

present for an increase of dues for student members.

Since the rates of dues are defined under By-law IX, an amendment to that bylaw is required. The first essential step toward such an amendment was the resolution of the Board of Governors quoted in full above. The second essential step toward such an amendment is satisfied by publication of this notice of the 1954 Annual Meeting and its purposes.

The third step will be a "show-of-hands" vote by the voting members of the Society of whom a quorum must be present on whether to approve or disapprove the recommendation of the Board.

The Bylaws provide that in the event a quorum (at the present time 120 voting members) is not present at that meeting, an affirmative vote of three-quarters of the entire membership of the Board of Governors may make that proposal part of the Bylaws. All members of the Board of Governors have been notified in writing that in the event a quorum of the voting membership is not present at the Annual Meeting, a special meeting of the Board of Governors will be called at noon on Tuesday, October 19.—*B.N.*

The New Journal

When the Board of Governors decided that advertising would be published in the *Journal* beginning in July, it was also decreed that the *Journal* be in a new format to accommodate advertising plates of the standard 7 X 10 in. size. This change was practical not only for advertising but also for the *Journal* throughout, allowing the use of standard material in making up pages, standard lockup of forms for press and standard paper.

The *Journal* is issued in the 8½ X 11¼ in. size because that works out of a standard sheet of paper and allows maximum printing efficiency. This size is preferred by the Society's printer who also produces *Electrical Engineering* and other journals in this size.

Within the overall text page size of 7 X 10 in., the type face, type size and column width have been repeated from the old *Journal* as the most practical choices for economy and readability. Another physical aspect, the cover, was for this six months kept similar to the recent cover for the sake of continuing identity.

And inside, too, as far as substance goes the policy is to keep the *Journal* the same, except for including advertisements. The technical papers are to be of the same type and will continue to be just as rigorously screened by the same Board of Editors. Each technical paper is to be paged in successive pages, without "continued's" into the back of the *Journal*. News, reports and reviews will appear throughout the advertising section.

The new *Journal* carries 206% as many words per page as the previous format. This is the most efficient and economical format for the *Journal* up to this time.

Changes in format and procedures, in the past five years, and tightening up on authors alterations and photoengraving costs have kept the overall *Journal* cost increase at 16% while unavoidable increases in printing and paper costs for all



On a recent trip around the world, Dr. John G. Frayne, SMPTE Executive Vice-President, found evidence of Society activities at almost every place he visited. Most notable, however, was Hong Kong where the dynamic Harry More, Westrex Hong Kong Branch Manager, with all four of SMPTE's Hong Kong members, greeted him on arrival at the airport. Later our Executive Vice-President was the guest of Harry More and his SMPTE associates at a special Chinese dinner, Cantonese style. At a reception given for our peripatetic Vice-President, in which SMPTE and Westrex Corporation shared honors, the above picture shows Dr. Frayne along with the Hong Kong members. They are from left to right, William C. K. Hu, Managing Director of Wader Studio; John G. Frayne; Harry More, Westrex Hong Kong Branch

Manager; Robert Chung, Eastman Kodak Co., Hong Kong; and Walter Wu, an expert of film processing. Incidentally, Walter Wu spent about a year in Hollywood working in various film laboratories. Dr. Frayne's trip by air continued with stops in India and Ceylon and generally throughout Europe to reach a peak tempo at Washington, D.C., during the Society's Spring Convention. He found an intense interest in SMPTE activity in India where there appears to be a great thirst for technical knowledge and a great desire for many people to join the Society. There is no doubt that this organization is the leading one throughout the world in its field, and its *Journal* is regarded by all as having the last word on advances in the motion-picture and television arts.

publications of this kind have increased by 35%.

The present method of binding, along with the new format will yield considerable further gains in overall *Journal* efficiency.

—*V.A.*

Alex Quiroga, Senior Light Direction Engineer at the Hollywood studios of the American Broadcasting Co., has been awarded the 1954-55 WAAM Television graduate fellowship at Johns Hopkins University. The annual fellowship was established by the Baltimore television station WAAM at Johns Hopkins in 1952 to give a television professional man one year for special studies of value to his own development and to the industry.

Mr. Quiroga, the third person to hold the fellowship, will spend his year working on color television at a graduate level in the departments of physics, psychology and astrophysics. Since joining ABC-TV in 1949 as a cameraman, Mr. Quiroga has entered the field of research in video recording and created optical devices to improve the production values of TV programs, including the "Quirogascope" for tilting or rotating a scene by optical means during an actual telecast.

