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been a frequent lecturer — Illuminating Engineers Society; CBC Technical and Production staff; Ryerson Polytechnical Institute; SMPTE Little Convention. Part of research team whose work resulted in three technical papers at 1959 Miami Beach Convention re: Standardized Gray Scale Characteristic for Vidicon Telecine Density and Exposure Control for Television Film; and Constant Density Laboratory Process for Television Film. 1951 organized the CBC Film Operations. Received Centennial Medal of Canada in recognition of valuable service to the Nation; Citation from the Chief of Defense Staff, Canadian Armed Forces. Active member of the Toronto Section of the SMPTE — having been Program Chairman, Manager, Secretary/Treasurer and Section Chairman since 1959. Chairman, Program Chairman and Arrangements Chairman, Little Convention. Program Chairman 116th Technical Conference. Fellow of the SMPTE.

Joseph A. Flaherty. General Manager, Engineering and Development at CBS Television Network. 1952, degree in physics from University of Rockhurst. Joined CBS in 1957; design-

ing television network systems and plants. 1959, network's Director of Technical Facilities Planning. Presently responsible for all Engineering and Development activities for CBS Television. Fellow of SMPTE; Vice-President for Television Affairs; author of many technical articles published in the *Journal* on various aspects of Television Broadcasting. Emmy Award Citation for CBS Minicam Color Camera in 1969; 1974 David Sarnoff Gold Medal for progress in television engineering.

Frank L. Flemming, Vice-President Engineering, NBC Television Network. 1949 BSEE degree from University of Buffalo. Joined Sylvania Electric Products, designing television broadcast equipment. 1954 joined CBS Television Network doing equipment and systems design work. Director of Plant Systems Engineer in 1965 responsible for numerous broadcast systems engineering projects. 1967 Chief Engineer for Visual Electronics. Joined NBC in 1969. Responsible for design and installation of all major technical systems at the network and the owned station's studio plants. Fellow of SMPTE.

Industry News & Educational Activities



SMPTE Overseas

International activities of the Society during 1976 included representation at four meetings overseas — ISO Technical Secretaries in Geneva; Photokina in Cologne, Germany; the UNIATEC Congress in Moscow; and the International Broadcasting Convention in London.

In September, Alex Aiden, SMPTE Manager of Engineering Services, delivered a paper at a Seminar for ISO Technical Secretaries in Geneva, Switzerland. He provided a detailed analysis of the Society's operation of the ISO/TC36 Secretariat, contributing to the overall understanding of the international administrative work of ISO. After visiting Copenhagen and Berlin in connection with the Society's ISO participation, he attended the International Broadcasting Convention in London. The pho-

tograph above shows Aiden (third from the left) at the Seminar for ISO Technical Secretaries. Others in the group are C. Meredith (United Kingdom); R. B. Toth (USA); and B. S. Auzamenko (USSR).

The Society was represented at Photokina (10-16 September) by Pablo Weinschenk-Tabernerero, SMPTE Motion Picture Engineer, who distributed SMPTE literature (information on test films and Society activities) to thousands of persons attending Photokina. (A full report on Photokina appears on pp. 983-988 in the December 1976 *Journal*.)

In October SMPTE President Kenneth M. Mason; Chairman of the International Relations Committee, Robert Gale; and SMPTE Executive Director Denis Courtney represented the Society at the 12th UNIATEC Congress in Moscow. A report on the Congress will appear in a forthcoming issue of the *Journal*.

PROBLEM: You've got to shoot under fluorescents, mixed lighting or outdoor extremes...color must be perfect.

Don't expect an ordinary color temperature meter that reads only blue and red light to give you accurate filtration under such difficult—yet everyday—conditions. There's only one that can. The new Spectra® TriColor™ Meter.


The TriColor is a *full-spectrum* professional color meter. It measures all three primary colors: blue, red, and green. Touch the trigger, and the dual meter needles instantly lock in on the values. Then, just read the correct filtration on a handy pocket computer card.

