

96th SMPTE Technical Conference and Equipment Exhibit

Commodore Hotel, New York

September 27–October, 2, 1964

Planning is now progressing on all fronts for the New York Conference. Program Chairman **John Kowalak** and Arrangements Chairman **Russ Dupree** are preparing a stimulating week of technical sessions, exhibits and other activities for the large number of members who will be converging on the World's Fair City.

One of the most striking features of the New York World's Fair, now it is under way, has turned out to be the imaginative and exciting new applications of motion-picture projection and sound techniques to be found in so many of the exhibits. One of the important technical sessions during the Conference will be devoted to a group of papers on some of these, now being organized by **Boyce Nemec**, Reevesound Co. The June *Journal* will contain an informal preview of this session in the form of brief descriptions of some of the more interesting applications—published in June so that members may read about them before visiting the Fair during the summer.

Meanwhile the deadline for submitting papers for the program is fast approaching. Abstracts must reach **John Kowalak** (MOVIELAB, Inc., 619 West 54 St., New York, N.Y. 10019) and the appropriate Topic Chairman (see list in April *Journal*, p. 341) by June 17. One more Topic Chairman to be added to the list published in April is the chairman for Instrumentation and High-Speed Photography papers. He is **William G. Hyzer**, Consulting Engineer, 205 Wall St., Janesville, Wis.

Reading copies of papers must be sent to Mr. Kowalak and to the Editor at SMPTE headquarters no later than August 5.

Some additional Arrangements Committees Chairmen have been announced since the list published in the April *Journal*:

Hotel Arrangements: **Frank Bucci**, Pathe Laboratories, Inc.

Get-Together Luncheon: **Herbert De Groot**, National Broadcasting Co.

Publicity: **Stan Appenzella**, National Broadcasting Co.

Public Address and Recording: **Robert Nothdurft**, U.S. Army Pictorial Center

Ladies Program: **Robert Crane**, Color Service Co.

Conference Motion Pictures: **Charles Austin**, A.S.C.

Administrative Assistant: **Harold Jones**, Ansco

The Exhibit Chairman, **Dominick J. Capano** (S.O.S. Photo-Cine-Optics, Inc., 387 Park Ave. South, New York, N.Y. 10016) will be assisted by **Sheldon Kaplan**, Hollywood Film Co. Dom reports that plans for the Equipment Exhibit at the Commodore look excellent; there will be space for 70 booths, located between the Registration area and the Sessions auditorium. Printed information is being prepared and will be available in June.

Education, Industry News

6th Congress of the International Union of Technical Motion-Picture Associations

The 6th Congress of UNIATEC (Union Internationale des Associations Techniques Cinématographiques) will be held in Milan, Italy, October 14–17, 1964. The Congress will be organized by the professional motion-picture engineering association in Italy, ATIC (Associazione Tecnica Italiana per la Cinematografia), and the Chairman of the Congress will be Amleto Fattori, President of ATIC. Organizational support will also be given by MIFED (Mercato Internazionale del Film, del TVfilm e del Documentario).

The main theme of the Congress will be: Recent developments in cinema technique and possibilities of orientation in interdependence with television. Papers up to one hour in duration will be presented by

Member Associations of UNIATEC, and 15-minute papers by others, on the following subjects:

Picture and sound recording; photo-sensitive materials; recording, processing and reproduction equipment.

Specialized methods and equipment pertaining to cinematographic techniques.

Problems related to the transmission of films by television channels and the recording of video on film or tape.

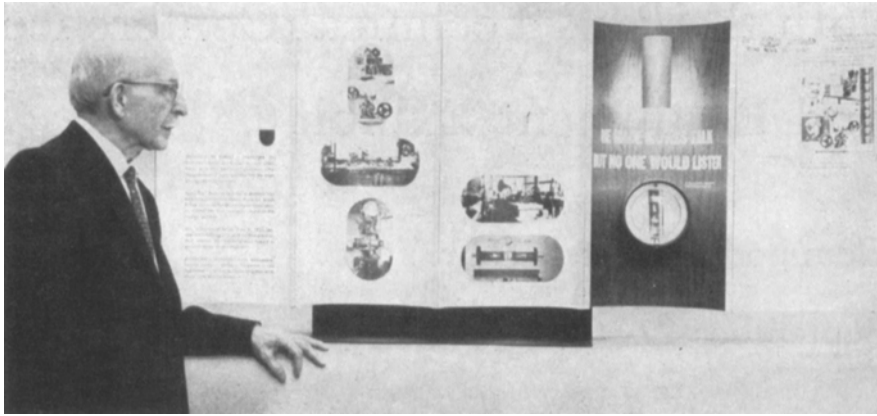
Video-electronic techniques in film production.

Techniques and projection equipment for theater television.

There will be an exhibit of professional motion-picture equipment accompanying the Congress, and on October 12 and 13, just before the opening, the Fourth International Competition on Film Technique will be held. For all information about the Congress, including the presentation of technical papers, the display of equipment

or the submission of films for the International Competition, apply to the Permanent Secretariat of UNIATEC, 92 Champs Elysées, Paris 8, France.

A National Conference on Electronic Information Handling sponsored by the University of Pittsburgh, Goodyear Aerospace Corp., and Western Michigan University will be held October 7–9 at Webster Hall Hotel in Pittsburgh. The conference will be open to professional men and women concerned with problems in this field. Areas of discussion will include an analysis of the entire electronic information handling field; end uses of information; systems under development; systems' shortcomings; and plans for the future in research, hardware and education. Further information is available from Professor Allen Kent, University of Pittsburgh, Pittsburgh 13, Pa.



Prof. Joseph T. Tykociner gave one of the first public exhibitions of sound-on-film on June 9, 1922, on the University of Illinois campus when he demonstrated his system of recording sound optically by means of a variable-density soundtrack. More than four decades later an exhibit displayed in the Illini Union on the university campus honors the 96-year-old inventor who began his academic career in 1921 as the university's first research professor of electrical engineering.

