

ecocassette duplication plant, and mobile unit home base. The new address is 380 Walnut St., Yonkers, NY 10701.

Lawrence Driscoll has been appointed Manager, Broadcast Services, RCA American Communications, Inc., 201 Centennial Ave., Piscataway, NJ 08854. Driscoll has responsibility for Americom's video/audio services to commercial broadcasting organizations. These include the SMARTS (Selective, Multiple Address Radio and Television Service) project, small-dish audio services, television services, and point-to-point audio services. **Lou Donato** was assigned responsibility for satellite distribution services utilized by Americom's three major network accounts — ABC, CBS, and NBC. **William Kopacka** was appointed Manager, CATV Services. He is responsible for sales and services to CATV program distributors utilizing RCA Americom's SATCOM satellite to reach over 1200 cable television systems. **Bradley Dusto** was appointed Manager, Video Services. He is responsible for video service offerings of RCA Americom, including the SMARTS project. **Jim Grady** is Manager, Audio Services, responsible for developing markets for Americom's small-dish audio services to radio broadcasters and for point-to-point audio service via satellite.

John Ratcliff has retired from the board of Rank Film Laboratories. He was appointed director, in 1970, with responsibility for marketing, a post he held for seven years. He established the marketing and sales department and played a major role in the redevelopment of the laboratories' facilities and diversification of its trading interests in the United Kingdom and

overseas. He also helped to forge links with major laboratories in other countries, including Technospes S.p.A. of Rome to provide distributors with an international processing network.

Books, Booklets, Brochures

The Directory of Engineering Societies, a compilation of 460 national, regional, Canadian, and international organizations covering all known nonprofit organizations that have primarily engineering and scientific activities, is available from Engineers Joint Council, 345 E. 47 St., New York, NY 10017. Each of the entries includes the name of the society, association, club, or fraternity; its official abbreviation; address and telephone number; the name of the principal officer, editor-in-chief, and elected officers; data such as founding date, size of staff, number of members, and annual budget are included, if available. The price of the directory is \$23.

Handbook of Electronics Calculations for Engineers and Technicians, edited by Milton Kaufman and Arthur H. Seidman, is available from McGraw-Hill Book Co., 1221 Ave. of the Americas, New York, NY 10020. The areas covered include basic technical mathematics, dc and ac circuit analysis, audio and tuned amplifiers, feedback, oscillators, power supplies, digital logic, computer-aided circuit design, transmission lines, filters, antennas, communications systems, and microwaves. This 668-page book contains 725 illustrations and is priced at \$24.50.

SIT and SEC Camera Tubes is the title of Technical Note 10, available from Quantex Corp., 252 N. Wolfe Rd., Sunnyvale, CA 94086. The characteristics and differences of these two high gain camera tubes are discussed with regard to particular applications. The basic structures of SIT (silicon intensified target) and SEC (secondary electron conduction) tubes are diagrammed and explained, as well as the combination of these tubes with an image intensified SIT (ISIT) or intensified SEC (ISEC) camera. The use of an extended integration mode in either ISIT or ISEC cameras for achieving extremely low light level imagery is described.

A Video Glossary is available upon request from US JVC Corp., 58-75 Queens Midtown Expwy., Maspeth, NY 11378. Terms are alphabetically listed, ranging from Camera through Vidicon. The 8-page glossary was compiled to aid the informed selection of a videocassette recorder system.

Gould Bulletin 449-11, describing the Gould OS3500 oscilloscope and optional DM3010 digital measuring unit, is available upon request from Gould Inc., Marketing Services, 3631 Perkins Ave., Cleveland, OH 44114. The portable oscilloscope, designed for laboratory and field use, measures advanced digital and conventional electric/electronic circuits. Gould Inc. is an international developer and manufacturer of electronic products.

Care and Feeding of the Mobile Multiplexer, a booklet describing the production of slide presentations and how to transmit their programming to video using the mobile multiplexer, is avail-

RCA's new FR-16 for television. It's a 16mm projector— and more.

True, the FR-16 is designed for projecting 16mm film in a telecine system, but it is much, much more than a projector.