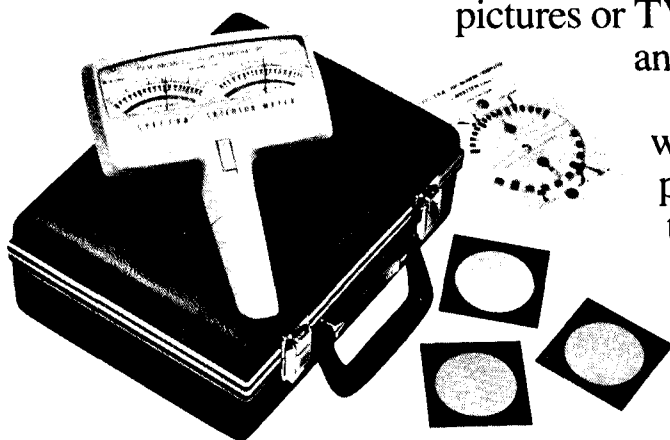
It works in any light—indoors, outdoors, mixed ambients—

—with any color film. Anywhere, because it's battery powered and lightweight.

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Ask your photo dealer for a demo, or write for Lit/Pak 4, Ehrenreich Photo-Optical Industries, Inc., Woodbury, N.Y. 11797.  **SPECTRA®**



SOLUTION: The new Spectra TriColor Meter gives you precise corrective filtration, in any light.

Board of Editors Chairman Pierre Mertz Retires

Pierre Mertz, Chairman of the Society's Board of Editors for 25 years, has retired. The incoming Chairman is Rodger J. Ross, who was Editorial Vice-President for the 1967-68 term.

A member of the Society for some 35 years, Dr. Mertz was made a Fellow in 1948 and in 1971 he was made an Honorary Member. (The grade of Honorary Member is the highest honor bestowed by the Society, an accolade granted to only a very few of its most distinguished members.)

During his years as Chairman of the Board of Editors, Dr. Mertz's guidance and influence were directed toward maintaining the high quality and prestige of the *SMPTE Journal*.

A number of important papers authored by Dr. Mertz have appeared in the *Journal*. Among his many other contributions to the *Journal* were translations, historical notes and reports. (A detailed Biographical Note presenting some of the highlights of Dr. Mertz's career appears on p. 607 of the July 1974 *Journal*.)

The American Society of Cinematographer's meeting on 25 October featured a debate between directors of photography and laboratory technicians. Laboratory representatives were: Raymond Gaul, Technicolor; Walter Eggers, MGM; Ted Fogelman, CFI; Fred Scobey, DeLuxe; and William Bickford, Movielaab. Volker Bahnmann of Arriflex Corp. demonstrated camera equipment first shown at Photokina. ASC headquarters are at 1782 N. Orange Dr., Hollywood, CA 90028.

The IFPA (Information Film Producers of America) reported an attendance of more than 400 registrants at its annual national conference, trade show and Cindy Awards presentation, held during the month of September at Palm Springs, Calif. Highlighting the event was the presentation of some special awards. The IFPA Gordon Award for Technical Excellence went to Cinema Products Corp. for its development and use of the Brown Steadicam.

A special honor went to Emery Kolb, an industry pioneer who is now 98 years old. He is the oldest living producer still showing film. A motion-picture he made some 60 years ago, documenting his explorations of the Grand Canyon and the Colorado River is still being shown.

Climax of the four-day conference was the presentation of Cindy awards. Best in Show Award for a 16mm film went to *A Walk in the Forest*.

The American Film Institute is accepting applications until 1 March for next year's program at its Center for Advanced Film Studies, 501 Doheny Rd., Beverly Hills, CA 90210. Students at the Center specialize in directing, production management, screenwriting, cinematography, or art directing. The program is open to advanced filmmakers and to individuals without background in film who have experience in such related areas as literature, theater, music, photography, or fine arts.

Ben and Harry Teitelbaum of Hollywood Film Co., 956 Seward St., Hollywood, CA 90038, have announced the acquisition of the business of PSC Technology, Inc. (formerly Producers Service Corp.), manufacturer of optical printers

and accessories. The acquisition will add optical printers, liquid gates and related items to Hollywood Film Co.'s manufacturing and sales lines, the announcement stated.

