

SMPTE test films for television



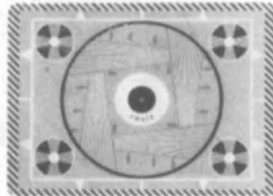
NETWORK, LOCAL, CCTV...

a test film library for
engineering and telecine

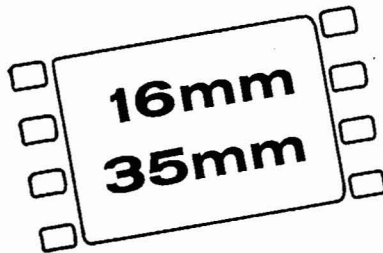
VIDEO TEST FILMS

TEST FUNCTIONS:

- alignment • resolution
- focus • linearity
- low and medium frequency response
- storage and transfer characteristics
- automatic brightness control
- qualitative picture analysis



FOR COLOR TELEVISION



- Grey Scale — for setting-up and adjusting signal generators
- comparative and qualitative test of system's ability to reproduce color
- representative quality Technicolor and Eastman color prints

PROJECTOR PERFORMANCE

Test and Adjust:

- picture steadiness • jump and weave
- shutter timing (travel ghost)
- framing • focusing
- aperture alignment



SOUND REPRODUCTION *optical / magnetic*

Test, Adjust and Calibrate Projector

- scanning beam slit position
- multi-frequency response
- azimuth and focus of sound optical train
- signal level and balancing, output flutter
- scanning beam illumination



FOR THE SCREENING ROOM

Jiffy Test Film: a time saving quick evaluation of 16mm sound projector system performance

for further information
and for a complete listing of test films, write to Department TF

Society of Motion Picture and Television Engineers

9 EAST 41st ST., NEW YORK, N.Y. 10017

Books, Booklets, Brochures

Laser Materials: A Tutorial Review With Bibliography (N64-30992N), a report on the nature, properties, and production of laser materials, with an extensive bibliography on possible laser components, is available from the Clearinghouse for Federal Scientific and Technical Information, U.S. Dept. of Commerce, Springfield, Va. 22151, at a price of \$4.00.

The 288-page report and bibliography compiled by Ohio State Univ. for NASA notes that laser action has been observed in gases, crystalline solids, and glasses. Recently it has been seen in seven organic liquids. Of importance, the researchers say, is the effect that the internal arrangement of crystals has on laser performance and of the crystal field on the laser ion. The report discusses methods of crystal growth and the structure, chemistry and spectral properties of glass. The report also covers the nature of laser ions with particular reference to the rare earths. The bibliography is in two parts, one contains references to recent books and reviews on subjects related to laser materials. The second is an annotated bibliography. The report explains that a laser material consists of a laser ion contained in a host lattice (crystal) or carrier material (glass). The ion must have incomplete shells (a transition element) and proper energy levels, relaxation time, and narrow line width. These requirements are met, for example, by the rare earth elements. The crystal lattice must be able to accept the desired ion and have good transmittance in that part of the spectra where the laser is to work. A crystal should be chemically and thermally stable. The requirements for a glass laser are not well known.

Laser light can be dangerous, according to a 10-page report entitled *Biological Effects of Lasers: Safety Recommendations and a Comment on the Concept of Ocular Damage* (AD 607 718N) prepared by the Naval Communication Psychology Div., Port Washington, N.Y. The report is available from Clearinghouse, U.S. Dept. of Commerce, Springfield, Va. 22151, at a price of \$1.00.

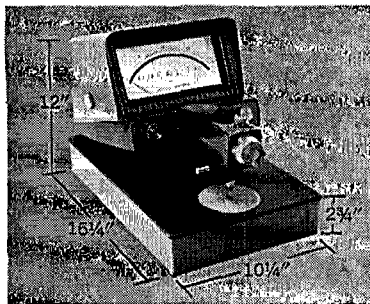
The report describes experiments with laser light on laboratory animals. Various types of injuries, some of them lethal, resulted. For example, irradiation of the eyes of albino mice by laser beams resulted in severe damage; in the case of black mice, complete destruction of the ocular orbit resulted. Irradiation of the forehead caused death within 24 hours in 75% of the mice exposed. It was also found that the severity of the lesion within the viscera of an irradiated organism was worse than the lesion caused on the skin.

