
BOOK REPORTS

Television Equipment Specification Service (TESS), a looseleaf service designed to provide subscribers with the technical specifications on all equipment used for professional television production and post-production, is published by Knowledge Industry Publications, Inc., 701 Westchester Ave., White Plains, NY 10604. The Editorial Director is I. S. Rosner. Access to the specifications is provided by major product category, by product subcategory, by specific product, or by manufacturer.

In addition to the technical specifications, TESS also provides an up-to-date directory of manufacturers. All manufacturers are listed alphabetically in the Index with each of their products enumerated by model number and name and the page on which it appears.

Generally all specifications provide information under the following headings: input, output, general characteristics, power requirements, mechanical, environmental, and price. Since many categories of equipment do not readily conform to this format, additional headings have been added to the various categories as needed.

This (initial) edition contains product information received from manufacturers during 1981. More than 600 manufacturers were contacted and asked to provide specifications on all of their products. These manufacturers are located mainly in the United States and Canada, but foreign manufacturers that maintain a selling presence in the United States have also been included.

TESS is an impressive publication. It has been arranged to provide the maximum convenience for the user as well as containing timely and reliable information.

The price of \$450 for a year's subscription includes the ringbound book (4½ lb with protective cover) plus supplements. The supplements, containing updated information, are published approximately every three months during the year.

Optical Fiber Systems: Technology, Design and Applications. By Charles K. Kao. Published (1982) by McGraw-Hill, 1221 Avenue of the Americas, New York, NY 10020. 205 pp. Illus. 6 × 9 in. Price \$23.50.

The book covers the technological bases, the design, and economic concepts of optical fiber systems. Meant for general audiences as well as specialists, the book shows how optical fibers are directly responsible for the shift toward an information-based society. It discusses in detail where, when, and why optical fiber systems should be used. The book explores the entire area of optical fiber technology and includes guidelines for future research. The business aspects and market potential of

optical fiber systems are extensively discussed. Each of the key systems components — fiber, cable, detector, source, and couplers are comprehensively analyzed. Numerous line drawings are included.

PCM and Digital Transmission Systems, by Frank F. E. Owen, is available from McGraw-Hill Book Co., 1221 Ave. of the Americas, New York, NY 10020, at a price of \$30. The 295-page book, the latest volume in the Texas Instruments Electronics Series, focuses on pulse-code modulation and digital transmission technology. Extensive discussions are devoted to sampling, quantization, analog/digital conversion coding, integrated communications circuits, and fiber optics systems. The guide emphasizes telecommunications; however, it can also be of value to engineers in such varied disciplines as digital sound recording, radio transmission, and video signals.

A Method for Assessing the Quality of Daylight Simulators for Colorimetry has been published by the Commission Internationale de l'Eclairage (CIE Publication No. 51). A method is provided for evaluating the suitability of a test source as a simulator of CIE Standard Illuminants D₅₅, D₆₅, or D₇₅. For each of these standard illuminants, spectral-radiance-factor data are supplied for five pairs of nonfluorescent samples that are metameric matches. The colorimetric differences of the five pairs are computed for the test illuminant; the average of these differences is taken as the Visible Range Metamerism Index; this is used as a measure of the quality of the test illuminant as a simulator for nonfluorescent samples. For fluorescent samples, the quality is further assessed in terms of an Ultraviolet Range Metamerism Index. Copies of the document may be obtained for \$24 each from Dr. Klaus D. Mielenz, Secretary, U.S. National Committee, CIE, c/o National Bureau of Standards, Washington, DC 20234.

The second revised edition of the New York Production Manual is available from Gale Research Co., Book Tower, Detroit, MI 48226, at a price of \$58. The handbook covers New York City, New York State, five states bordering New York, plus Ontario and Quebec, Canada. In addition to the 25,000 name-address-phone number listings, the 1,000-page manual provides information on New York unions and their contracts, New York shooting stages, commercials production, awards information, and more.