Buck Film Laboratories has announced a move to 714 Banbury Ave., Slough, Bucks, England, as a result of rapid expansion necessitating the acquiring of larger quarters. The new facility will accommodate existing equipment for multi-rank printing of 8mm films but will allow for the installation of the latest high-speed, high-temperature color processes.

Stockdale Corp., 2211 W. 2300 South, Salt Lake City, UT 84119, has announced acquisition of Acme Film and Video Labs Ltd. in Hollywood, Calif. The new facility, renamed Photo-Tech Laboratories/Hollywood, will offer 16mm and 8mm printing and processing services. Processing equipment will include VNF (Video News Film), Eastman Kodak's new color reversal film.

Audio Service Co., 565 Fifth Ave., New York, NY 10017, has announced a new audio rental service. Sound products available for rental include Nagra recorders, Sela mixers, microphones and a wide variety of accessories. The sound equipment is available on a daily, weekly or monthly basis and can be shipped throughout the country to meet customer's requirements, the announcement stated.

Berkey Manhattan Filmstrip and Slide Laboratories, 222 E. 44 St, New York, NY 10017, now has the capability of providing complete service on cassette and cartridge mastering, loading and duplicating. The announcement was made by Selwyn Robbins, President.

Eastman Kodak Co. announced four appointments in the consumer products engineering area at Kodak Apparatus Division (KAD). Vernon H. Jungjohann was appointed Manager, Current Products Design. David E. Beach, Bruce L. Elle and G. Edwin Kindig were appointed Managers, Product Design.

Paul Wittlig retired 23 October from CBS TV Network after 42 years of service. At the time of his retirement he held the post of Staff Consultant, Engineering Development. Prior to that appointment he had been Director of Production and Development, his work including the development of special electronic and optical effects. Among his noteworthy developments were the first mechanical digital display device (DDU); digital clock for *Captain Kangaroo*; polarized animation signs; and rotating prisms.

One of Wittlig's most widely known developments is a system called Videoscene. Use of this system maintains the relative size of a miniature scene as the studio camera moves toward or away from a subject keyed into the miniature set. This effect was accomplished by devising an electronic zoom—a type of zooming device that utilized a technique which varied the CRT election beam deflection to vary the raster size and thereby produce a zooming effect.

Wittlig will continue to be associated with CBS in the capacity of a consultant. He is a Fellow of the Society.

Everett L. Hanson has been appointed Director of Maintenance and Building Operations for

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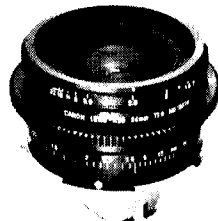
INTRODUCING THE CANON ULTRA-FAST ASPHERIC PRIME LENSES FOR 35MM CINEMATOGRAPHY

Specifically designed for professional cinematography, these exciting new lenses are the result of an extensive and painstaking research program jointly undertaken by Canon Inc. and Cinema Products Corporation, in cooperation with the Research Center of the Association of Motion Picture and Television Producers.

Naturally, these lenses incorporate all the latest advances in modern lens technology, including multiple anti-reflective coatings on all elements, floating elements wherever required, etc.

But it is the *aspheric* property of these lenses that makes them so extraordinary — because aspheric lens design is inherently superior to conventional lens design since it permits the best possible use of all available light.

And, unlike any other series of high speed lenses currently available for motion picture use, every lens in the Canon series is aspheric.



24mm (T1.6)



35mm (T1.4)



55mm (T1.4)



85mm (T1.4)

lower, with nothing but neon signs and street lamps for illumination, there's virtually no halation. The Canon aspherics just take the light in: penetrating the scene, holding all the detail.

The Canon aspheric lenses minimize uncontrollable flare (with its concomitant loss in contrast and resolution) and improve the definition and contrast of the scene *regardless of variation of light levels within the scene*. Even at the highest levels of illumination.