Other publications available from the Clearinghouse are *Variable Display System*, a description of a new display system which greatly shortens response time and enables changing part or all of the stored information (AD 606 179N, price, \$1.00); and *Complex Fresnel Integral* evaluates the complex Fresnel integral by means of Taylor's series expansions. Tabulated values for the various forms of the complex error function are presented and related to the Fresnel integral (N64-23531N, price, \$4.00).

New Series 200 Macbeth Quantalog color film densitometers assure maximum accuracy of readings over the entire density range



The special Filter Turret of the TD-203 contains a set of Status A-58 (red, green, and blue) filters, calibrated and supplied to Macbeth by the Eastman Kodak Company plus a #106 Wratten Visual Density Filter. Each has its own separate zero-adjustment. Calibrated Status A-58 filters make possible standardization of spectral densitometric readings and performance not now provided in an instrument in this price range. The TD-204 contains Status M filters.



Measure color film densities to an exactness not previously possible. The new Quantalog® TD-200 series densitometers provide precise readings *even in the higher densities*. Result: tighter processing control enables you to make the most of today's advanced emulsion technology.

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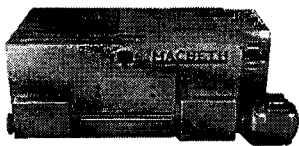
1. Telescopic constant-pressure reading head eliminates errors from operator pressure variations.
2. Meter measurements are linear (not logarithmic) over the entire scale, minimizing reading errors.

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- TD-206 for infrared and visual sound track measurements.

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A total of 178 institutions of higher learning were teaching 2,065 courses in broadcasting in 1963, according to a report by Leslie Smith ("Education for Broadcasting: 1929-1963") published in the Fall 1964 issue of the *Journal of Broadcasting*. In his report Mr. Smith notes that "Education and industry now work together . . . educational broadcasting is as much a part of 'the industry' as commercial broadcasting. . . ." In the same issue among other timely and informative articles is a discussion of "Television and Space Communication," abstracted from a Unesco report on "Space Communications and the Mass Media." A controversial article by Rex G. Howell ("Fairness — Fact or Fable.") discusses the FCC's "Fairness Doctrine" taking the position that broadcasters are

"in the position of trying to operate under a vague set of restrictions on their freedom of expression."

The *Journal of Broadcasting* is published by the Association for Professional Broadcasting Education, University of Southern California, University Park, Los Angeles, Calif. 90007.

Maxwell's International Subject Bibliographies No. 36 Cinema is a joint publication of The Documentation & Supply Centre of Robert Maxwell & Co., Ltd., Oxford, Eng., and The Documentation & Procurement Centre, Div. of Maxwell Scientific International Inc., Long Island City 1, N.Y. It is available without charge from Maxwell Scientific International, Inc., 122 E. 55 St., New York, N.Y. 10022.

Lists of other specialized bibliographies are also available upon request. Bibliography No. 36 Cinema is divided into six sections: General and History; Individual Films and Scripts; Films of Individual Countries; Industrial, Social and Educational Aspects; Biography and Autobiography; and Reference.

Statistical Analysis of Noise, Sound, and Vibration (Bruel & Kjaer Technical Review 1-64) by K. E. Kittelsen and C. Poulson is a 23-page booklet available without charge from B&K Instruments, Inc., 3044 W. 106 St., Cleveland, Ohio 44111. The booklet explains the necessity of statistical distribution analysis of random signals, such as noise and vibration. Since ordinary statistical analysis is a tedious, time-consuming and costly operation, instrumentation techniques have been developed to provide accurate analysis automatically. The booklet describes the many applications of statistical analysis involving dynamic phenomena such as noise, vibration, strain, pressure, temperature, etc., which frequently have a random characteristic. Examples are given.