Shown above is Prof. Tykociner viewing display panels in the exhibit. The first panel cites Prof. Tykociner's demonstration, "Edison — De Forest — Tykociner. The first two are known to most schoolboys, but the third — Tykociner — has slipped

almost imperceptibly into the pages of engineering history," the citation begins. The next two panels show the inventor's laboratory and equipment; the third shows, under magnifying glass, a portion of the original film with variable-density soundtrack besides the pictures. The next panel (last in the row) shows a page from the *New York World* of July 30, 1922, reporting the invention.

(The work of Prof. Tykociner has been described in the *Journal*, Aug., 1958, pp. 520-523, by John B. McCullough — "Joseph T. Tykociner: Pioneer in Sound Recording"; and Joseph E. Aiken — "Technical Notes and Reminiscences on the Presentation of Tykociner's Sound Picture Contributions.")

A Symposium on Quasi-Optics, 14th in the Polytechnic Institute of Brooklyn series of International Symposia (*Journal*, p. 820, Oct., 1963), will be held June 8-10 in New York. Three Professional Technical Groups of the IEEE (Antennas and Propagation, Microwave Theory and Techniques, and Sonics and Ultrasonics), as well as the Optical Society of America, are cooperating with the Microwave Research Institute of the Polytechnic Institute in organizing the symposium. It is co-sponsored by the Air Force Office of Scientific Research, the Office of Naval Research and the Army Research Office.

Session topics will be Diffraction; Moving Charges; Electron Beams and Plasmas; Resonators; Antennas and Propagation; and Techniques and Components. The opening session will be devoted to the state of the art. Two papers at the session will be "Quasi-Optic Diffraction" by L. B. Felsen, and "Comparison of Normal Mode and Ray Theoretic Treatments of Acoustic Propagation in the Ocean" by I. Tolstoy. A Round-Table Discussion on Resonators will explore alternative viewpoints on quasi-optic resonators. Papers will be presented by distinguished scientists from the United States and from England, France, the Netherlands and Italy.

The 7th Annual Summer Motion Picture Workshop will be conducted by New York University, July 27 to Sept. 4. It will be an intensive six weeks of creative filmmaking in the areas of motion-picture writing, direction, editing and sound recording. The workshop is conducted espe-

cially for advanced motion-picture students, for special students and teachers who have had equivalent film-production experience, and for those professionally engaged in the field. Films are produced in the University's studios at Washington Square and on location. Students work in groups of six per film and each group is responsible for the production of a one-reel documentary or dramatic film. Students participate in all aspects of motion-picture production from the writing of the script to the preview of the "answer" print.

Haig P. Manoogian is Director of the Workshop staff. Staff members are Irving A. Falk, John C. Mahon, Jr., and Walter J. Wicks.

The Photographic Society of America (PSA) has announced a special competition for students to be held in connection with the 35th Annual Film Competitionsponsored by the Motion Picture Division of the PSA. Students who are enrolled in accredited or approved college, university or photography school courses in cinematography are eligible to enter films. The films may be on any subject, in black-and-white or color, sound or silent, any length and any width. Winning film will receive a Student Film Award plaque. The film will be shown during the PSA International Convention to be held August 16-20 in Montreal, Canada. Closing date for the contest is July 31. Additional information is available from George W. Cushman, 2440 E. 4 St., Long Beach, Calif. 90814.

The American Science Film Association, 704 17th St., N.W., Washington, D.C.

20006, held its annual meeting May 11-13 in the State Department Auditorium. A film exhibition was held in conjunction with the meeting. Films on scientific and technological research, classroom instruction and public education were shown.

The 12th National Industrial Photographic Conference sponsored by the Professional Photographers of America, Inc., 152 W. Wisconsin Ave., Milwaukee, Wis. 53203, will be held August 2-7 at the Conrad Hilton Hotel, Chicago. Purpose of the conference is to present information on the latest photographic tools and techniques. Speakers will be nationally known experts. Topics will include Architecture in Industry; Filtering Mixed Light for Color; Small Negative Enlargements; Small Camera vs. Large Camera; Product Release; Audio-Visuals; Photographic and Art Department Coordination; Microminiature; Photoelastic Stress Analysis; Space Photography; Cinematography; Fiber Optics; Aerial Applications; and Highly Reflective Surfaces. The program will include panel discussions and a New Products Forum. There will be an exhibition of award-winning motion pictures and slide-films; there will also be a manufacturers trade and product show and an annual exhibition of professional photography. A half-day of the conference will be devoted to special government and military programs. A number of topics will be covered including Department of Defense Photography; Army's Audio-Visual Communications Center System; Marine Corps Photography; and Photography at Work in the Air Force.

A seven-language-track sound system was recently installed in one of Colonial Williamsburg's twin theaters. A combination of any six of the seven languages can be in use simultaneously. Translations are offered in German, French, Spanish, Italian, Russian, Portuguese and Japanese. For the presentation of the introductory film, *Williamsburg—The Story of a Patriot*, the English soundtrack is preset at a volume level well below normal, although audible enough to allow the foreign viewer the benefit of the music and sound effects. A hand-held, or lorgnette, earphone is employed so that he can listen to the translation with one ear and the low-level English track, music and sound effects with the other ear. No attempt was made to correlate lip movement. However, the system is electrically interlocked with the movie projector enabling an instantaneous translation of the dialogue. A dual purpose of the installation is that it can serve single, as well as mixed, foreign language groups in the 250-seat theater. If an entire group spoke the same language that translation could be fed through the theater public address system at a volume that would dominate the English soundtrack.

