

Chester B. Bahn, Editor of *Film Daily*, died suddenly on January 8, 1962, as the result of a heart attack which occurred while he was visiting Universal Studios in Hollywood. He had been with *Film Daily* since 1936 when he came to New York as Managing Editor. In 1937 he became Editor. In 1960 he moved to California where he made his headquarters at the paper's Hollywood office.

Born in 1893, in Liverpool, N.Y., he was graduated from Syracuse University in 1916. His career as a newspaperman began that same year when he became a reporter on the *Syracuse Journal*. During World War I he remained for a time with the paper as its military editor and later served in the U.S. Public Service Reserve. Between 1922 and 1935 he worked on various newspapers and entered the motion-picture field as film critic on the *Syracuse Telegram-American*. Later he became drama and motion-picture critic on the *Syracuse Herald*.

During his years as Editor of *Film Daily* he became one of the influential figures of the motion-picture industry. His thoughtful editorials were widely quoted. The *Motion Picture Daily* in an editorial noted that the industry "lost a sincere friend and champion." It was announced on February 23, that a commemorative plaque will be placed in the lounge of the Will Rogers Memorial Hospital at Saranac Lake, N.Y., in recognition of his editorial support of the hospital and its research program.

Abstracts

Abstracts from other Journals, chosen for importance and timeliness, are published in the *Journal* from time to time. The greater number of these abstracts are translations, chiefly from the U.S.S.R., and made available by the *Kodak Monthly Abstract Bulletin*.

The subject areas are grouped below

- Cameras and Equipment (Except High-Speed)
- Color Photography and Color Development
- Film and Its Properties
- Film Processing Apparatus and Chemicals
- High-Speed Photography and Instrumentation
- History
- Printing and Optics
- Projection (Light Sources and Screens)
- Sensitometry and Image Structure
- Sound Recording and Reproduction
- Television

Bibliography Information Publications of NIKFI, published by the Department of Scientific-Technical Information of NIKFI, Moscow: Issue 1, *Inform. Byull. NIKFI*, 1958, 188 pp.; Issue 2, *Inform. Sbornik NIKFI*, 1960, 180 pp., P. Ya. Raizer,

Zhur. Nauch. i Priklad. Fotografii i Kinematografii, 6: 238-240, 1961.

The All-Union Scientific Research Kinofoto Institute (NIKFI) publishes information bulletins containing extensive bibliographies. The first issue contained a bibliography of government standards, patents, author's certificates, and announcements of registrations of scientific research papers by NIKFI (42 pages) and also information and publications on the activity of NIKFI. The second issue, published in two sections, contains a bibliography (155 pages) and information and publications of NIKFI. The bibliography consists of three parts: (1) chemistry of photographic processes and technology of production and processing of light-sensitive materials, (2) motion-picture technique and (3) high-speed photography and motion pictures.

The main object of the publications is to supply continuous information to scientific and engineering technical personnel of NIKFI, motion-picture studios, and motion-picture camera, equipment and film manufacturing plants on the newest developments in the Soviet Union and abroad in motion-picture technique, patents, standards, inventions, etc.

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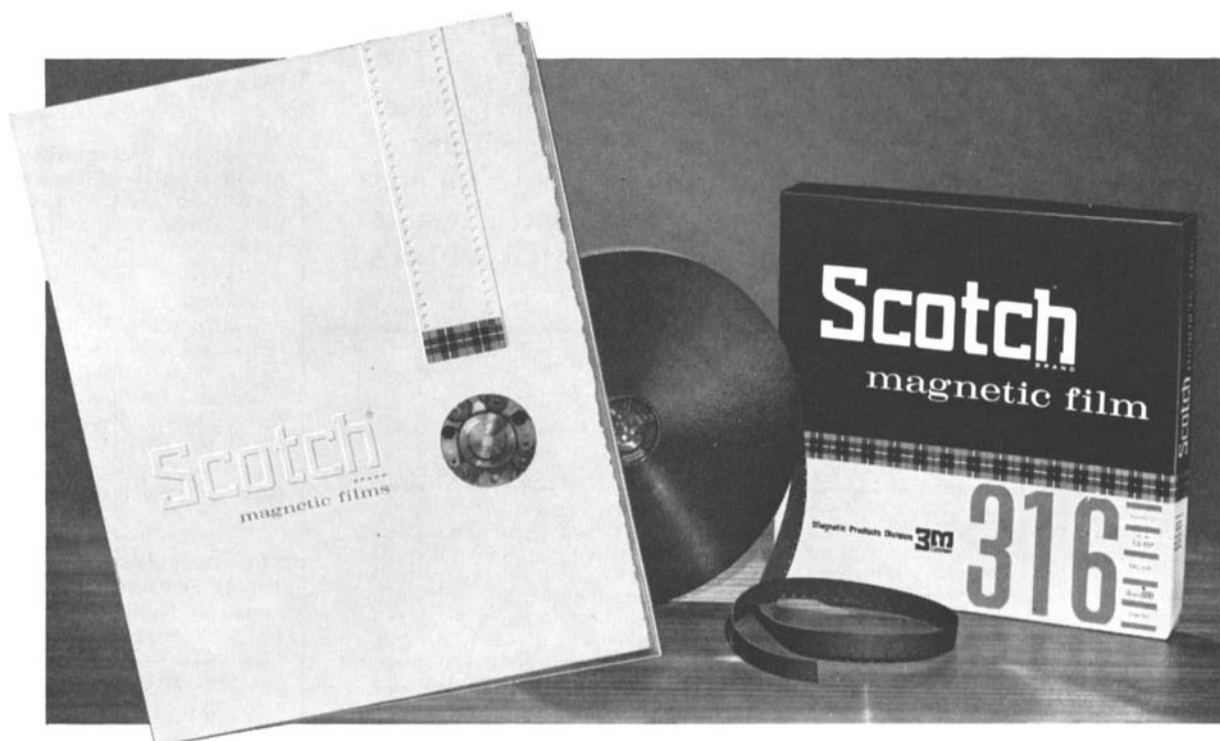
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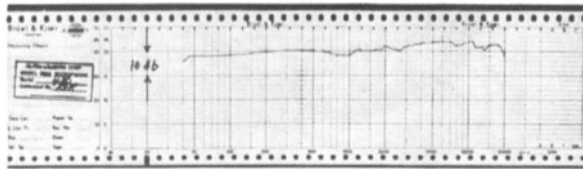
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CAMERAS AND EQUIPMENT (Except High-Speed)