The search for the lost nuclear submarine, the Thresher, is the subject of an article in the November 1964 issue of *EGG Ink* published by Edgerton, Germeshausen & Grier, Inc., Crosby Drive, Bedford, Mass. 01730. The article is illustrated with photographs, some of them taken underwater at a depth of more than 8,000 ft. Other illustrated articles in this issue describe new devices for protection from nuclear flash and a story on the surveying of the English Channel's ocean floor.

Oscilloscope cameras and accessories are described in a 16-page illustrated booklet available without charge from Tektronix, Inc., P.O. Box 500, Beaverton, Ore. 97005. The booklet describes four complete, standard camera systems and also contains detailed specifications on available components and accessories which can be used to simplify custom-designing a camera to meet specific requirements. The booklet also contains a series of photographs of waveforms to illustrate typical applications with various lens/object-to-image ration combinations.

Xensol II, a new xenon lamp of medium output, is described in an illustrated article in the October 1964 issue of *Picture and Sound*, a Zeiss Ikon publication. (Zeiss Ikon A. G., Werk Keil, z. Hdn. Herrn Dipl. Ing. H. Tummel, Kiel-Wik, Mecklenburger Str. 32/36, Germany.) The same issue also contains illustrated feature articles on the Circarama and the Rotorama and a discussion of the Ernemat II projection system.

Theatrical Lighting for Quartz is the title of a brochure (Bulletin Q-8) available from Kliegl Bros., 32-32 48th Ave., Long Island, N.Y. 11101. The 12-page brochure is well designed with white on blue and effective drawings of the equipments described. Performance data are supplied and possible applications are presented.

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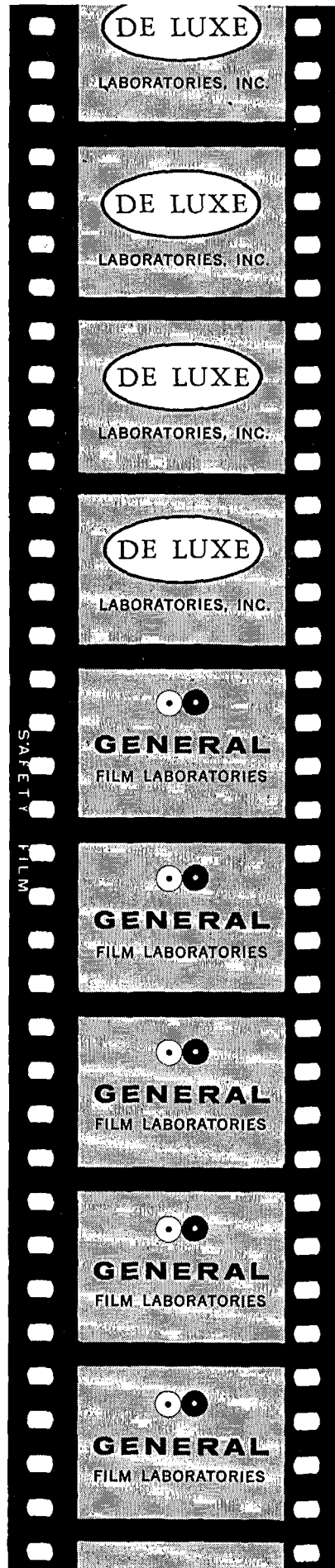
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The Arriflex-35 2C, a compact lightweight motion-picture camera, is described and illustrated in a 4-page folder available from Arriflex Corp. of America, 257 Park Ave. South, New York, N.Y. 10010. The folder also includes descriptions of new accessories available for all Arri-35 cameras.

Precision engineered cams are described in an illustrated leaflet available from Commercial Cam & Machine Co., 400 N. Ashland Ave., Chicago, Ill. 60622. Various sizes of cams for widely diversified uses are shown in the leaflet.

Monitors for broadcast television studios are described and illustrated in a leaflet (Brochure No. 2153) available from Ampex Corp., Video Instrumentation Div., Mail Stop 6-1, 401 Broadway, Redwood City, Calif. 94063. The monitors are available in a variety of screen sizes and mechanical configurations.

