



**Color
It
Warm
and
Natural**

SONY F-121 CAROID DYNAMIC MICROPHONE

... the instrument Sony engineered to provide the ultimate in performance under difficult conditions. Whether you wish to reproduce the rich warmth of strings and woodwinds or the fine upper registers of a soprano, this superb Sony instrument will fulfill your most discriminating expectations. Designed to meet the exacting requirements of professional use, the Sony F-121 offers a cardioid pattern with exceptional front-to-back rejection ratio without compromising the normal frequency response. An integrated wind screen assures immunity against any wind-produced noise or blast effect, while the convenient on-off switch permits immediate operation. The Sony F-121 is the ideal selection for the recording enthusiast who wants professional



characteristics in a microphone whose operation is foolproof. Complete with 20-foot microphone cable, desk stand, clip-on holder, and deluxe carrying case, just \$59.50.

F-121 Features and Specifications: Select from three impedances (50, 150 and 10,000 ohms). On-off switch has electrical safety interlock to prevent accidental cut-off. Change single wire to switch impedances. Unidirectional characteristic. Frequency response, 30 - 18,000 Hz. Hum induction level, below 6 db/mgauss. Wind noise, less than 50 db in all directions. Dimensions: 7" x 1 1/2" max. dia., 1" min.

SONY SUPERSCOPE®

8150 VINELAND AVENUE • SUN VALLEY, CALIF. • 91352



ATLANTA, Oct. 2—The **Atlanta Section** held its October meeting at WAIL-TV, the Atlanta affiliate of the American Broadcasting Co.

Byron Lindsey, Chief Engineer, and Carl Meeks, Asst. Chief Engineer, demonstrated color videotaping techniques practiced at WAIL-TV to members and guests. A tour of the facility followed.

After the tour members and guests assembled in a large conference room where Carlton Winckler's excellent film *Color by Design*, an Editec VTR on video-tape editing, and a video-tape demonstration of the Piclear scratch remover used by WAIL-TV in its film chain, were shown.

Jim Young, cinematographer and winner of the Alfred P. Sloan Award, showed excerpts from some of his excellent documentaries.

Thirty-four members and guests were in attendance. Refreshments were served courtesy of WAIL-TV.—Hubert Jenkins, *Chairman*, Public Health Service Audio-visual Facility, National Communicable Disease Center, Atlanta, Ga.

CAPE KENNEDY, Aug. 19—H. Richard Hertel, Editorial Supervisor, Technicolor, Inc., Kennedy Space Center, Fla., spoke before the meeting of the **Cape Kennedy Section** held at the Holiday Inn in Cocoa Beach. Thirty-six persons attended the meeting.

Hertel discussed Technicolor's job of providing photographic support for NASA at the Kennedy Space Center. The support includes camera work, processing, film distribution and the maintaining of a film library.

Hertel's talk outlined the camera operation and engineering instrumentation support provided. Laboratory and camera equipment were described in a slide presentation. Hertel said Technicolor provides still and motion-picture coverage of a launch vehicle from arrival to launch. The work of the motion-picture production unit was also discussed in its job of producing films for launch reports and news release.

Spacequest 1966, a motion picture produced by Technicolor for NASA, was shown. It depicted NASA's accomplishments during 1966. Pointing out the magnitude of providing photographic support at the Space Center, Hertel said one launch required approximately 100 cameras.

This discussion was well received by the membership.—Richard M. Kise, *Secretary-Treasurer*, Radio Corp. of America, Patrick Air Force Base, Fla.

DETROIT, Sept. 26—The **Detroit Section** met at Angell Hall at the University of Michigan in Ann Arbor where 103 persons

attended. Dr. Emmett Leith, Radar and Optics Laboratory, University of Michigan, presented a talk on "Holography—Three Dimensional Laser Photography."

Leith explained the principles of holography in terms analogous to those of conventional photography. This was accomplished despite the lack of a real image on the photographic plate or optics in the system.

