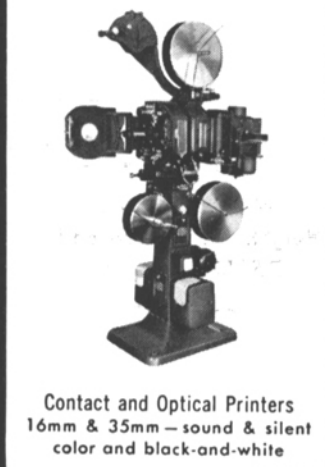
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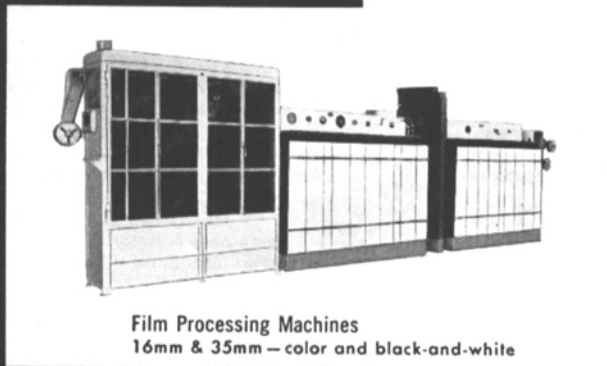


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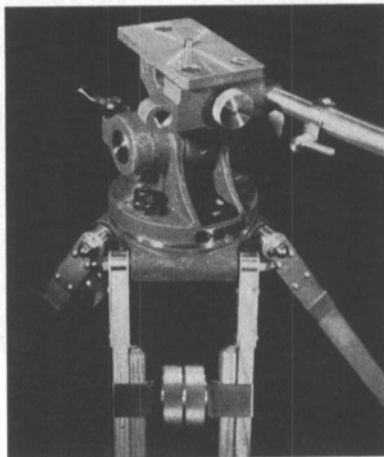
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Still Standards and Others

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Photographic Sensitometry, PH2

Method for Determining Spectral-Sensitivity Indexes and Group Numbers for Photographic Emulsions, PH2.6-1954 (Revision of Z38.2.4-1946), 75¢.

Photographic Apparatus, PH3

Specifications for Threads for Attaching Mounted Lenses to Photographic Equipment, PH3.10-1954 (Revision of Z38.4.11-1944), 25¢.

Photographic Processing, PH4

Eight Specifications for Photographic Grade Chemicals:

Mono-Benzyl-Para-Aminophenol Hydrochloride, PH4.135-1954, 25¢.

Isopropylamine, 50-Percent Aqueous Solution PH4.178-1954, 25¢

Benzyl Alcohol, PH4.181-1954, 25¢.

Sodium Carbonate, Monohydrate, PH-4.227-1954 (Revision of Z38.8.227-1948), 25¢.

Sodium Carbonate, Anhydrous, PH4.228-1954 (Revision of Z38.8.228-1948), 25¢.

Sodium Tetraborate, Decahydrate (Borax), PH4.230-1954 (Revision of Z38.8.230-1948), 25¢.

Sodium Metaborate, Octahydrate, PH-4.231-1954 (Revision of Z38.8.231-1948), 25¢.

Sodium Tetraborate, Pentahydrate, (Borax, 5 Mole), PH4.233-1954, 25¢.

Dimensions for Bite of Film Clips, PH4.15-1945 (Reaffirmation of Z38.8.4-1945), 25¢.

Radio, C16

Volume Measurements of Electrical Speech and Program Waves, C16.5-1954:

Measuring electrical speech and program waves, according to the practices of the Institute of Radio Engineers, has been approved by the ASA, and published as an American Standard. The standard is a coordination of IRE standards first published in 1953. The Standard contains definitions and requirements for a standard volume indicator and its use in measuring speech and music over wire and radio systems. A section on good engineering practice is also included in the document. 50¢.

Definitions of Terms on Antennas and Wave Guides: submitted to ASA by the Institute of Radio Engineers, this standard, (designated as C16.21-1954,) establishes a set of standard definitions for eliminating inconsistencies among antenna and waveguide terms. 75¢.