The result on film is photography that is remarkably clear and sharp, well defined and well balanced, with good color rendition and saturation, especially with regard to flesh tones.

Which makes the Canon aspheric lenses ideal for filming under any and all light conditions. Night-for-night with available light, as well as in broad daylight, or on a well lit sound stage.

The technological breakthrough

While the theory for the design of aspheric lenses has been known for quite some time[†], it was not until the advent of modern computer technology and the development of computer-controlled automated machinery that it became possible to design and grind aspheric lenses in such a way as to permit *consistent high quality manufacture at a reasonable cost*.

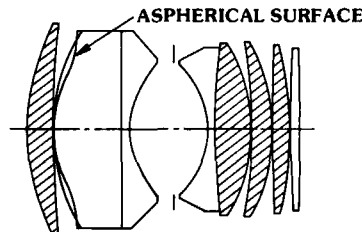
Which is what prompted Canon and Cinema Products to launch a development program for a series of ultra-high-speed aspheric prime lenses, all supplied with BNCR-type mounts, and covering the range of focal lengths most used in professional cinematography: 24mm, 35mm, 55mm and 85mm.

A great deal of money, time and effort went into this program. The final results are more than well worth it.

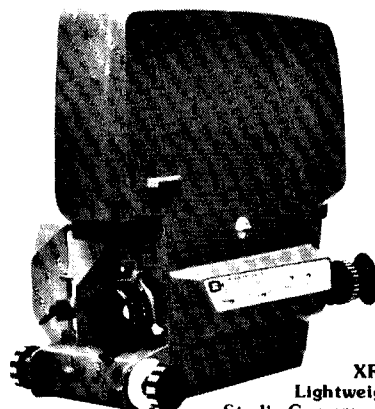
Aspherics — ideal for filming at all light levels

By causing the marginal rays to be in sharp focus, and, at the same time, rejecting random or spurious rays, the Canon aspheric lenses improve definition and sharpness at the edges and reduce flare when the lens is *wide open*.

Shooting night-for-night with available light — the aspheric lens wide open — at 25 footcandles and even



Arrow points to aspherical surface. The deviation from the normal spherical curve is exaggerated for illustrative purposes.



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Let your eyes convince you

Ask your dealer (or call Cinema Products) to arrange for a screening of our dramatic 35mm test reel comparing the Canon aspherics with other high speed lenses for motion picture use.

Before you start on your next film project, shoot some test film of your own.

Your eyes will convince you. The Canon aspheric prime lenses are superior to any other high speed lenses currently available for 35mm cinematography.

[†]Descartes, the French philosopher and mathematician, had already suggested that the use of non-spherical surfaces might reduce optical aberration. That was way back in 1638.

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DeLuxe Laboratories, 1546 North Argyle Ave., Hollywood, CA 90028, it was announced by Fred J. Scobey, Senior Vice-President. Hanson has been with DeLuxe since 1956. In his new post he will be responsible for all company building operations, service shops and their maintenance. DeLuxe Laboratories Hollywood facilities are among the largest in the world.

Julian Hopkinson, Pacific Region Technical Manager, Motion Picture Products, Agfa-Gevaert, Inc., will represent the Society of Photographic Scientists and Engineers on the ANSI PH22 National Standards Committee, according to a recent announcement. The appointment was made by M. G. Anderson, SPSE Standards Committee Chairman. Hopkinson was SMPTE Program Chairman for the Society's 117th Conference.

Neal Keehn has joined Motion Picture Laboratories, Inc., 781 South Main St., Memphis, TN 38101, as Vice-President, Sales and Service, Eastern Division, it was announced by Frank M. McGeary, MPL President. Formerly with Byron Motion Pictures, Keehn has also served as Writer-Director for Calvin Communications, Inc., in Kansas City. In his new post he will supervise MPL Sales and Service from his office at 1120 Connecticut Ave., N.W., Suite 940, Washington, DC 20036.