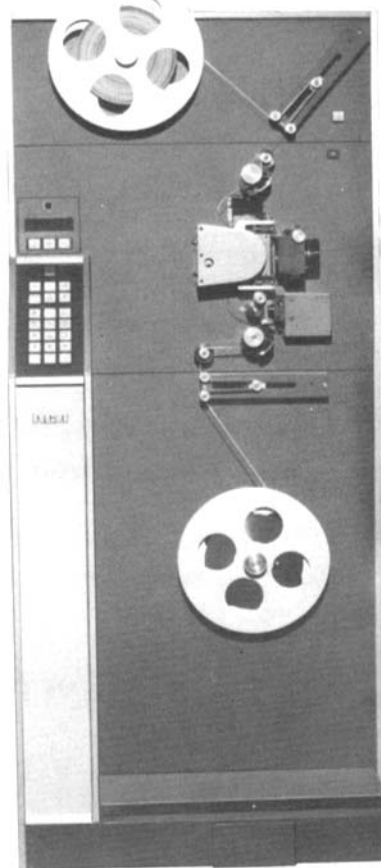
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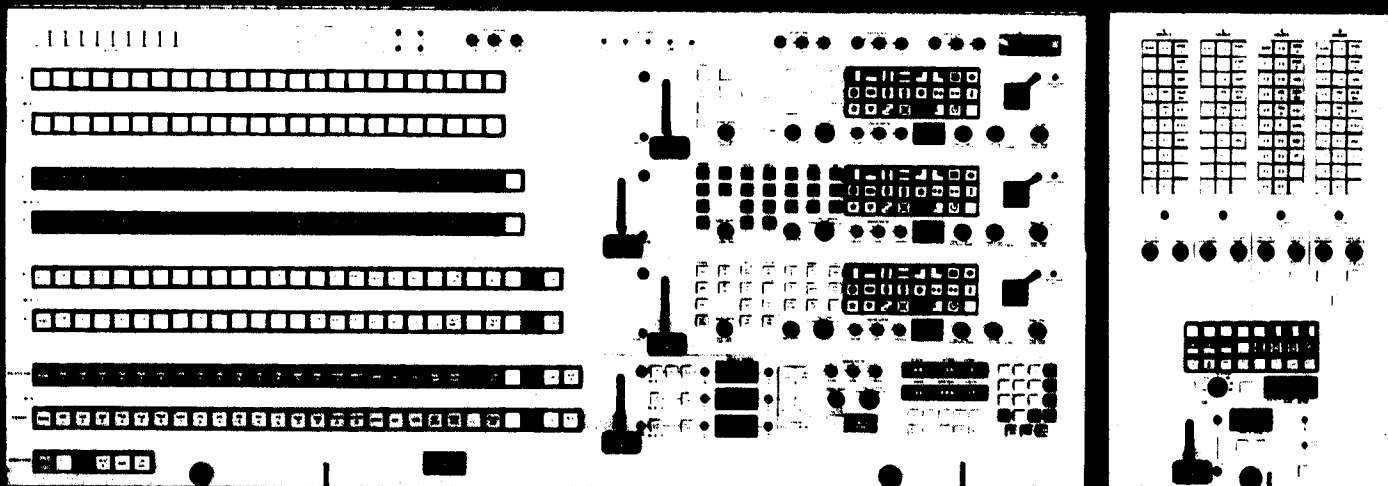
The FR-16 is an outstanding 16mm film handling system for routine teleproduction and broadcast operations—but it *can* do much more. For details, contact your RCA Representative, or write RCA Photophone Systems, 2700 W. Olive Avenue, Burbank, CA. 91505 U.S.A. Telex 68-6215

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able upon request from Buhl Optical, 1009 Beech Ave., Pittsburgh, PA 15233. The mobile multiplexer is a film chain that permits a color or monochrome camera to serve as both a studio and film chain camera. Additional hints are provided for improving light distribution and for balancing light sources from two to three slide projectors which feed into the mobile multiplexer.

The Reel Directory '79 contains more than 1000 listings in 16 categories, including producers, laboratories, equipment supplies and facilities, sound, and video. The listings include addresses and brief descriptions of the services offered. The book (ringbound) is available from the publisher, Bonnie Carroll, P.O. Box 31581, San Francisco, CA 94131, at a price of \$7.50.

Literature and a price list of Hamamatsu video equipment, vidicon cameras, image disector cameras, measuring video systems, and image analysis systems are available from Hamamatsu Systems, Inc., 332 Second Ave., Waltham, MA 02154. Descriptions include the C-1000 computer compatible video camera, the C1055 x-y tracker, and the C-1285 image analysis system.

A drive component specification and price list for 16mm and 35mm continuous photographic processing machines is available from Lab Methods Corp., 7645 Densmore Ave., Van Nuys, CA 91406. The publication includes dimensioned drawings and prices of 16mm and 35mm pacer and film rollers, glass and stainless steel ball bearings, roller spacers and spring inserts, drive disks, and soft-touch tires.



Section Meetings

New York, 11 June — An expectedly large turnout of more than 250 members and guests showed up at CBS Television Broadcast Center for two interesting presentations.