Audiovisual Market Place 1982 is available from R. R. Bowker Co., 1180 Ave. of the Americas, New York, NY 10036, at a price of \$39.95. The paperbound guide groups 22 sections under three broad areas: audiovisual software, audiovisual hardware, and reference. Listings contain firm names, addresses, telephone numbers, key

personnel, product lines, and other related details.

International Resource Development Inc., 30 High St., Norwalk, CT 06851, has announced publication of an in-depth study and analysis of flat-panel display markets. According to the study, more than three dozen suppliers in the U.S. and overseas have developed flat-panel displays which are thinner and lighter than conventional CRTs and which consume less power. The 188-page report analyzes flat-panel display technologies, pricing, and markets. It includes 10-year market projections and appraisals of the future of the displays now in existence. The report (#188) costs \$1,285.

Booklets and Catalogs

Backgrounder: RCA Commercial Communications Systems Division is a historical survey of RCA broadcasting equipment. The booklet, which contains information on cameras, telecine, antennas, videotape recorders, transmitters, and mobile broadcast units, is available from RCA News Services, Building 2-7, Camden, NJ 08102.

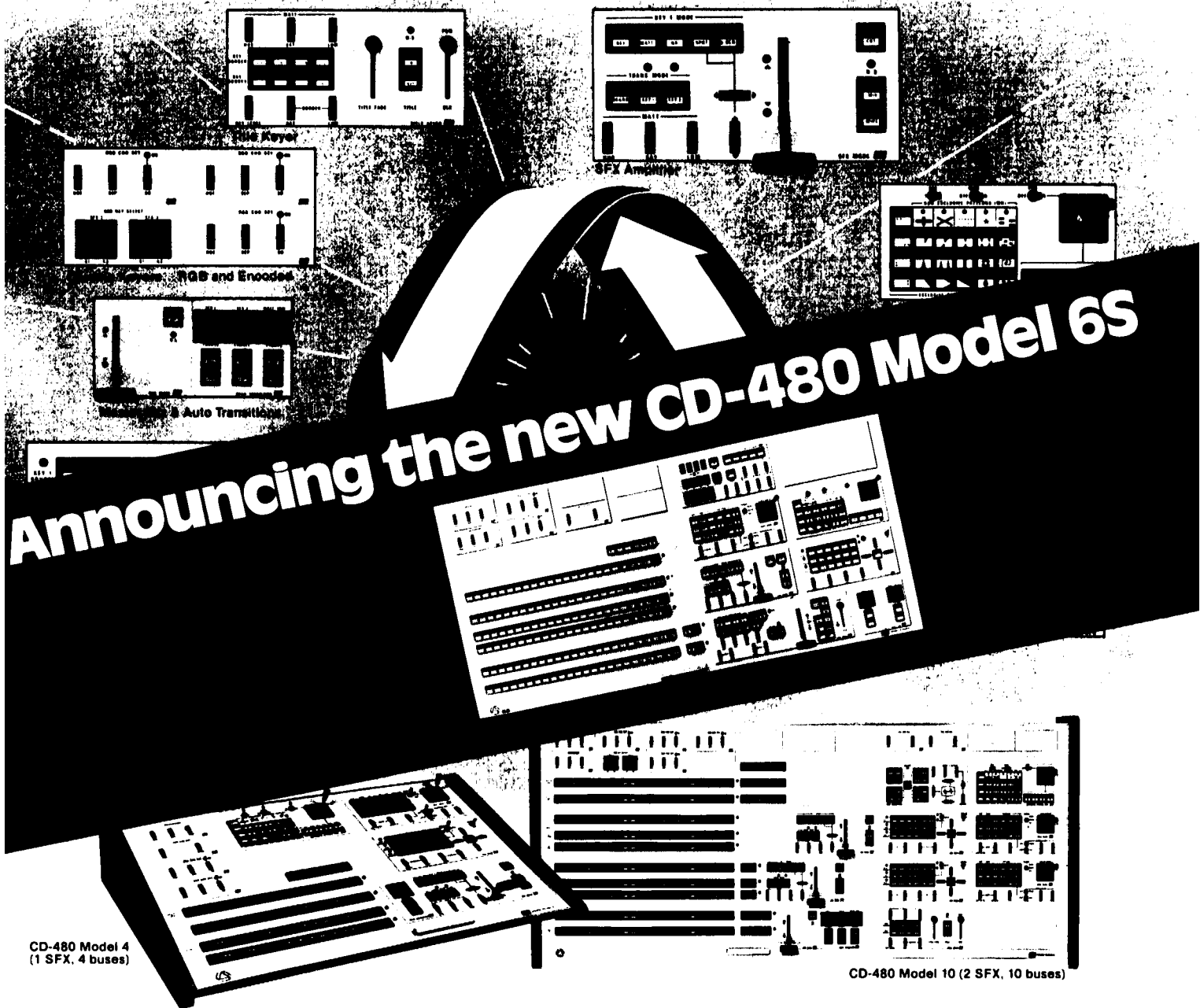
1 Inch Video Tape and the VTR: A White Paper, available from 3M Magnetic Audio/Video Products Div., 223-5N 3M Center, St. Paul, MN 55144, focuses on the care and cleaning of 1-in videotape recorders and 1-in videotape. This handy, 8-page guide contains some rather surprising facts: "A fingerprint can be over ½ mil in height . . . When only a .032 mil head-to-tape separation is needed to generate a large dropout, cleanliness is critical."