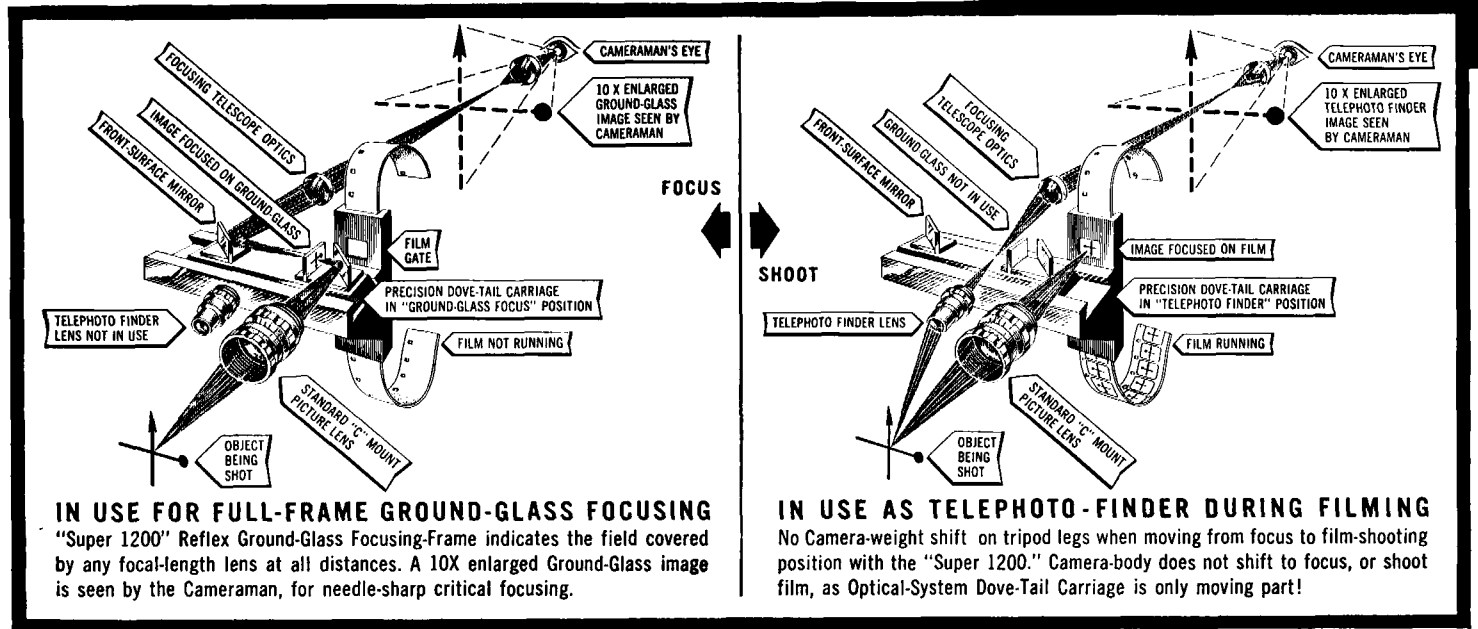
The new system was installed by W. A. Yoder Co., an audio-visual equipment firm of Richmond, Va. Translators from the U.S. State Department recorded the foreign language tracks.

The twin theaters were described under the title "The Colonial Williamsburg Theaters for a Wide-Screen Participation Film," by Arthur L. Smith and Ben Schlanger, *Journal*, 70: 677-685, Sept. 1961.

Auricon

"SUPER 1200" CAMERA with Full-Frame Reflex Ground-Glass FOCUSING OPTICAL SYSTEM

The unique and versatile features built into the 16mm Auricon "SUPER 1200" Sound-On-Film Recording Camera have prompted Producers and Cameramen to name the Super 1200... "Finest 16mm Sound Camera ever built!" This Camera is "Self-Blimped" for whisper-quiet Studio work, has 33 minutes of continuous film capacity, Variable-Shutter or Kinescope "TV-T" Recording Shutter, plus the combined "Rifle-Scope" Telephoto Finder and Reflex-Focusing Optical Systems illustrated below. Its only equal is another Auricon "Super 1200"...



IN USE FOR FULL-FRAME GROUND-GLASS FOCUSING
"Super 1200" Reflex Ground-Glass Focusing-Frame indicates the field covered by any focal-length lens at all distances. A 10X enlarged Ground-Glass image is seen by the Cameraman, for needle-sharp critical focusing.

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No Camera-weight shift on tripod legs when moving from focus to film-shooting position with the "Super 1200." Camera-body does not shift to focus, or shoot film, as Optical-System Dove-Tail Carriage is only moving part!

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FEATURES OF MODEL CM-74 CAMERA INCLUDE...

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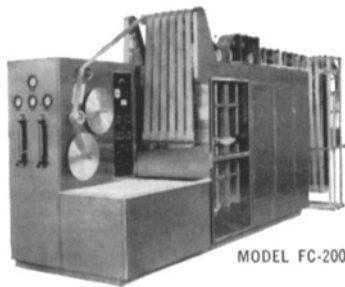
A **PROVEN** line
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FROM *hi-speed*

HI-SPEED MODEL FC-200

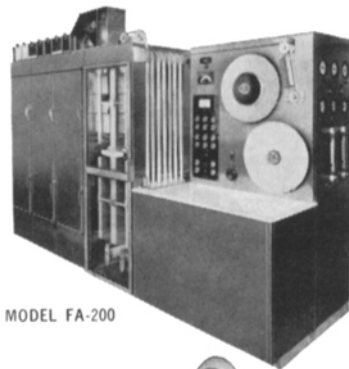
SPRAY DEVELOPER — Processes all your black and white film from 16 to 70mm, continuously, automatically, to a superior and uniform standard of quality. Speeds up to 150 ft. per minute, depending on film type. Unique spool arrangement and servo-drive system provides smoothest drive characteristics, optimum film tension, constant residence time in each cabinet. Automatic film change-over. All-spray design includes spray developing, fixing, wash, impingement drying. 5 minute pull-through time. Quick, easy maintenance and installation — requires only power, water, and drain connections.