The Standardization of Spools for Narrow-Gage Motion-Picture Cameras (in Russian), A. A. Sakharov, *Tekh. Kino i Televideniya*, 5: 71-72, May 1961.

The main provisions of the Soviet standard GOST9615-61 on spools (magazines) for 2 by 8mm and 16mm cameras, and of GOST9379-60, in so far as the latter refers to spools for 16mm cameras, are discussed.

Theoretical Prerequisites in the Taking of Films for the Circular Cinepanorama (in Russian), A. A. Lapouri, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, No. 38, 27-45, 1960; *Tekh. Kino i Televideniya*, 5: 85-86, Apr. 1961.

Different schemes are considered for obtaining a panoramic image with an acceptance angle of 360° along the horizontal. Descriptions are given of optical schemes for the filming units of the circular cinepanorama. Determinations are made of the depth of space which can be sharply defined and of parallax in taking films for the circular cinepanorama.

The Development of Apparatus for Taking Films for the Circular Cinepanorama (in Russian), L. I. Arkhipov and F. S. Novik, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, No. 38, 46-57, 1960; *Tekh. Kino i Televideniya*, 5: 86, Apr. 1961.

A short description is given of some features in the construction of apparatus for the production of films for the circular cinepanorama. The phenomena of division and merging of adjacent images are discussed.

Motion-Picture Camera Distance Control, Ya. L. Butovsky and L. G. Golshtein, *Tekhn. Kino Tela*, No. 8, 30, 1961.

Exposure Meters in Cinematography (in Russian), F. S. Pyatnitskii, *Tekh. Kino i Televideniya*, 5: 66-70, May 1961.

An article covering the fundamentals of exposure meter technique for amateur cinematographers is continued (for first part see *ibid.*, 5: 74-77, Apr. 1961).

Manufacture of a Beam Splitter Attachment for a Trick Camera, L. M. Glotova, *Tekh. Kino i Televideniya*, 5: 53-56, Mar. 1961.

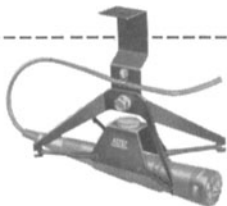
Determining of Flat Mirror Shutter Angle Parameters of Motion-Picture Cameras, G. V. Mering, *Tekhn. Kino Tela*, No. 8, 45, 1961.

COLOR PHOTOGRAPHY AND COLOR DEVELOPMENT

Contact Fog in Color Multilayer Films (in Russian), L. V. Grechko and Yu. V. Vilenskii, *Zhur. Nauch. i Priklad. Fotografii*