The first presentation was the first public showing of the new 3/4-in U-Matic test tape produced by the SMPTE. Charles Ahto of Tape-Films, Inc., introduced the tape and explained the purpose of the various signals and pictures. The tape is intended to help people to adjust their television sets so as to provide a much more consistent display quality.

The second presentation which was on Loudness in Television Programming was presided over by Joseph Flaherty, Vice-President, Engineering and Development, CBS Television Network. Flaherty introduced the two speakers, Emil Torick and Bronwyn Jones of the CBS Technology Center. Owing to the wide interest in the practice of loudness measurement and perception, special invitations were sent to producers and advertising directors and over 50 of them showed up.

The papers presented by Torick and Jones outlined the history of sound measurement and pointed out that presently VU and peak meters do not accurately indicate loudness as perceived by humans. As a result of recent psychoacoustic

research, CBS technicians are developing a new loudness meter. Demonstrations of differing program content and comparisons of measurement by VU, peak meters, and the CBS loudness meter were provided. — Richard Marcus (Reporter), Rombex Productions Corp., 245 W. 55 St., New York, NY 10019.

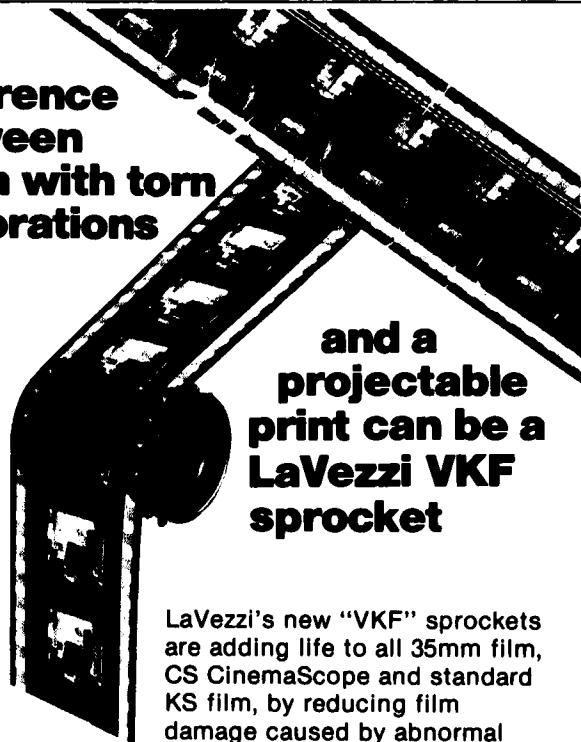
Pacific Northwest, 27 July — The meeting was held in Vancouver, B.C., with an attendance of 23 members and guests. John Luccock, Jr., and his father presented a program on the development of amateur cinematography using equipment and film from their collection. All equipment and films are for the 9.5mm gauge. The collection, started by John Luccock, Sr., 56 years ago contains some 500 titles and 15 pieces of early equipment. Included in the program was an exhibit of the baby Pathé projector and camera (1922) which used notched titles, the Pathé Vox projector (1935), and the Bolex G-2 projector (1938). The projectors were used to show early films and Kodachrome 9.5mm films shot in Vancouver from 1950 to the present. — Thomas J. Bowles, (Secretary-Treasurer), King Video-cable Co., 320 Aurora Ave., N., Seattle, WA 98109.

San Francisco, 14 August — The meeting was held at Eastman Kodak Company's Regional Marketing Center with an attendance of 200 members and guests. Richard Edlund, Special Effects Supervisor and Director of Photography at the Kerner Co., gave an extremely interesting talk and slide presentation on production of the special effects for *Star Wars*. In addition to the detailed discussion of the special effects for *Star Wars*, Edlund gave the group some preview information on the sequel, *The Empire Strikes Back*, scheduled for release next year.

Three major tools were used to produce the special effects. First, a camera that could repeat very accurately using 12 channels of computer controlled servo information. Using the computer control, it is also possible to perform the same actions on a different scale depending on the size of the models being used for a particular part of a shot. Second, the very large blue screen matting system which allows a complete shot to be built up from a number of separate pieces. Third, the many models some of which are built in as many as three different scales for use in various types of shots. A great amount of effort went into building models, some of which are shown in only a few frames of the film, particularly when the purpose was to show an explosion.

Other items discussed were the special printers used, location shots in the desert, the use of a painted background to give the effect of longer distances, and other interesting information about the film. It took two years to produce the 13 minutes of special effects actually used in the film. After the formal presentation, Edlund answered a great number of questions from the audience. — David K. Fibush (Secretary-Treasurer), Ampex Corp., 401 Broadway, MS 3-59, Redwood City, CA 94063.

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