TV/Video Sync: Primer and Product Note Opt. 005-1 has been published by Hewlett-Packard Co., 1501 Page Mill Rd., Palo Alto, CA 94304. This 16-page primer, with 13 drawings and three photographs, includes a section on U.S. NTSC broadcast standards and nomenclature; discussions of PAL, NTSC, and SECAM systems of color transmission; and a glossary of video terms.

Shure Brothers Inc., 222 Hartney Ave., Evanston, IL 60204, has announced the release of their latest Microphone and Circuitry Products Catalog. The 72-page catalog describes over 150 microphones, including professional, general purpose, communication, and special purpose models, as well as microphone accessories and circuitry products.

A new catalog from Plastic Reel Corp. of America, 475 Boulevard, Elmwood Park NJ 07407 provides full details on the firm's products for the film, video, and computer industries. Included in the illustrated catalog are the Plio-Magic line of 16-mm, 35-mm, 8-mm, and super-8 reels,

Continued on p. 592



Announcing the new CD-480 Model 6S

CD-480...the most powerful and modular production switcher available today.

The 480's proven superior performance, reliability and flexibility has evolved from these powerful video production modules.

That's why you can customize a 480 to your specific production requirements... within your budget. And because of the 480's modular design we can deliver the largest model within 90-120 days.

Design your own switcher starting with any one of 9 basic models, and selectively equip it with a wide range of powerful 480 modules and accessories.

No other manufacturer can offer you that flexibility... and every 480 is equipped with the unbeatable video power of the CD-480 SFX Processor System that includes the SFX Amplifier, Key and Wipe Modules.

The 480 family includes switchers with 4 buses... even a model you can upgrade from 1 SFX and 5 buses to a Model 8 or 9 with 2 SFX Amplifiers and 8 or 9 buses. And the 480 continues to evolve which means you can always add the latest 480 production accessories.

That's why over 300 users call the 480 the most powerful and flexible new generation switcher available today.

Start designing your new CD-480 now so you can have the competitive advantage. Call or write for literature or our complete CD-480 Design Kit.