Book Reviews

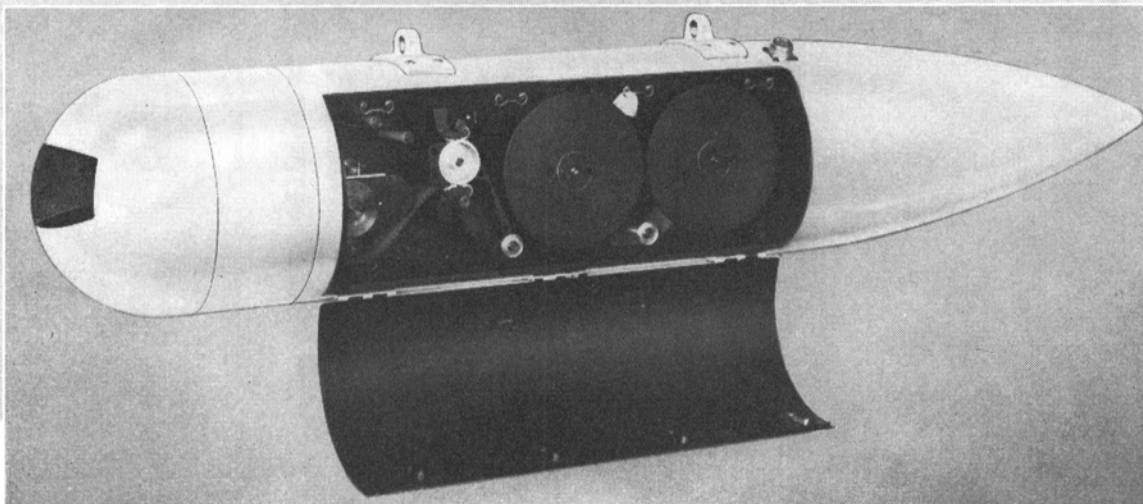
Flash! Ultra-High Speed Photography, 2d ed.

By Harold E. Edgerton and James R. Killian, Jr. Published (1954) by Charles T. Branford Co., 551 Boylston St., Boston 16. 215 pp. Profusely illus., incl. 3 color plates. 8¼ X 11 in. \$6.50.

Nearly everyone who has had anything to do with the ever-popular "Strobe-light" has at one time or another looked into *Flash*, long one of the best illustrated books showing what electronic flash can do in expert hands. Now comes a second edition of this "picture" book pertaining to that branch of photography which uses the gas-discharge tube as a primary light source.

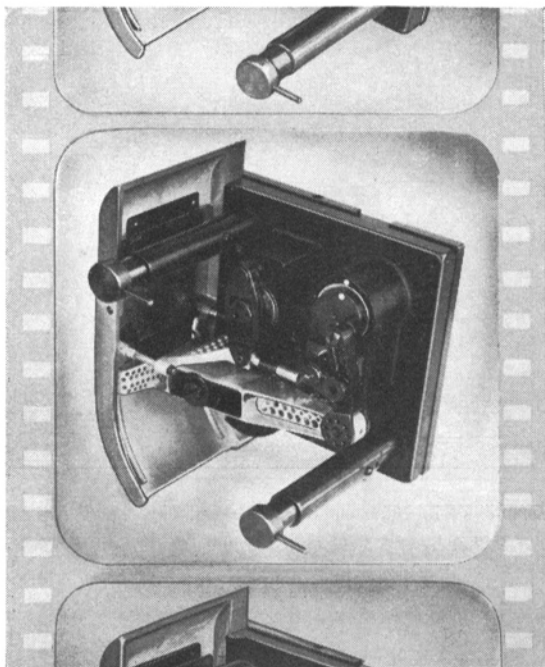
One is impressed, even overwhelmed, by the multitude of subject matter, ranging from color portraiture to graphic analysis of machine operations. As a very broad and general outline of possible uses of electronic flash, this book fulfills a basic need—that of popularization and education. It does not, however, offer much information to the technical worker in the field of photographic analysis.

PHOTO-SONICS INC.