MODEL FC-200

HI-SPEED MODEL FA-200

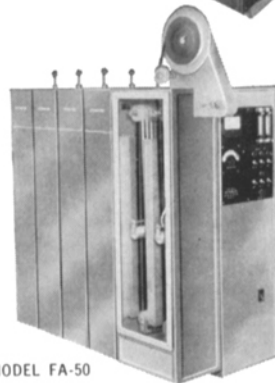
SPRAY DEVELOPER — For 16/35mm black and white film. Meets very highest quality standards at speeds up to 200 ft. per minute. Provides precise temperature control of developer, hypo, wash and drying air for optimum results on camera or dupe negatives, separations, masters, sound tracks, or release positives. Any solution temperature from 70°-95°F can be chosen and maintained to within $\pm 3^\circ\text{F}$. All directional effects eliminated. H & D strips produce identical curves whether run head first or tail first.



MODEL FA-200

HI-SPEED MODEL FA-50

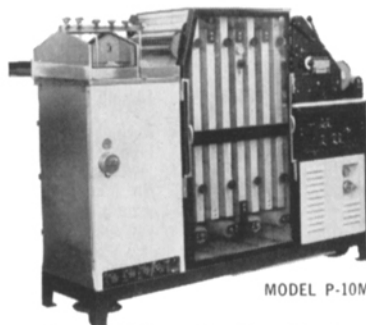
SPRAY DEVELOPER — Here is spray processing at *popular prices*. Produces crystal clear, ultra-sharp film, 16mm and 35mm, perforated or unperforated. Requires 2½ gallons of developer and hypo. Speed: 50 fpm positive, 25 fpm negative. Rugged, heavy duty construction for continuous, trouble-free operation with minimum maintenance.



MODEL FA-50

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Hi-Speed products for the photographic laboratory: Spray Developing Machines — Negative-Positive Color Equipment — Kodachrome, Ektachrome and Anscochrome Installations — Roll Paper Processors — Silver Recovery Systems — Custom Photographic Processing Equipment — Laboratory Engineering Service. Hi-Speed Equipment, Inc. is a member of the Artisan Industries family of companies, serving a broad segment of industry. Each associated company brings to its own field impressive experience and resources. Whenever necessary, these resources can be pooled to bring to your problems a combination of skills, facilities, and experience unmatched in the field of special production equipment.



The **Industry Film Producers Assn.** will hold its Fifth Annual Conference June 4-6 at the Disneyland Hotel in Hollywood. Keynote speaker will be General Joseph J. Cody, Jr., Vice-Commander, Air Force Space Systems Division. Cinema industry "Cindy" awards for the best industry-produced films of 1963 will be presented at the annual awards banquet on the final night of the conference. On the same night the Jay Gordon Memorial award will be made for outstanding individual contribution to the field of industrial films. The IFPA Conference Vice-President is Joseph M. Gulli of Lockheed-California Co.

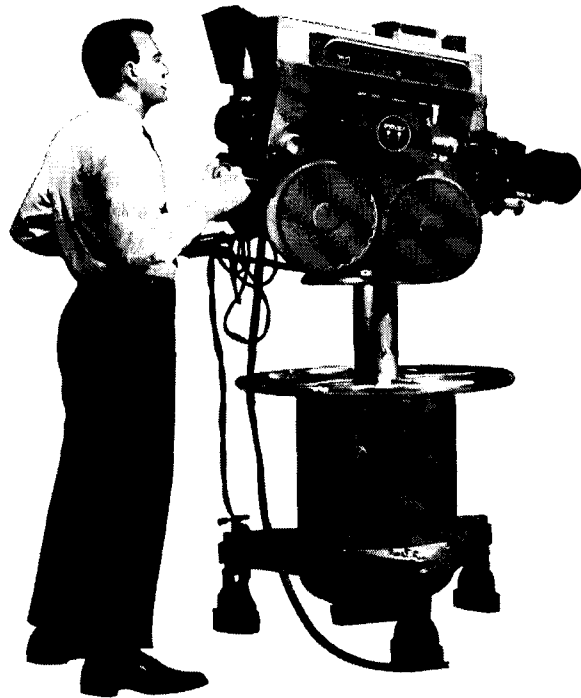
A seminar on the subject of **Techniques in High-Speed Photography** will be held July 20-24 at the Massachusetts Institute of Technology. Meetings will be held at the Stoboscopic Light Laboratory with mornings devoted to theory and demonstrations and afternoons to laboratory practice. One of the aims of the program is to give those who attend a practical, everyday working knowledge of many of the cameras in active use. Topics to be discussed include pulsed stroboscopic lighting; optical high-speed cameras; Kerr cells; Faraday shutters; and image converters. Inquiries should be addressed to: Office of the Summer Session, M.I.T., Room 7-103, Cambridge, Mass. 02139.

The **Institution of Electronic and Radio Engineers (IERE)** is the new name of the organization formerly known as the British Institution of Radio Engineers. The Institution was formed in 1925. At that time there was considerable discussion about title and the term "electronic" was advocated for inclusion in the name of the Institution. The discussion was revived in 1944 when the Institution's Post-War Development Report defined electronics as "the radio valve or kindred devices at work in ways other than direct aural or visual communication." The announcement stated that in the last 20 years such work has achieved increasing prominence in the learned society activities of the Institution as well as in the professional occupations of its members. The IERE now occupies Nos. 8 and 9 Bedford Square, London, and is shortly to take on additional administration offices at No. 3 Gower St. The Institution has Divisions or Sections in many countries of the Commonwealth and its membership is distributed throughout 64 countries.

Brooklyn College Television Center, dedicated March 19, includes two studios, the larger having more than 2,000 sq ft of floor space with equipment supplied by RCA. In addition to preparing instructional tapes to be used at Brooklyn College and other institutions, the Center will be a source of programs for metropolitan viewers and will also help to supply trained personnel for the television industry.