William Hunter Low, Jr., has been appointed Director, Advertising and Promotion, Motion-Picture and Television Markets, Motion-Picture and Audio Visual Markets Division, Eastman Kodak Co. He has been with Kodak since 1966. His most recent post prior to his present appointment was Coordinator of Advertising and Promotion, Motion-Picture and Television Markets.

Dennis A. Robertson, General Manager, Professional Division, Bell & Howell Ltd., and Director of Bell & Howell A-V Ltd., England, has been appointed Eastern Hemisphere representative for Filmline Corp. The announcement was made by Ed Krause, Filmline President. Filmline manufactures motion-picture processing machines and is the developer of the Micro-Demand drive system. Robertson's headquarters are at Bell & Howell Ltd., Alperston House, Bridgewater Rd., Wembley, Middlesex, England.

Harvie E. Schwartz, Jr., has been appointed to the newly created post of Director of Technical Operations for Goldmark Communications Corp., 98 Commerce Rd., Stamford, CT 06904, it was announced by Peter C. Goldmark, GCC President. Schwartz was formerly Manager of Engineering for Byron Motion Pictures, Inc., Washington, D.C. In his new post he will be responsible for the overall direction of technical operations for GCC's Transcan Division which produces film-to-videotape transfers of motion-picture feature films and other programs for cable TV, industrial and educational television applications. Schwartz will report directly to Nat C. Myers, Jr., GCC Vice-President as part of a realignment of the Transcan Division. Also reporting to Myers under the reorganization will be Joseph DeBragga, Director of Marketing for Transcan.

Transcan uses a patented electronic process to transfer motion pictures and other programs from film to videotape for the smaller viewing aperture of television making it possible to accomplish film-to-videotape transfers without loss

of essential picture information. The system also eliminates the cropping of titles and credits.

Books, Booklets, Brochures

Self-Study Manual on Optical Radiation Measurement, a new series of Technical Notes edited by Fred E. Nicodemus, has been prepared by the National Bureau of Standards for those needing to make accurate optical radiation measurements. At a time when changes in the base units of international measurements methods that will make these new physical standards more useful, the announcement stated.

The first issue contains the first three chapters of "Part I — Concepts" expected to be of interest to workers in such diverse fields as astronomy, heat-transfer, illumination, photometry, meteorology, photo-biology, photo-chemistry, optical pyrometry, remote sensing and infrared applications. According to the announcement, measurements by different instruments or techniques commonly disagree by 10 to 50%. Reducing the uncertainty of these measurements to 1 or 2% is an NBS goal now within reach. Copies of the first Technical Note in the series (SD Catalog No. C13.46:910-1) are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 at a price of \$2.10 (25% additional for other than U.S. mailing).

TDC Division of Frequency Technology, Inc., Box 365, Whitcomb Ave., Littleton, MA 01460, has made available a 6-page color brochure that describes the ballast and lamp-starting circuits needed to operate the Osram line of Metallogen[®] HMI and HCI daylight lamps. Designed for lamp power ranges of 200 W to 4000 W, TDC's Stabilarc[™] constant power ballasts are designed to hold lamp color temperature constant for a variety of operating conditions while the Lampstarter Modules[™] provide the high voltage impulses necessary to strike the initial arc, Osram HMI and HCI lamps are designed to provide the daylight spectrum required by theater, TV, motion-picture and special effects lighting applications.

The Sound Reinforcement Component Application Guidebook, a 16-page brochure with case-history delineation of specific installations using the SR line of sound reinforcement components, is available upon request from Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. Applications of the components to critical sound requirements ranging in size and complexity from those presented by mammoth outdoor concerts to those in intimate lounges are described. The SR component line includes an audio console, two power amplifier models, an extended range speaker system, a portable speaker column, a speaker column for permanent installations, an electronic crossover and an array of custom accessories. The components can be used as complete systems or integrated with other equipment.

Aerial Photo Equipment, a 20-page catalog available from Top Flight, Inc., 1001 Enterprise Ave., Bay 22, Oklahoma City, OK 73128, describes and illustrates cameras and other equipment designed specifically for aerial photography. Included are descriptions and illustrations of camera mounts, intervalometers and a number of other specialized items.