70MM-5A AIRCRAFT CAMERA

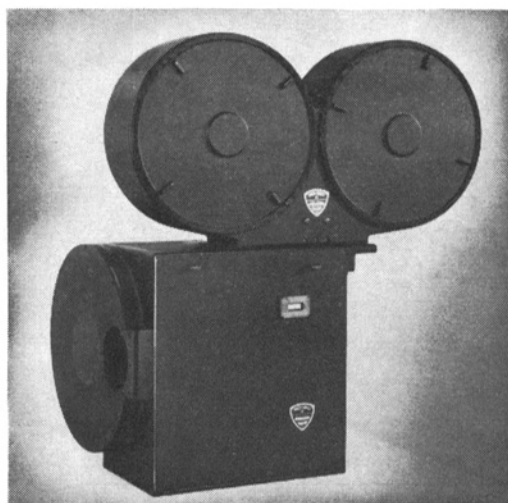
Aperture Size 1.156 x 2.25 inches—400 ft. film capacity
Film registration pins—60 frames per sec.
150 watt heater—24 volt motor



Actual frame size 70mm-10A showing photograph of film movement

70MM-10A CAMERA

Aperture Size 2.25 x 2.25 inches
Film registration pins
60 frames per second
110 volt synchronous motor
Film load—1000 or 400 ft. mag.



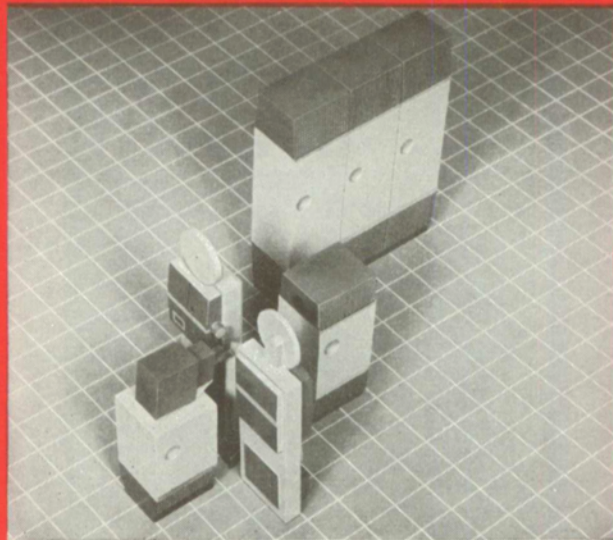
Additional information on request

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◀ This Philco 16mm CineScanner and its companion, the 35mm model, provide the finest film reproduction in either color or monochrome.



Multiplexed arrangement of two 16mm CineScanner film units and automatic dual slide changer for four program sources in color.

CineScanner—superior for monochrome
... the only practical method for color!

PHILCO CORPORATION

CineScanner

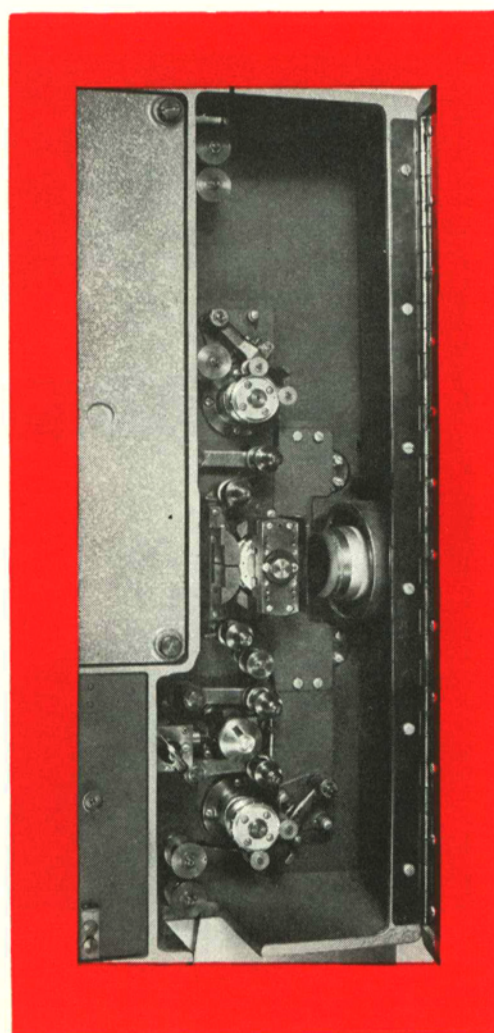
and enjoy modern film telecasting!