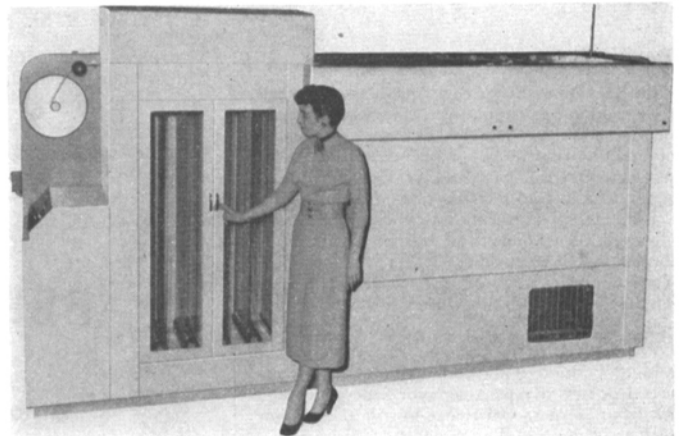
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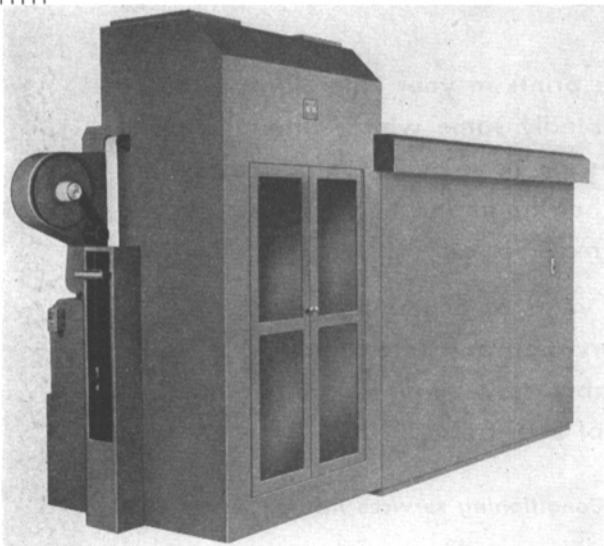
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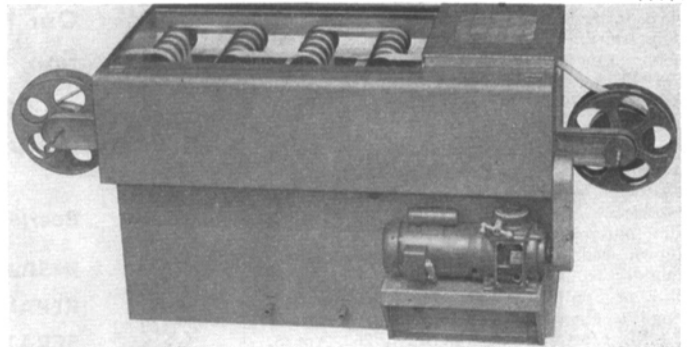
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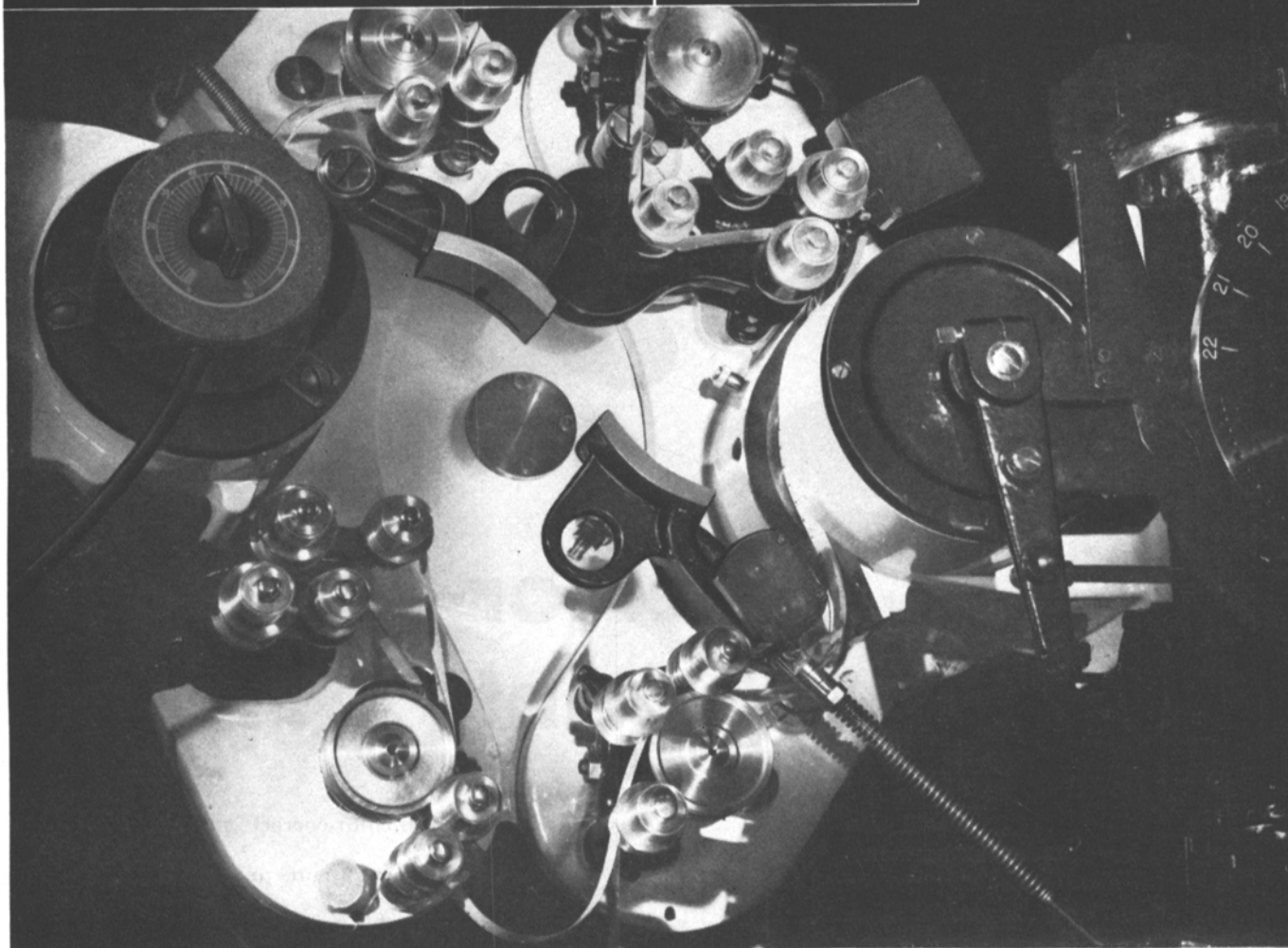
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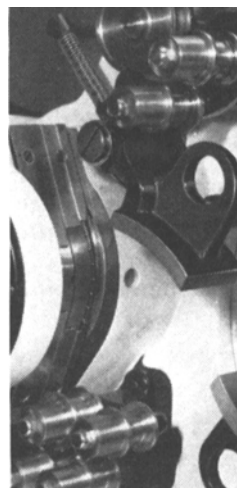
Here is another step forward in Bell & Howell's year of printer progress. This is the Design 5205 double-head printer, "heads above" all others in quality reproduction of sound and picture.