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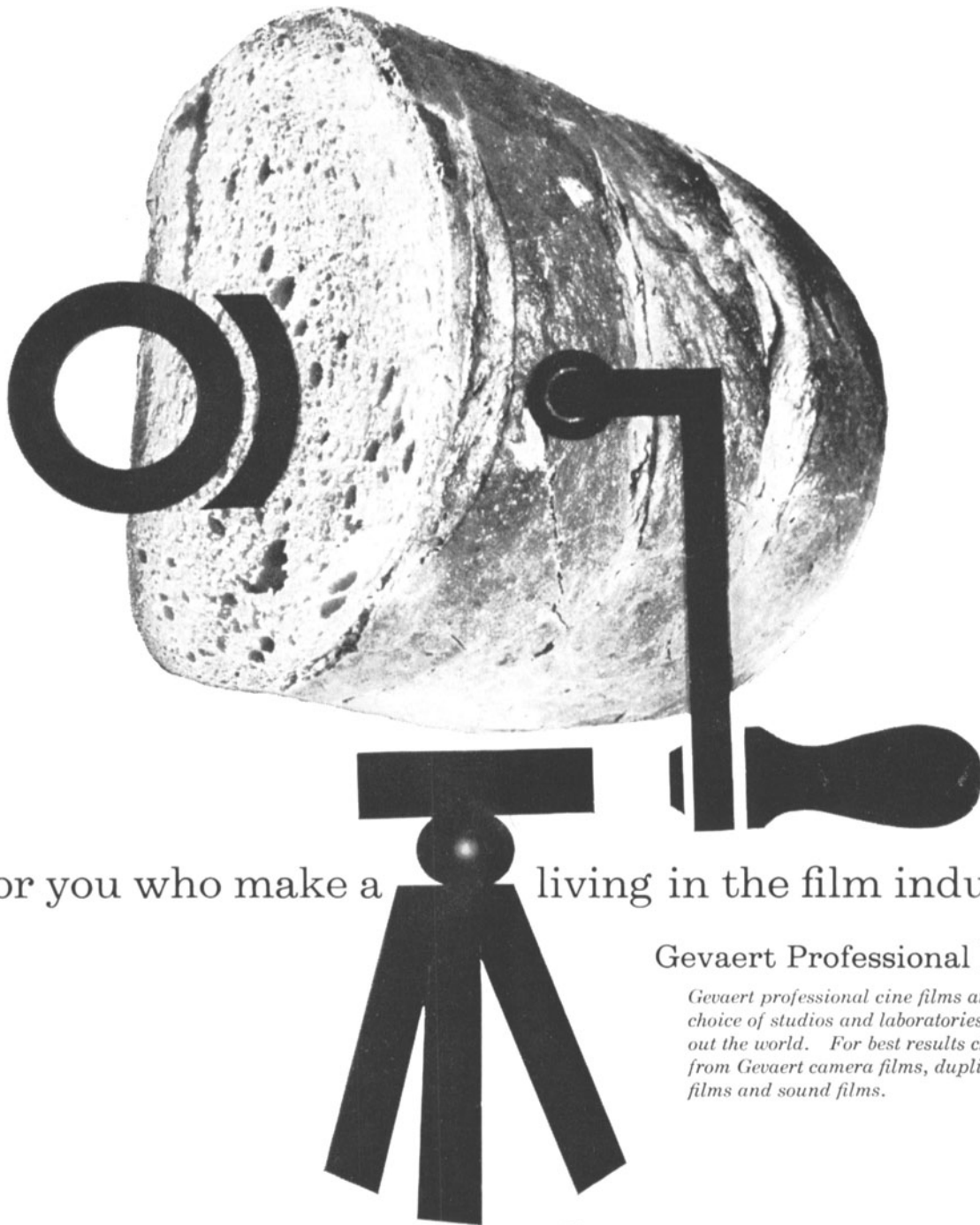
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i Kinematografii, 6: 225-226, No. 3, May-June 1961.

"Contact" fog is fog which arises in emulsion layers in contact with the colloidal-silver filter layer, during color development. Measurements of the electrode potential of a silver electrode in a silver sol when potassium iodide is added show an immediate fall in silver-ion content followed by a build-up to the original value. This is in agreement with the idea that colloidal silver is a source of some form of ionized silver. It is suggested that the fog is caused by the diffusion of ionized silver from the filter layer into neighboring layers during coating and drying, these silver

ions reacting with the excess of halide in the emulsion to form developable silver halide. The addition of nondiffusion reducing agent to the filter layer, which has been suggested, probably acts by causing a reduction in the silver-ion content of the layer, at least long enough to cover coating and drying.

New Group of Color Films for Motion-Picture Photography, A. N. Iordanskii, I. M. Kilinskii and Iu. B. Vilenskii, *Tekh. Kino i Televideniya*, 5: 4-13, Mar. 1961.

FILM AND ITS PROPERTIES

Experimental Study of Motion-Picture Film Itself Fluttering, Andgey Olendzky, *Tekhn. Kino Tela*, No. 8, 39, 1961.

Design of the Instrument and the Method of Measurement of Electric Resistance of a Motion-Picture Film Support and Its Antistatic Coatings, A. I. Bukin, A. M. Bolotovskaya, L. G. Gross and B. Ya. Shuleiko, *Trudy NIKFI*, No. 37, 123, 1960.

FILM PROCESSING (Apparatus and Chemicals)

The Influence of the Concentration of Developing Agents on Rapid Development. 4. Rapid Development of Negative Photographic Materials (in Russian), P. I. Levina and V. A. Veidenbakh, *Zhur. Nauch. i Priklad. Fotografii i Kinematografii*, 6: No. 3, 164-170, May-June 1961 (for part 3, see *ibid.*, 5: 334, 1960).