Coherent light produced by a laser beam is analogous to the incoherent light used in regular photography. After regular processing of the photographic plate Leith explained how the image is recovered by projecting a laser beam through the plate to reveal a virtual image in full three dimensions.

In holography, all images are positives—there are no negatives—and contrast always remains the same as recorded from the original subject.

Leith pointed out several commercial applications of holography in addition to its photographic use. These include the ability of a hologram to store and reveal large quantities of factual data in a small space and its capability in the field of photographic interferometry.

The meeting concluded with the projection of a hologram.—John A. Campbell, *Secretary-Treasurer*, The Jam Handy Organization, Detroit.

DETROIT, Oct. 17—An excellent presentation on the subject "Spectral Color Response in Studio Lighting," was given by Rollo G. Williams, Vice President, Century Lighting Co., before 70 persons attending the **Detroit Section** meeting held at The Jam Handy Organization in Detroit.

Using an effective set of 2 × 2 color slides and drawing upon his extensive knowledge and experience, Williams gave audience a basic understanding of the very important aspects of lighting from the standpoints of color, intensity and economy.

Starting with pertinent facts regarding the optics and color response of the human eye, he moved to the physical characteristics of light and light sources. The great need for more scientific measuring devices, greater understanding of the practical use of meters, and more standardization of equipment was stressed.

It was particularly interesting to learn how much economy can be accomplished in lighting sets for motion-picture or television reproduction if the spectral characteristics of light, in terms of color and color temperature, are accurately applied. For instance, he pointed out that lighting for blue can be done at a fraction of the power cost if the proper wave length is recognized in selecting the lamps for illumination, and even more savings can

be realized if rehearsals lighting is done at low key and then pushed to the greater color temperature for the short time of photography or between exposure.

A difficult subject was expertly handled in a very interesting and highly educational manner.—John A. Campbell, *Secretary-Treasurer*, The Jam Handy Organization, Detroit.

NASHVILLE, July 15 — A special meeting of the **Nashville Section** was attended by 85 persons at the Quality Courts Motel in Memphis, Tenn.

The session was sponsored by Motion Picture Laboratories and featured a talk by Ernie Robertson who discussed and demonstrated his method of editing more than 20,000 ft of football film into a sports highlight film in color with special effects.

A presentation prepared by Hill Ber-mont, of the Georgia Center, was given on his programs produced for the National Education TV Network. Other features of the meeting were exhibits of equipment such as tape recorders, cameras and lighting equipment. Each exhibit was accompanied by a demonstration.

Motion Picture Laboratories was open from 8:30 to 9:30 in the morning for tours of its operation. MPL also presented split-screen comparisons between various color film stocks and a demonstration of the new 4X reversal and forced-processed EF. The noon meal was served in the Dobbs

House courtesy of MPI.—William C. Hunter, *Secretary-Treasurer*, WHAS, Inc., 10310 Foxboro Dr., Louisville, Ky.

ROCHESTER, Sept. 14 — Herbert A. Tiedemann, Photographic Technology Lab, NASA Manned Spacecraft Center, Houston, Tex., presented a paper on "Geologic Interpretation from Orbital Photography," before 250 persons at the **Rochester Section** meeting held at the Dryden Theater.

According to Tiedemann, handheld photography experiments from orbiting spacecraft has shown unique capabilities and advantages over other conventional means of photography. Important advantages which were demonstrated with numerous color slides are speed and scope of coverage, variability in scale, wide perspective and continuity of observation.

Tiedemann interpreted photographs of special interest to various branches of geology, as well as the allied fields of oceanography, physiography, geography and cartography.—Robert O. Gale, *Secretary-Treasurer*, Eastman Kodak Co., Rochester, N.Y.

ROCHESTER, Oct. 12 — J. J. DePalma and J. S. Chandler, both of the Eastman Kodak Co. in Rochester, discussed Kodak's new high-brightness front projection screen at a meeting of the **Rochester Section** held at the Dryden Theater. There were 250 persons in attendance.