This new design does not merely combine two separate heads. *It is one precisely engineered instrument.* Vital parts have been re-designed for better contact at the printing apertures. Brand new features include printing sound-drum assembly, sprockets with improved tooth pitch, stripper plates.

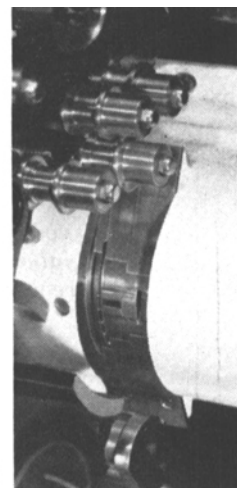
Model D and J printers will come with double-head assemblies. Outstanding features of the new Bell & Howell double-head printer will be available also as modifications to existing printers.



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SOUND APERTURE



PICTURE APERTURE

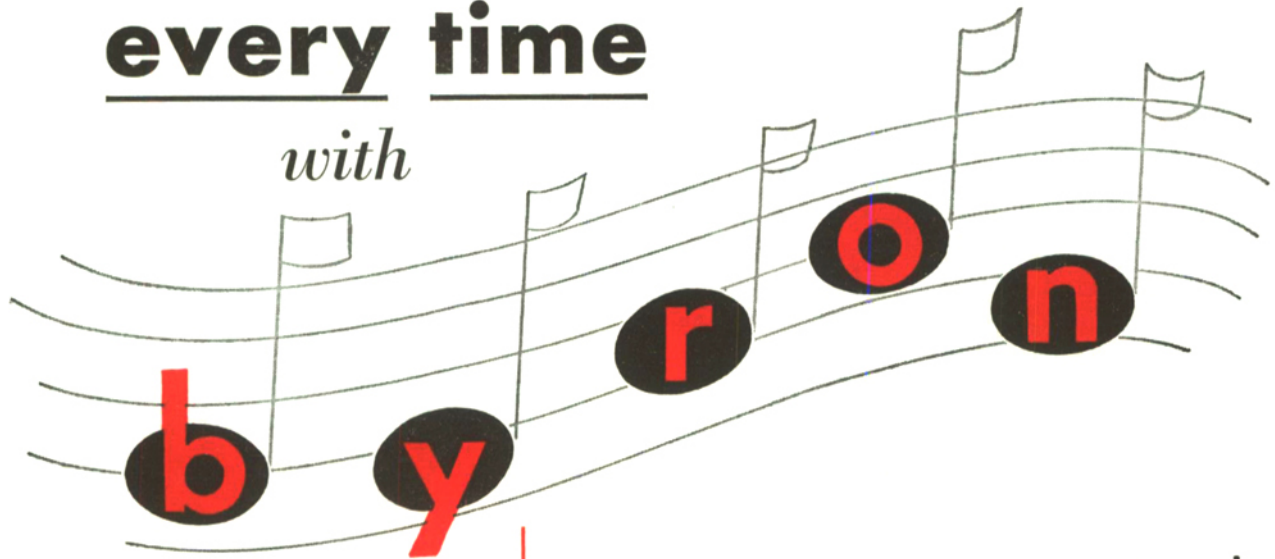
For full information about Design 5205 double-head printer, write Professional Department, 7185 McCormick Road, Chicago 45, Illinois.

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