Different kinds of negative film have been developed in Metol, hydroquinone and Metol-hydroquinone developers, with a range of concentrations of the developing agents, the system of rapid development being the same as that used in earlier papers in the series. The shape of the curves showing the density after 20-sec development plotted against log concentration varied with the content of silver halide per unit area of film. Potassium bromide had little or no effect on the final density or on fog. In rapid development of the negative, unlike that of the fine-grain positive, described earlier, the mechanism of development by hydroquinone seems to be of the same type as that of development of Metol.

Finally, a Metol-hydroquinone developer formula is recommended for a rapid development of high-speed negative films. It is: Metol, 2-3 g; hydroquinone, 45 g; sodium sulphite (anhydro), 63 g; sodium hydroxide, 45 g; water (distilled) to 1 liter; it gives acceptable sensitometric properties with a development time of less than 40 sec.

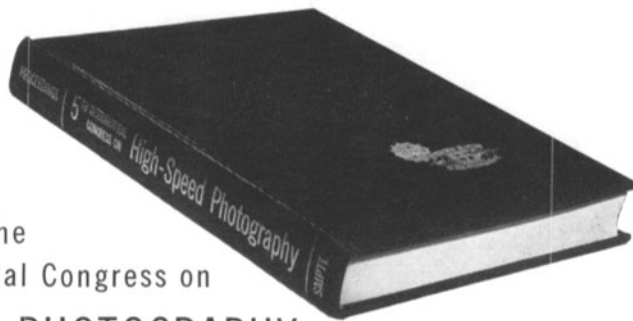
Description of Rapid-Processing Machine for 16mm Film, B. J. Davics, *Nature*, 190: No. 4779, 868, June 3, 1961.

HIGH-SPEED PHOTOGRAPHY AND INSTRUMENTATION

The Method of Optical Image-Shift Compensation in High-Speed Motion-Picture Cameras (in Russian), S. V. Kuagin, *Trudy MVTU*, No. 73, 117-124, 1959.

The speed of the film in parameters of prisms and the requirements of the sharpness of image, are exposed while continuously moving, using an optical compensation method with a rotating prism must take into account the parameters. The paper offers two methods for calculating the compensation unit. In both cases, 111 stet of compensation is recommended, that is stet smaller than the one obtained by calculations. As a result, the quality of the image is improved because of smaller aberration errors. Absolute compensation (complete coordination of the speeds of the

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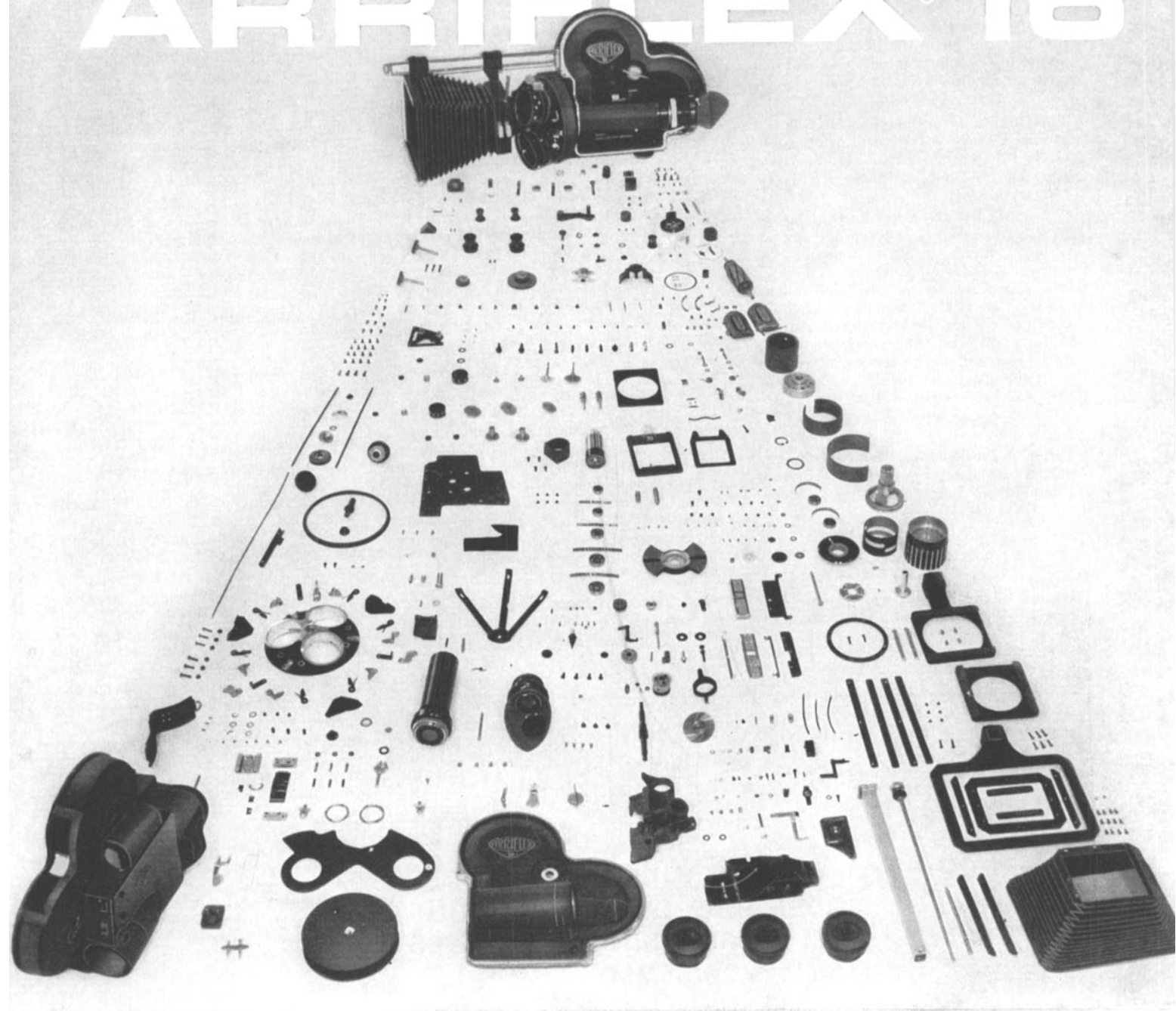
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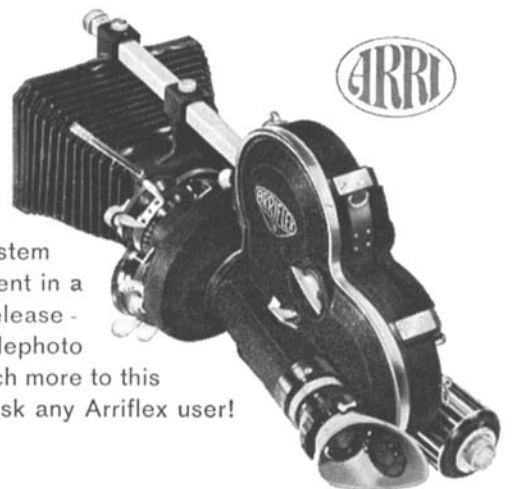
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film and the image) cannot be obtained by prism compensators. The smaller the angle of compensation, the smaller the residual displacement of the image because of an incomplete compensation, provided that all other conditions remain equal.