Engineering Index, Inc., now located at 345 E. 47 St., New York, N.Y. 10017, offers three services. The Engineering In-

THE REVOLUTIONARY GEMINI TAPE/FILM SYSTEM



NOW AVAILABLE TO TV STATIONS and VIDEO TAPE PRODUCERS

GEMINI is a fully perfected system which produces simultaneous, direct 16mm film during videotape production. GEMINI replaces the kinescope with a dependable, high quality motion picture film. Developed by MGM Telestudios, the GEMINI system uses a 16mm camera unit mechanically and optically coupled to the TV camera. No special lighting is required. Normal good television lighting yields good GEMINI film. If proper, simple procedures are followed, the picture on the TV monitor will faithfully be reproduced on 16mm film. Our exclusive Edilite system, feeding off the tally lights, marks the film with a line of light when the camera is "taken." Most editing, therefore, becomes automatic in a zero cut printer, and does not require the physical cutting of the film.

Every Television broadcaster, studio and producer that uses electronic cameras has a need to record a portion of his total production. Videotape supplies this need in many cases. However, the cost of videotape equipment, stock and handling represents a financial burden in many

situations. Particularly is this true where programming is to be widely distributed within and outside the country, such as in the case of producers of entertainment programs, educational material, industrial features, commercials, training programs, etc.

Also, foreign distribution of videotape is generally impractical because of differences in technical standards throughout many countries of the world. However,

every TV station in the world is equipped to use 16mm film, and regular projection equipment for group screenings is universally available and commonplace. The GEMINI system fulfills this recording and distribution need with economy, dependability and quality, backed by the reputation of the world's foremost production organization.



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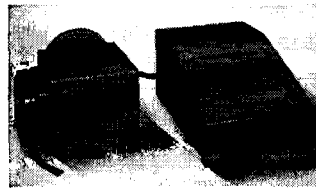
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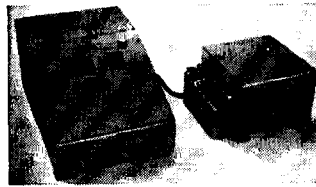
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AUTOMATIC
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Bell & Howell modern research and engineering has produced this completely new additive color printing system, that permits you to deliver color prints with a color accuracy and fidelity never before possible. The new Bell & Howell Model "C" additive color printer assures color stability and control through the use of dichroic mirrors which separate a single 1,000 watt light source into the three primary beams. For scene-to-scene correction, each primary beam can be modulated through 50 steps in values of .025 Log E. In addition twenty-four points of .025 Log E values of exposure are available manually, to allow for any necessary emulsion corrections.



Program Tape Perforator



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The pre-selected color timing information is easily and quickly pre-programmed on standard computer tape, which automatically controls the Model "C" Printer. Besides scene-to-scene color changes, fade lengths of 16-24-32-48-64-96 frames and zero close for extended scenes are also coded on the

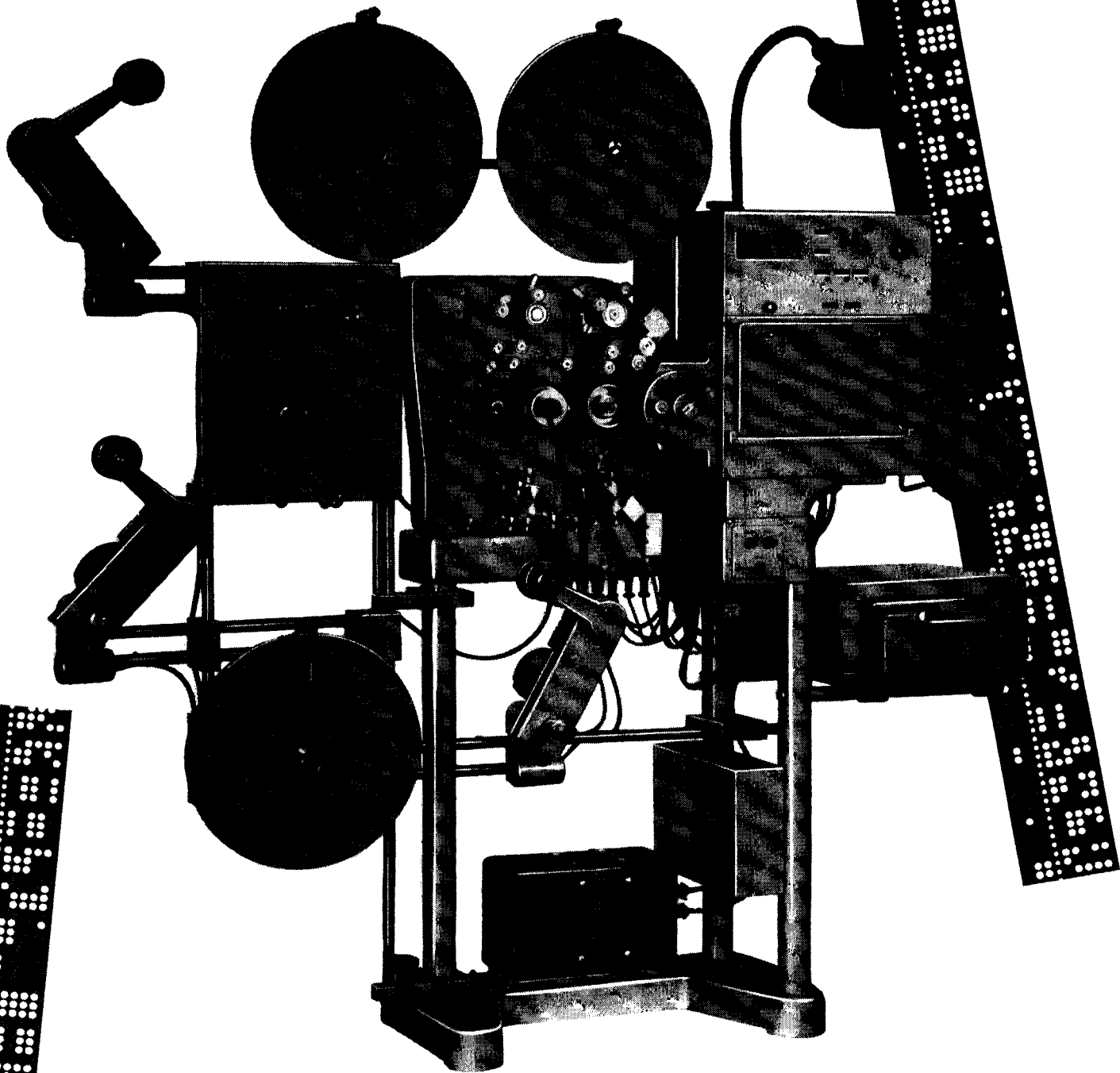
program tape to allow the production of release prints from original negatives at 180 feet per minute. All printing information can be double checked from the punched tape by an accessory tape checker-duplicator.