- Smooth, Silent Operation — No Flutter
- Preview of all Program Sources
- Color and Monochrome, 16MM and 35MM Models

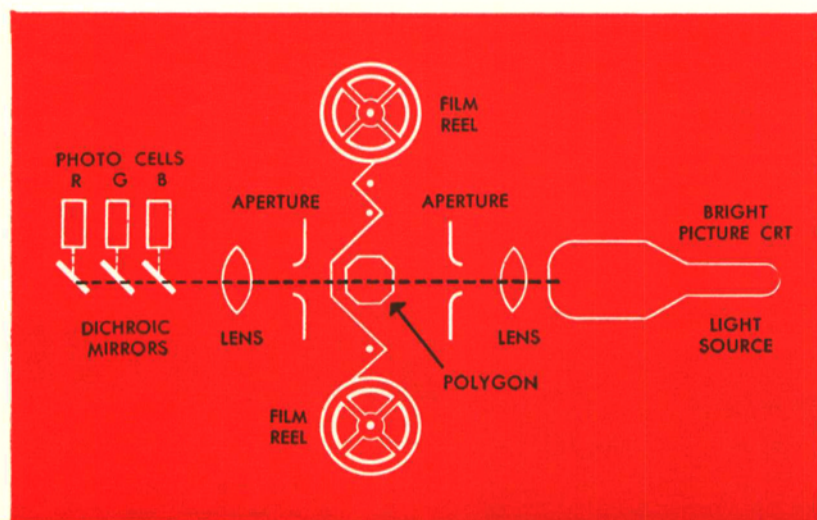
Once you've seen CineScanner operate—witnessed the clear, steady pictures and observed the smooth, silent performance—you will agree it's the only way to televise film—in *monochrome or color!*

There are good technical reasons why: The Philco CineScanner employs flying-spot scanning, a technique never equaled in producing high definition pictures. In CineScanner, there's no hot projection lamp to fail or burn the film. Only source of light is a long life, cathode-ray tube with dependable "cold" light harmless to film. CineScanner employs a special continuous-motion film transport mechanism designed by Philco and built by the Mitchell Camera Corporation of Hollywood . . . no noisy, film-damaging intermittents in the CineScanner! Most important of all to color Broadcasters, CineScanner uses economical photo tubes instead of expensive camera tubes . . . *and there are no color registration problems in CineScanner!*

With the Philco CineScanner, you can start today in monochrome, convert tomorrow to color—with no obsolescence of equipment! Get full technical data on this new and greatly improved method of televising films and slides. Contact Philco, Dept. SE today.



Interior view of the film unit showing precision film transport mechanism, sound head and the simplicity of the optical system.



Simplified diagram showing the basic principles of CineScanner operation.



GOVERNMENT & INDUSTRIAL DIVISION • PHILADELPHIA 44, PA.

In Canada: Philco Corporation of Canada Limited, Don Mills, Ontario

The second edition of *Flash* differs from the original in several respects. Some new pictures have been added, including three examples of color photography. A new technical section has been included. This section is very good, but does not suffice for the engineer, while it is probably too advanced and specialized for many pictorial photographers. There are interesting chapters on the assessment of flashtube characteristics, as well as the design of electronic flash equipment. A bibliography and a list of equipment manufacturers has been included.

The entire volume has been printed on coated stock. Reproduction and printing is generally good considering the difficult subject matter. Some pictures, however,

show defects particularly in heavily inked areas.—*Kenneth Morgan*, Research Laboratories, Interchemical Corp., 432 W. 45 St., New York 36.

L'Arc Electrique Intensif

By Dr. Jean Parisot. Published (1950) by Gauthiers-Villars, Quai des Grands-Augustins 55, Paris (6). II × 116 pp. 48 figures and plates incl. 6 tables: 9 × 11 in. Price \$3.56.

The author is head of the research laboratory of "La Société Carbone-Lorraine" and much of his material is taken from their hitherto unpublished work. He first traces the historical development of the high-intensity arc from the earlier flame

and projector carbons, emphasizing its distinguishing features. A short section on materials and methods of carbon manufacture is included, together with a rather detailed description of lamp operation with several different types of high-intensity carbons.

A section on light measurement describes in considerable detail the procedures used in his laboratory for measuring light output, including brightness distribution over the crater surface and spectral-energy distribution of the light. Typical curves of both are included.

The processes going on at the positive and negative electrodes while the arc is operating are analyzed, emphasizing the fact that light intensity is determined by the positive carbon, while the negative carbon can affect steadiness. The discussion of the effects of carbon composition on performance includes a chapter on the use of substances other than the cerium rare earths as flame materials or "mineralizants." This knowledge permitted France to keep its motion-picture theaters in operation when the country was deprived of rare earths during the German occupation.

A review of the theories proposed in order to account for the high brightness obtainable from this source leads the author to conclude that the subject calls for considerably more work.

The book can be recommended as combining in one volume the practical and theoretical aspects of operation of the high-intensity arc. Its principal weakness is inadequate treatment of means for increasing crater brightness.—*C. E. Greider*, National Carbon Research Laboratories, P.O. Box 6087, Cleveland 1.

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