The Quality of the Image in High-Speed Motion-Picture Cameras (in Russian), G. I. Belinskaya, *Zhur. Nauch. i Priklad. Fotografii i Kinematografii*, 6: No. 3, 213-219, May-June 1961.

A method is given for determining the resolving power of high-speed motion-picture cameras, taking into account the movement of the image relative to the film, diffraction, defocusing and aberrations. On the basis of this method, a calculation is carried out for the SK camera, showing that the strongest influences are those of diffraction and image movement relative to the film. A method is shown for finding the luminous energy distribution in the image of an edge of an object of any form.

Using Pulsating Light Sources for the Schlieren Cinematography of Transient Phenomena, *Trudy Lab. DVIG*, No. 5: 167-171, 1960.

HISTORY

History of the Invention of Motion Pictures, I. V. Sokolov and B. N. Konopleva, Moskva, Gos. izd-vo "Iskusstvo," 193 pp., 1960.

PRINTING AND OPTICS

Motion-Picture Objectives and the Sharpness Criterion (in Russian), A. L. Yarinovskaya, *Tekh. Kino i Televideniya*, 5: 29-34, Apr. 1961.

A method of testing a lens for image sharpness, elaborated in the Mos'film studios, is claimed to give a better idea of the properties of the lens in practice than does a conventional measurement of resolving power. A sharp edge (razor blade) is photographed through an optical system incorporating the lens to be tested, the final image being at a magnification of $280\times$ or $140\times$. Several exposures are made, a developed image with a maximum density of 1.2 above fog being attained as the reference point, and are plotted against distance. The area under the curve between two standard ordinates on the distance scale is measured as a percentage of the total area of the density times the distance rectangle. This value is a measure of "unsharpness" and is zero for an ideal image. The results of this measurement on a number of lenses are recorded, and an investigation of stopping-down shows that up to a certain point the unsharpness criterion falls as a lens is stopped down, the resolving power simultaneously increasing. Past that point, the image quality falls off once more.

New [Soviet] Motion-Picture Printers (in Russian), I. S. Golod and N. D. Bernshstein, *Tekh. Kino i Televideniya*, 5: 59-61, May 1961.

Three printers are described briefly. The 23NTO-I is an optical printer for printing a 35mm color negative onto 35-imbibition matrix film through three-color filters, and also for printing imbibition matrices from separation negatives. The 23UTO-I is intended for printing 2 by 16mm film color or black-and-white. The 25KTK-I is a precision contact printer for picture and soundtrack on 35mm color or black-and-white films.

Focus Ranges of Lenses and New Forms of Motion-Picture Photography (in Russian), A. A. Lapaury, *Tekh. Kino Tela*, No. 7, 10, July 1961.

Optics and Lighting Engineering, *Tekh. Kino i Televideniya*, 5: 88-89, Mar. 1961.