Other features are 2400-foot capacity . . . Single 1000-watt lamp (optional 750 and 1200), proximity reflector type . . . Edge light printing separately controlled at aperture . . . Instruments internally illuminated . . . Slow-start circuit to prevent film damage . . . Internal air pressure.

Accessories include 1000-watt rectifier . . . 16mm, 35mm and 35/32mm soundheads and RF cue kits.

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MODEL "C" FEATURES—Ability to make scene-to-scene color corrections . . . Six fade lengths (16-24-32-48-64-96) separately controllable by pre-punched program tape . . . Zero close to allow extended scene printing . . . Over 2000-foot capacity . . . Single 1000-watt lamp proximity reflector type . . . Edge light printing separately controlled at aperture . . . Instruments internally illuminated . . . RF cue system available as accessory to supplement standard notch cue . . . Slow-start circuit to prevent film damage . . . Internal air pressure . . . Pre-wired for sound head installation . . . Automatic stop in case of negative break.

ACCESSORIES—Tape checker-tape duplicator unit (6173C), 1000-watt rectifier (6160), RF cue kits (6395) and 16mm, 35mm, 35/32mm soundheads.

OTHER MODELS AVAILABLE—Model "MB" automatic high speed printer, for black and white or color printing (where scene-to-scene color corrections are not required). This model is pre-planned and pre-drilled for up-dating to the Model "C" at any time.

Both Model "C" and Model "MB" are available for the following sizes 16mm, 35mm, 35/32mm, 65/70mm, 70mm type I, and 70mm type II.

Demonstration Film Available

A three minute color sound film has been prepared demonstrating the additive color system of motion picture printing. Examples of color correction are shown, as well as demonstrations of the unique new light valves combined with tape controlled operation. To preview this film write or phone James L. Wassell, Director of Marketing, Bell & Howell Company, 7100 McCormick Road, Chicago, Illinois 60645, (312) OR 3-3300.

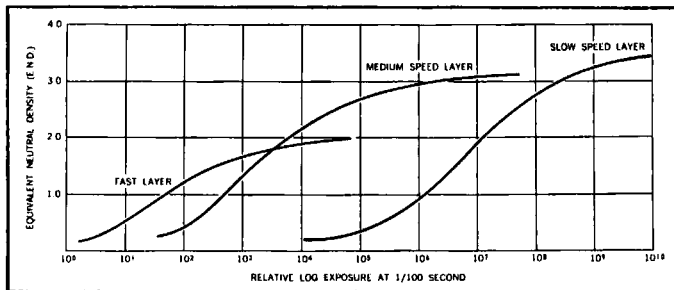
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XR Film records the data you always hoped to get of: missile exhaust flames, plasma streams, ordnance detonations and astronomical and other phenomena.

XR Film takes pictures across a speed range extending from ASA 400 to ASA 0.004 (a useful exposure response of 8 decades or 100-million to 1), with a single combination of aperture and shutter speed settings.



Conventional Log E characteristics for XR Film must be represented by three separate D, Log E Curves, one for each emulsion layer.

XR Film virtually cannot be overexposed.

XR Film, with a single aperture and speed setting of the camera, can record data that normally requires the use of several camera-film combinations.

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XR Film is available now in standard 16 mm and 35 mm roll sizes, 35 mm cassettes, 4 x 5 and 8 x 10 cut sheets and 5-inch aerial.

XR Film can be used by you to solve critical problems in photography. To order or for further information (including technical data and prices), phone, wire, or write: XR Customer Service Department, Edgerton, GERMESHAUSEN & GRIER, Inc., 160 Brookline Avenue, Boston 15, Mass. Phone: COpley 7-9700 TWX: EG&G BOS 617-262-9317.

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Eight Soviet physics journals are now available in English from the American Institute of Physics, 335 E. 45 St., New York, N.Y. 10017, with the cooperation of the National Science Foundation, according to a recent announcement. Prices range from \$22.50 for six issues of *Uspekhi* to \$95.00 for 12 issues of *Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki* (Soviet Physics — JETP) with slightly higher rates for foreign subscribers. (*Uspekhi* is also available at half rate to individuals whose employing organizations subscribe to it. Other Soviet journals available in English from AIP are *Fizika Tverdogo Tela*; *Zhurnal Tekhnicheskoi Fiziki*; *Akusticheskii Zhurnal*; *Doklady Akademii Nauk SSSR*; *Kristallografiya*; and *Astronomicheskii Zhurnal*. The announcement noted that Vol. 133 of the *Physical Review* (Jan. — Mar. 1964) contains 451 articles of which 84 contain JETP references.

The Golden Eagle has been awarded by the Council on International Nontheatrical Events (CINE) to 101 motion pictures and nine motion pictures have won the newly established Golden Eagle award for films made by teen-agers. The award-winning films are those chosen by CINE to represent the United States in major international film festivals. The 101 Golden Eagle films were selected from more than 300 nontheatrical, television documentary and entertainment short subject films submitted from all over the United States. From the 1964 winners as well as from some winners of previous years, the United States will submit entries to at least 30 major foreign festivals during the year.