Packaged Luxtrol Light Controls are described in a 16-page illustrated booklet, Bulletin L564P, available from Superior Electric Co., Bristol, Conn. 06012. Various types of packaged dimmers are available for nontheatrical use.

A transmitter and receiver microwave link is described in illustrated leaflets showing television equipments available from Microwave Associates, Inc., Burlington, Mass. 01804. The system is described as being small enough to carry easily, powerful enough to transmit 12 miles without boosters and sufficiently self-contained to operate with a battery pack.

The VR-660 and VR-1560 portable Videotape Television Recorders are described and illustrated in a product sheet available from Ampex Corp., Video/Instrumentation Div., 401 Broadway, Redwood City, Calif. 94063. Applications, features, and specifications of both models are listed.

Daily rental rates covering some 26 major classifications of motion-picture and sound equipment are included in an 18-page price list available from Behrend's, Inc., 161 E. Grand Ave., Chicago, Ill. 60611. Classifications include 16mm, 35mm, and high-speed motion picture cameras; still cameras; animation equipment; dollies; editing equipment; and time-lapse equipment. Rentals are listed at the day rate, but a table is provided to allow calculation of long term rates.

B & S Rental Catalog No. 4, available from Birns & Sawyer Cine Equipment Co., 6424 Santa Monica Blvd., Hollywood, Calif. 90038, is a 68-page illustrated catalog describing professional photographic equipment available for rental. Detailed descriptions are provided. More than 200 fully captioned photographs are used to supplement the descriptions.

Flexaust hose and associated products are described and illustrated in Bulletin 650 available from the Flexaust Co., Div. of

Callahan Mining Corp., 277 Park Ave., New York, N.Y. 10017. The firm specializes in the design and manufacture of hose and duct for industrial dust collection, fume control, air and materials handling.

The BBC Handbook 1965 has a large amount of diversified television information attractively presented in a highly compact form. The 256-page, paperbound book contains a great deal of reference material, tables, maps, diagrams, historical material, bibliography, index, etc., and also contains many dramatic photographs of scenes from BBC broadcasts. Like its predecessor volumes (Books, Booklets, Brochures, *Journal*, p. 292, March 1964), it also contains several literate and highly readable articles by members of the BBC staff.

In the Foreword, Lord Normanbrook, BBC Chairman, states "... Some of the material included (in the 1965 edition) is there for purposes of reference, to be consulted rather than read. But in addition to this factual material there is much that will repay study by anyone who is concerned to understand the art of mass communication by broadcasting..." An example, selected at random, of the factual material in the book is that of a table showing how wavebands and frequencies are allocated to broadcasting. The relationship between frequency and wavelength is also explained.

Articles include "More Than a Tinkling Cymbal," by Kenneth Adam, Director of Television, which begins, "Dogs, of misfortune and misunderstanding, at the heels of BBC-2 in its early days..."; "Music Planning: Its Responsibilities," by Hans Keller, Chief Assistant, Music Programmes, Sound (Orchestral and Choral) ("BBC music covers everything from Pop to Zak, the imaginary Polish composer whom one or two of us invented — not in order to hoax the world as some critics thought, but to give a palpable demonstration of our unprecedented crisis of communication."); "The BBC in the World," by E. Tangye Lean, Director of External Broadcasting; "The Current Debate," by J. Camacho, Head of Talks and Current Affairs, Sound; "The Communication of Science," by Aubrey Singer, Head of Outside Broadcasts, Features and Science Programs, Television; "Listening and Viewing in the Sixties," by Robert Silvey, Head of Audience Research; and "Automation and Computers in the BBC," by J. H. Arkell, Director of Administration, and F. C. McLean, Director of Engineering.

BBC Representative in New York is J. Aistrop, 630 Fifth Ave., New York, N.Y. 10020. The Handbook is priced at 7 shillings, 6 pence.—Ed.

You and Camera Repair is the title of a school catalog available upon request from National Camera Repair School, Dept. OD, Englewood, Colo. 80110. The attractively designed 78-page catalogue describes and illustrates tools and materials supplied to the students and outlines lesson texts. The catalog also contains a question-and-answer section, which was developed from questions frequently asked by prospective students.