New Developments in Motion-Picture Film Printing, I. S. Golod, *Tekh. Kino i Televideniya*, 5: 78-81, Mar. 1961.

PROJECTION (Light Sources and Screens)

Tone Reproduction in Rear-Projection (in Russian), I. B. Blyumberg, V. A. Glebov, I. N. Zavalina and Yu. L. Leibov, *Tekh. Kino i Televideniya*, 5: 37-42, May 1961.

A density wedge of seven steps was photographed and taken through the stages of preparation of a film with rear projection. The brightness of each step was measured at each stage: original wedge, rear-projection negative, rear-projection positive, rear-projected screen image, combination negative, combination positive and final screen image. Resolution and grain were also studied.

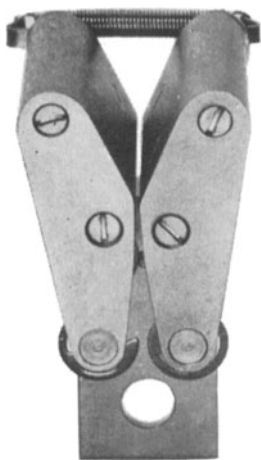
From the results it is concluded that, with improvement, the rear-projection method should receive much wider application. Recommendations are given for improving the quality of tone reproduction, including the choice of a background with a tonal range within the capabilities of the system, the use of the correct portion of the characteristic curves of the negative and positive films, the choice of lenses with the minimum of light scatter, even illumination of the rear-projection screen and the use of fine-grain films.

A Screen for the Circular Cinepanorama Theater (in Russian), S. A. Drukker, G. L. Irskii and S. A. Panina, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, No. 38, 90-101, 1960; *Tekh. Kino i Televideniya*, 5: 86, Apr. 1961.

A description is given of a two-tiered screen construction for a circular cinepanorama theater. Consideration is given to the illuminating engineering requirements of the screen material, the utilization of the screen and the illumination of the screen.

The PKP-1 Motion-Picture Projector (in Russian), N. Ya. Voloskov, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, No. 38, 78-82, 1960; *Tekh. Kino i Televideniya*, 5: 86, Apr. 1961.

Features of the PKP-1 motion-picture projector for the circular cinepanorama, developed on the basis of the existing SKP-33 projector, are discussed. The



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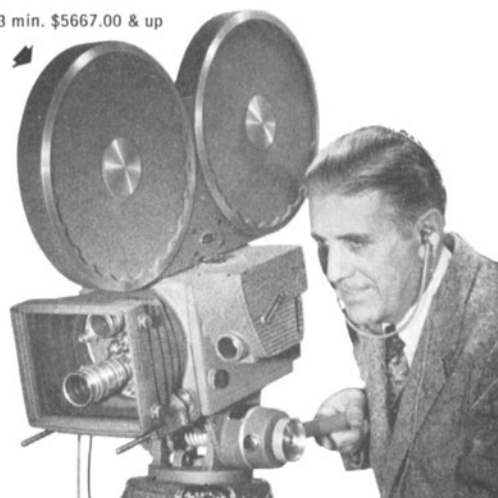
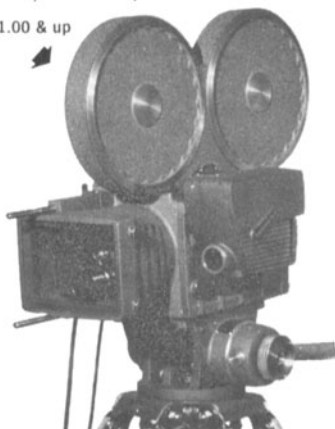


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mechanical system, the film gate, the take-up, the automatic closing shutter, etc., are discussed.

A Traveling Lecture Hall with a Motion-Picture Projector, O. Konov, *Sots. kul't.*, 14: No. 3, 44-45, Mar. 1961.

Recent Developments on the Eidophor Large-Screen Projector, E. Baumann, *Nature*, 190: No. 4779, 868, June 3, 1961.

Electronic Rear-Projection [for Special-Effects Television] (in English), S. I. Kataev, L. I. Kidrov and B. P. Khromoi, *Tekh. Kino i Televideniya*, 5: 3-12, May 1961.

The Acoustics of the Auditorium of the Circular Cinepanorama Theater (in Russian), A. N. Kacherovich, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*; No. 38, 120-123, 1960; *Tekh. Kino i Televideniya*, 5: 88, Apr. 1961.

A Light Source with the Xenon Gas Discharge Lamp for the PKP-1 Motion-Picture Projector (in Russian), G. A. Golostenov and G. L. Irskii, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*; No. 38, 83-89, 1960; *Tekh. Kino i Televideniya*, 5: 86, Apr. 1961.

Reasons are given for the necessity of using the xenon lamp as a light source for the PKP-1 motion-picture projector. Two types of optical system which may be used with the light source are considered. A de-

scription is given of features of the construction of the lamphouse and the position and control of its components.