The 8th San Francisco International Film Festival will be held Oct. 14-27 at the Metro Theater in San Francisco under the auspices of the International Federation of Film Producers Associations, an international organization that formulates regulations for film festivals now operating in 71 cities throughout the world. Films in four categories will compete for the Golden Gate Award. The categories are 35mm Feature Films, 35mm Short Films, 16mm Film as Art, and Film as Communication. Cash awards totaling about \$1,000, established by the Harold L. Zellerbach Art Foundation Awards, will be awarded to the short films in the 16mm Film as Art category which are selected by the awards



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jury. Additional information is available from the Festival's Information Center, 172 Golden Gate Ave., San Francisco 2.

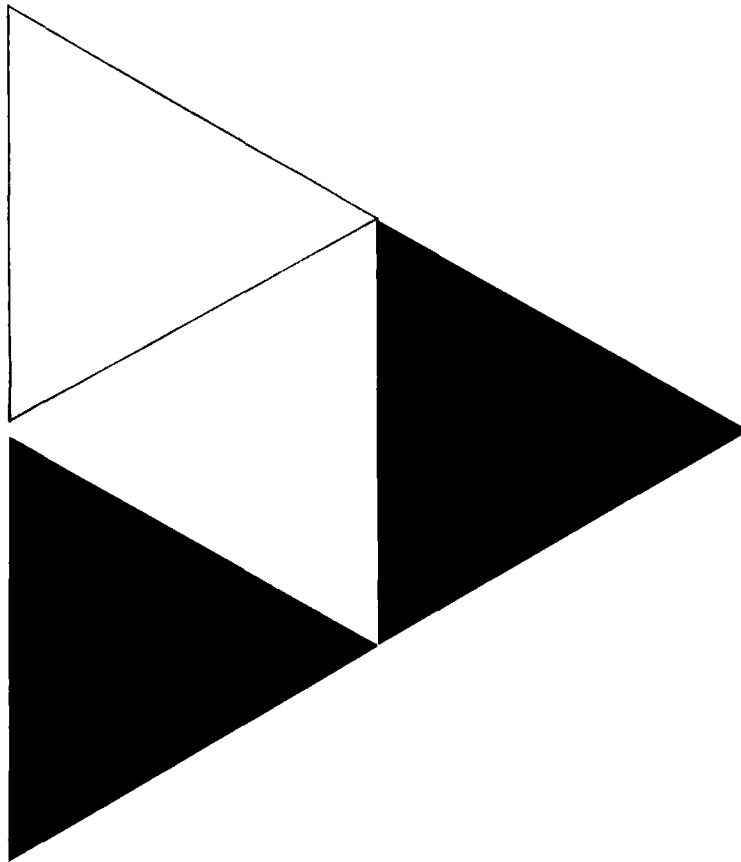
Three out of five research and development engineers are on the government payroll, either directly or indirectly, according to a Department of Labor report cited in the Newsletter issued by the Professional Engineers in Industry section of the National Society of Professional Engineers, 2029 K St., N.W., Washington 6, D.C. The report states that more than 120,000 engineers and scientists are now employed directly by the Federal government and that perhaps half as many in state or local governments. About 300,000 are said to be employed in Federally financed programs in private industry, universities, and other nonprofit organizations.

The Commission on Engineering Education, 1785 Massachusetts Ave., N.W., Washington, D.C. 20036, will sponsor an exhibit of educational materials for engineering educators, June 22-25, at the 72nd Annual Meeting of the American Society for Engineering Education to be held at the University of Maine, Orono, Maine. Textbook publishers and manufacturers of audio-visual equipment will participate in the exhibit. The Commission on Engineering Education is a nonprofit organization financed initially by a grant from the National Science Foundation. It was established to develop and maintain engineering education at a maximum level of excellence.

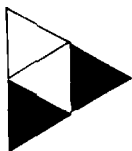
A special 4-session course on the operation and maintenance of Arriflex 16mm and 35mm cameras sponsored by IATSE Local 659 was recently conducted by Birns & Sawyer. Classes were held at the firm's Rental Department at 1014 N. Vine St., Hollywood, on March 24, April 7, April 21 and May 5. Attendance was limited to Local 659 cameramen who were chosen by the union. Subjects covered included a discussion of the basic features of the Arriflex 16mm and 35mm cameras; reflex viewing; lenses; magazines; sync control systems; sound blimps; sound and heater barneys; underwater camera housings; tripods; motors; batteries and power supplies and other accessories. Special emphasis was given to describing the basic operation of Arriflex cameras and various problems which may arise. Classes were conducted by Marvin Stern, Manager of the Birns & Sawyer Rental Dept., and Norman Margolin, Supervisor of Maintenance.

A series of training sessions for Altec service engineers is being conducted by Century Projector Corp., 729 Seventh Ave., New York, N.Y. 10019, at its factory in Long Island City. The training covers the firm's American-made projectors and its all-transistor sound systems.

The Philip A. Hunt Chemical Corp., Palisades Park, N.J., formerly known as the Philip A. Hunt Co., completed a public distribution of its Class A common stock during its 55th year of business in



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March 1964, according to an announcement from J. S. Coles, President. Among the firm's subsidiary companies are the Hunt Chemical Works, Ltd., with offices in Long Island City, N.Y., and the Philip A. Hunt Company (Canada) Ltd., with headquarters in Toronto, Can. The firm has manufacturing facilities located in Long Island City, Chicago, Cleveland, Los Angeles, Toronto, and Palisades Park.