According to DePalma and Chandler, theoretical gains are possible with ideal screen materials and shapes by which the reflected light is efficiently concentrated into the audience space. A new screen material and screen shape were described which combine to yield about 10 times the brightness of conventional matte screens. This screen is especially useful in ambient light. A demonstration of this new screen was given.

DePalma and Chandler had presented a paper on the new screen at the 102nd SMPTE Technical Conference on September 22, 1967, in Chicago.

A French-made film obtained from the New York State Library Association, was shown at the meeting.—Robert O. Gale, *Secretary-Treasurer*, Eastman Kodak Co., Rochester, N.Y.

SAN FRANCISCO, April 21 — The location of this joint meeting of the **San Francisco Section**, the IFPA, SPIE, SPSE and BPA, was the Ames Research Center, Moffett Field, Calif. There were 250 persons attending.

The Ames Research Center of NASA performs basic and applied research in the support of the nation's space and aeronautical programs. During dinner at the center, the Photo Group presented films showing documentary and high-speed instrumentation coverage of research projects. After dinner, photographic techniques used to record both preliminary

Reviewed by the SMPTE Advisory Committee on Special Effects in Motion Pictures: Herbert Meyer, Chairman, Russell Brown, Thomas G. Fisher, Jack Froehlich, Max Hankins, Ub Iwerks, Ivan Martin, Bob Matthey, Frederic L. Ponedel, John Roche, J. Edward Stenbridge, Edward Stones, Virgil Summers.

- For Industry Reference and for Students
- A New Book From the SMPTE

Special Effects in Motion Pictures

(Some Methods for Producing Mechanical Special Effects) **Frank P. Clark**

CONTENTS

The Development of Special Effects
The Application of Special Effects
Atmospheric Effects
Special-Effects Props
Optical Effects
Sound Effects

Miscellaneous Effects
Shooting
Pyrotechnics
Sources of Special Effects (Appendix)
Index
Bibliography

238 PAGES MORE THAN 100 ILLUSTRATIONS

■ Price **\$7.50**

Discounts of 20% to SMPTE members and booksellers on single copies; 25% on orders of 5 through 49; 33½% on orders of 50 or more.

Order from:

Society of Motion Picture and Television Engineers
9 East 41st Street, New York, N. Y. 10017

research phases and actual events were shown.

There was a tour of the Research Center which included the world's largest wind tunnel, a high-speed tunnel with a demonstration of the Schlieren effect, and the world's fastest wind tunnel where photographs are taken at less than one billionth of a second exposure.

This was a highly successful meeting with excellent attendance.—John Corso, Jr., *Secretary-Treasurer*, W. A. Palmer Films, Inc., 611 Howard St., San Francisco.

SAN FRANCISCO, June 13—Herbert E. Farmer, Dept. of Cinema, University of Southern California, Los Angeles, presented a discussion on the "Motion Picture Technology and Training in the USSR" before 50 persons attending the **San Francisco Section** meeting. The meeting, held at KGO-TV, had the participation of SPIE, SPSE, IFPA and BPA.

Farmer, who was chairman of the second SMPTE delegation to visit the Soviet Union, presented many observations illustrated and documented with slides. It was an excellent opportunity for all to hear first hand about the motion-picture industry in Russia.—John Corso, Jr., *Secretary-Treasurer*, W. A. Palmer Films, Inc., 611 Howard St., San Francisco.

SAN FRANCISCO, Oct. 19—Twenty-five persons attended the **San Francisco Section** meeting held at the Eastman Kodak Co. in San Francisco.

Robert Hufford of the Hollywood office of Eastman Kodak gave a presentation on "A High-Brightness Front Projection Screen."

R. H. Lawrence demonstrated 16mm motion analyzer projection equipment. The entire program was well received by all in attendance.—John Corso, Jr., *Secretary-Treasurer*, W. A. Palmer Films, Inc., 611 Howard St., San Francisco, Calif. 94105.