A Basis for the Choice of the Parameters of the Soviet System of the Circular Cinepanorama (in Russian), E. M. Goldovskii, *Trudy Vsesoyuz. Nauch.-Issled. Kinofotoinst.*, No. 38, 5-26, 1960; *Tekh. Kino i Televideniya*, 5: 85, Apr. 1961.

Some points in the exhibition of films by the circular cinepanorama method are treated as a development of the idea of the cylindrical screen. The features in which the Soviet system differs from the American Cinerama are explained. Consideration is given to the choice of the methods of taking and projection; the choice of the number of cinefilms for the circular cinepanorama system; the basic parameters of the auditorium; and the elements of the projection equipment of a circular cinepanorama theater.

Automation of the Exhibition of Motion-Picture Films (in Russian), E. M. Goldovskii, *Tekh. Kino i Televideniya*, 5: 13-22, May 1961.

Various aspects of the problem of automation of a cinema performance are discussed, including continuously acting film magazines, projector light sources, film transport mechanisms, lens-changing mechanisms (normal to wide-screen, etc.) and automatic focusing of projectors. It is concluded that automation of film exhibition will be feasible only when pro-

jection apparatus is specially designed for the purpose, and the requirements of an automated system are set out.

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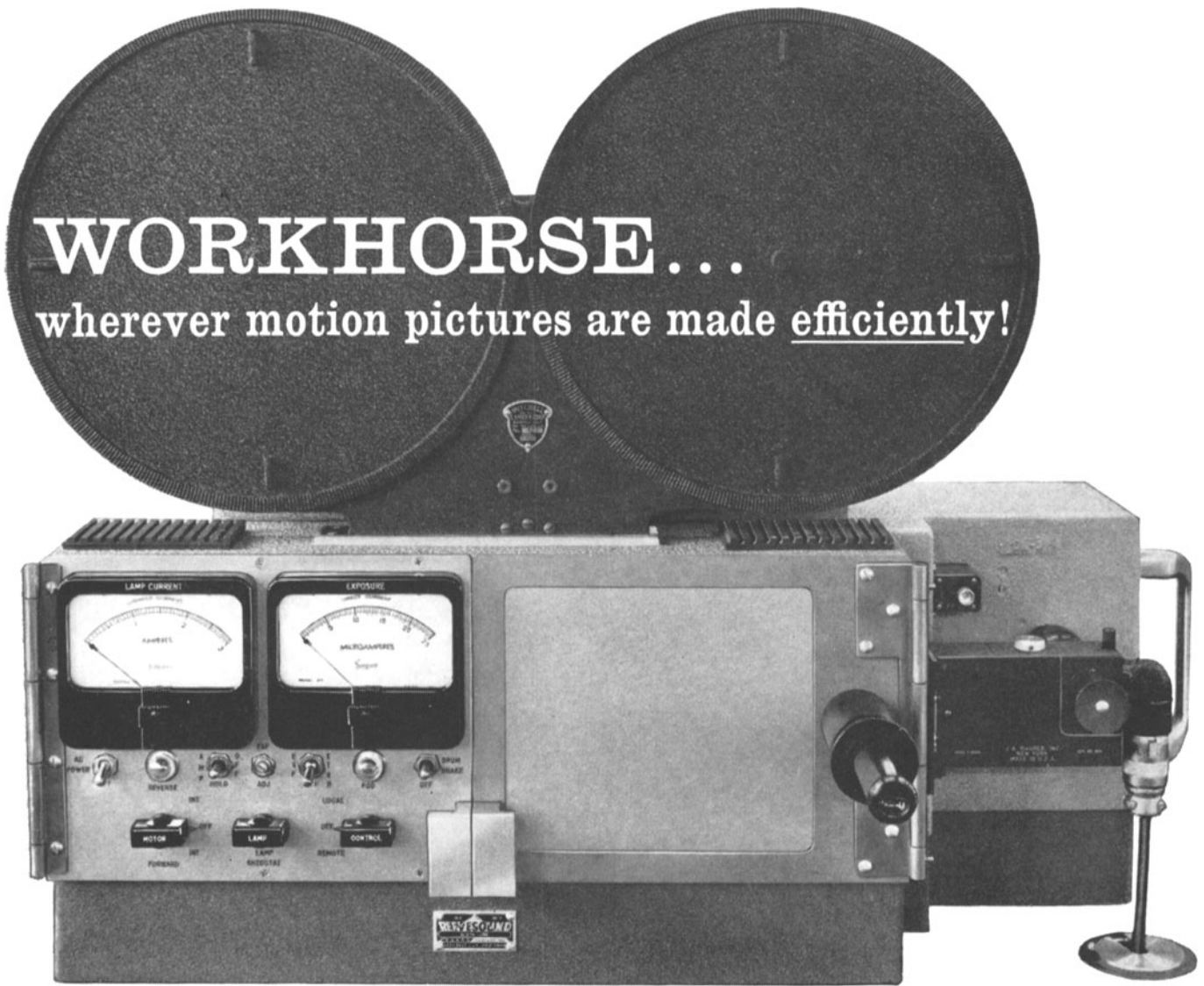
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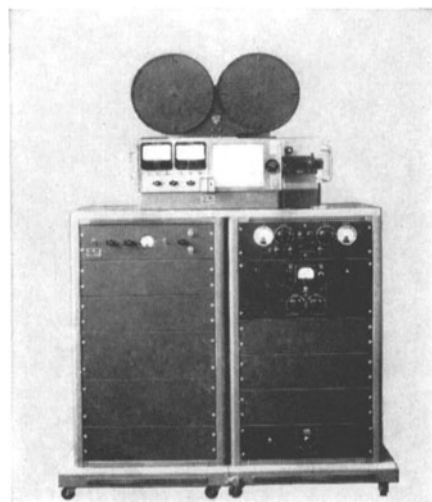
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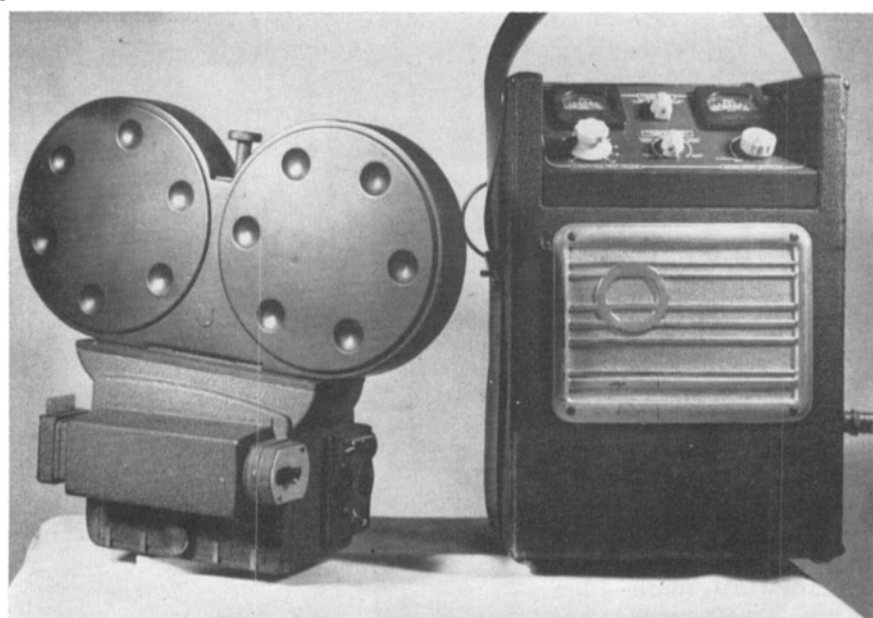
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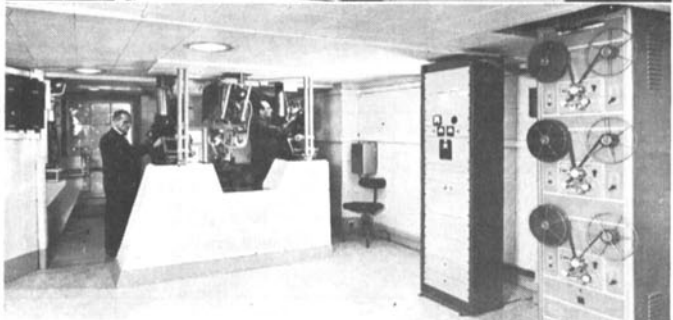
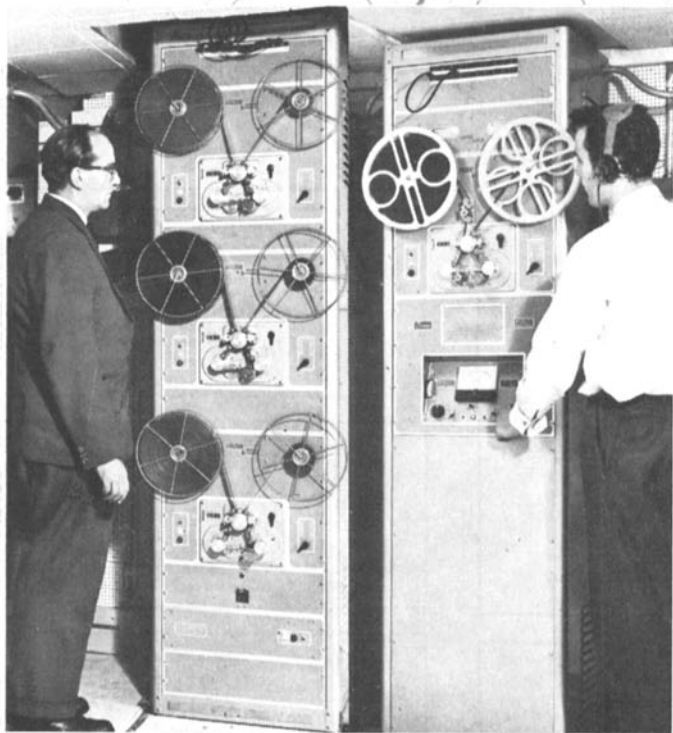
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