Technicolor Corp. of America plans to acquire the issued stock of Technicolor Ltd. of London (approximately 49%) not already held by Technicolor Corp. of America at the price of 21 shillings in cash for each stock unit. The announcement was made by Patrick J. Frawley, Jr., Chairman of the Board and Chief Executive Officer of Technicolor, Inc., of which Technicolor Corp. of America is a wholly-owned subsidiary. In making the announcement Mr. Frawley said that the move is "in line with Management's confidence in the continued growth and expansion of the motion-picture industry and in the increased use of color for feature productions of all budgets."

Monogram Industries, Inc., of Culver City Calif., has acquired Magnasync Corp. of North Hollywood, according to an announcement from Martin Stone, President of Monogram. The acquisition involved purchase of 60% of Magnasync's outstanding stock. Magnasync manufactures military and commercial sound-recording systems. Its current major projects include follow-on orders from the U.S. Air Force and Australian government for its 10-channel, air-to-ground voice recording and reproducing systems, the announcement stated.

Matthew Stuart & Co., importers of the Korting, Conferette, Phono Trix and Bryan tape recorders has moved to new and larger quarters at 3650 Dyre Ave., Bronx, N.Y. 10466. The firm was formerly located at 156 Fifth Ave., New York, N.Y. 10010.

Newtek, Inc., 39-25 62nd St., Woodside 77, L.I., N.Y., is a newly formed subsidiary of Aeroflex Laboratories, Inc., which has been established to design and manufacture products for the electrooptical field. Among its current areas of activity are image integration camera and system, to enhance the quality of photography and improve the information content and signal-to-noise ratio of photographic images; quantized scanners, for ultra-fast random access scanning and recording on photographic film, using an evaporated solid state matrix; precision flying-spot scanner for raster type and random access scanning in photographic data extraction and recording, using both advanced electronic and unusual optical techniques for a wide range of image processing problems, and other similar areas of research and development.

George D. Margolin has been appointed Vice-President and General Manager of Front Projection Corp., 404 Park Ave. So., New York, N.Y. 10016. The newly-formed

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firm produces a projection system said to permit greater efficiency and ease in the projection of lifelike backgrounds for professional photographic, motion-picture and television use. Prior to his present appointment, Mr. Margolin had been Technical Editor of *Popular Photography Magazine* and had acted as consultant on phototechnical and marketing problems.

Three new appointments to the Bell & Howell audio-visual sales staff have been announced by Carl G. Schreyer, President of Bell & Howell Photo Sales Company. Theodore C. Donhauser has been appointed Midwest Regional Manager of Audio-Visual (AV) Industrial Sales. He succeeds James J. Graven, who has been named Manager of AV Industrial Sales. Henry H. Wilson has been appointed Audio-Visual Sales Engineer. Mr. Graven has been with the firm since 1956. He was formerly Director of Audio-Visual Sales for Ampro Corp. Mr. Donhauser has been with the firm since 1960. Prior to his present appointment he was District Manager for Bell & Howell Consumer Products in the Salt Lake City, Utah, area. Prior to his present appointment Mr. Wilson was Administrator of Bell & Howell field service, a post he had held since 1957.

Ernest J. Dieterich has been appointed Director of Engineering for Midwest Operation, Data Products Corp., 8535 Warner Dr., Culver City, Calif. His headquarters will be in the firm's St. Paul, Minn., facility and he will be responsible for the firm's midwest engineering activities. Prior to this appointment, Dr. Dieterich was Group Director of Systems and Logic for Honeywell's Electronic Data Processing Division.

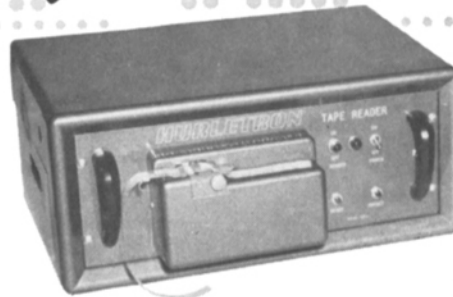
Les McElwain has been named Midwestern Regional Sales Manager for the Reeves Soundcraft Division of Reeves Industries, Inc. His headquarters will be in the Reeves Soundcraft Midwestern regional Office, 28 E. Jackson St., Chicago. Mr. McElwain has been associated in various sales managerial positions with TRW Semiconductors, Inc., since 1962. Prior to that he was a senior sales engineer for General Electric Co.

A major distribution center for tapes manufactured by Reeves Soundcraft Div. of Reeves Industries, Inc., has been established at the firm's warehouse at 342 N. Labrea Ave., Los Angeles. Tapes include audio range, video, computer and instrumentation tapes. The new distribution center will be under the supervision of John E. Borg, West Coast Regional Manager for Reeves.

Byron L. Allison has been appointed to the newly created position of Director of Marketing for Military and Special Products, Photo Products Group, Bell & Howell, 7100 McCormick Rd., Chicago 45. Prior to this appointment Mr. Allison was Vice-President and Director of Sales for Chicago Aerial Industries. He had previously held a number of engineering positions during a 10-year association with Bendix Corp.

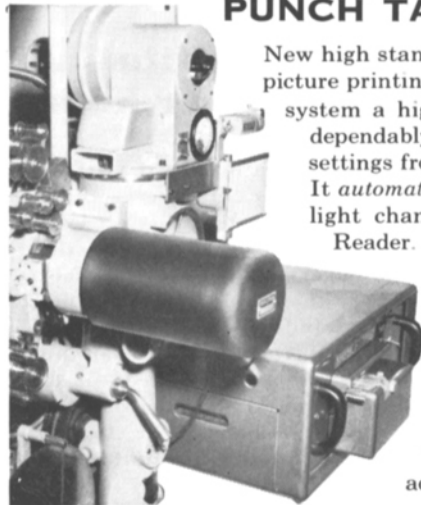
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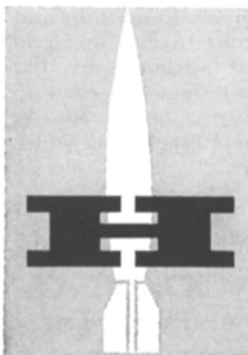
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