WASHINGTON, D.C., June 7—The **Washington D.C. Section**, instead of its usual monthly meeting, participated in the annual SPSE Banquet held in the Crystal Room, Officers Club, Washington Navy Yard.

The evening started with a social hour, followed by a buffet supper. The high point of the evening was a fling at the gaming tables; each guest was given \$5,000(ersatz) with which to try his luck at various games. To wind up the evening, guests used their winnings to bid on many fine prizes donated by both SMPTE and SPSE members.—Louis C. Beinert, *Secretary-Treasurer*, Audio-Optics, Inc., 1314 Powhatan St., Alexandria, Va.

WASHINGTON, D.C., Sept. 26—The National Academy of Sciences was the scene of the **Washington, D.C. Section** meeting at which 26 persons attended.

Dr. Fred Forsgard, Director of Color

Products, Research and Development, General Aniline and Film Corp., showed slides and discussed the new Anscochrome D 500 high-speed color film.

Edward M. Berkman, Technical Sales Representative, Quatron Corp., presented a 16mm color sound film describing the Fastax high-speed camera.

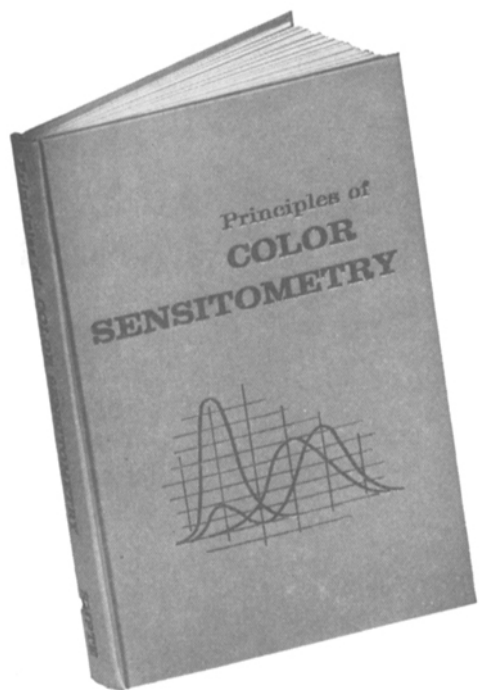
Following each presentation there were question-and-answer periods which were enlightening and interesting.—Louis C. Beinert, *Secretary-Treasurer*, Audio-Optics, Inc., 1314 Powhatan St., Alexandria, Va.

WASHINGTON, D.C., Oct. 9—In a joint meeting of the **Washington, D.C. Section** and the SPSE, held at Logetronics, Springfield, Va., brief reports were given on some of Logetronics' current research projects.

Described were the use of photographic film for high resolution image enhancement, a new film processing machine for cut sheet continuous tone graphic arts film and a new step and repeat automatic printer/enlarger for aerial films.

After a brief question-and-answer period, the group toured the 17,000 ft² plant. On the tour, John Street demonstrated photochromic materials used in photographic image enhancement; Ira Kohlman demonstrated the new film processing machine; and Eugene Sedburg demonstrated the new Logetronics electronic contact printer Model Mark II R5.—Louis C. Beinert, *Secretary-Treasurer*, Audio-Optics, Inc., 1314 Powhatan St., Alexandria, Va.

The latest edition of



Principles of COLOR SENSITOMETRY

Revised by an SMPTE committee headed by Dr. Francis H. Gerhardt

This essential book devotes chapters to:

- Sensitometric exposures
- Processing of sensitometric tests
- Quantitative evaluation of image density
- Densitometer design principles
- Transformations between integral and analytical densities
- Applications of color sensitometry and interpretation of sensitometric results
- Statistical aspects of color sensitometry

\$ 4⁰⁰

Discounts of 20% to SMPTE Members on single copies.
Less 25% to all purchasers on orders of 5 through 49; 33¹/₃% on orders of 50 or more.

Address your order to **SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS**

9 East 41st Street, New York 17, N. Y.