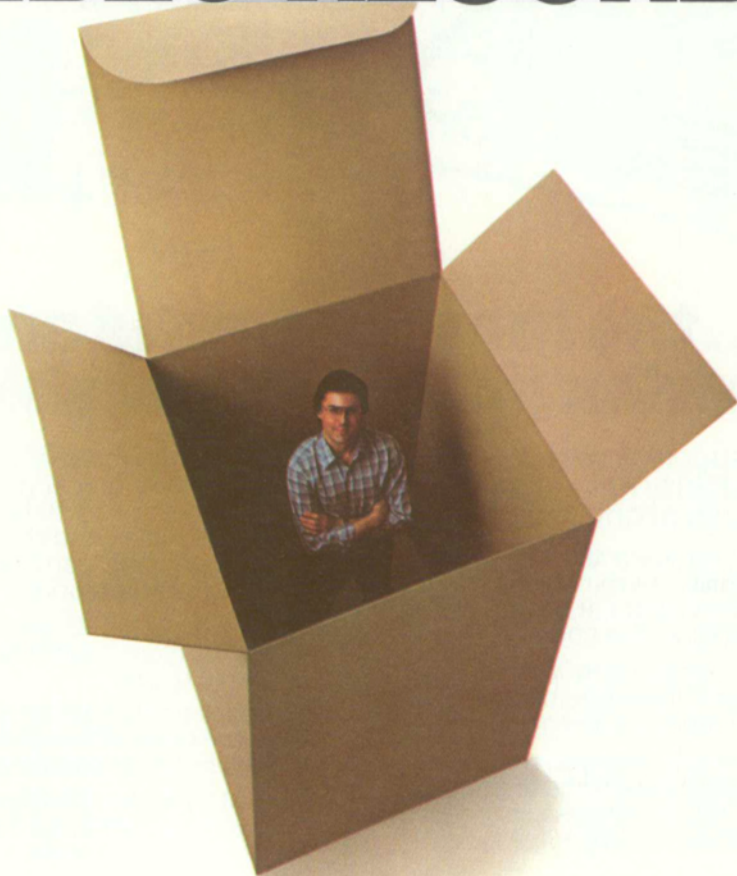
Central Dynamics Corporation, 900 Corporate Drive, Mahwah, NJ 07430. 201-529-1550.
Central Dynamics Ltd., Montreal, 514-697-0810.



CENTRAL DYNAMICS CORPORATION

The U.S. Broadcast Company for ■ COL ■ PHILIPS ■ American Data

**NEVER BEFORE HAS
THIS VITAL
COMPONENT BEEN SO
SUCCESSFULLY
INTEGRATED INTO A
1" VIDEO RECORDER.**



SONY INTRODUCES A 1" VIDEO RECORDER TAILORED TO THE PEOPLE WHO USE IT: THE BVH-2000.

Because Sony probably has more experience selling and servicing 1" VTR's than anyone else, we're in an unequalled position to understand the wishes of 1" video users.

And now, Sony announces with fulfillment for the broadcast industry: the new BVH-2000 1" video recorder.

WHY "BVH-2000" WILL MEAN DIFFERENT THINGS TO DIFFERENT PEOPLE.

In broadcast recording, there is no such thing as one typical situation.

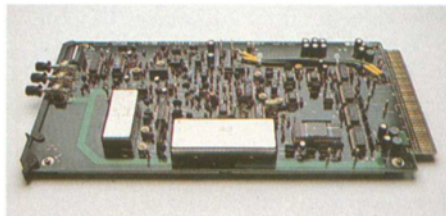
That's why there's no one single BVH-2000.

The BVH-2000 actually allows you to "design" the VTR you need for your own particular applications and budget.

You can choose among three different control panels—ranging from a basic model to one with virtually every possible feature and function.

And the tape transport system, signal system, and control section can either be combined into a single unit, or separated easily and installed in a 19" rack or console.

The BVH-2000 also gives you far greater latitude in setting up your entire recording system. Various remote-control connectors enable you to interface your system in a variety of ways for studio, mobile, and editing configurations. Direct interface with U-matic® and Betacam™ is possible, too. The BVH-2000



Plug-in time base corrector (optional).

also has an optional plug-in time base corrector.

What's more, the BVH-2000's lighter weight and smaller size (almost 50% less than its predecessor) make it as ideal on the road as it is in the studio.

And because of the ever-increasing number of applications requiring longer program times, the BVH-2000 provides up to 2 hours of tape time.

A VTR THAT LEADS THE SIMPLE LIFE.

In the BVH-2000, unlike most other VTR's, microprocessors are used to their full advantage. All data necessary for servo control are channeled into a central processing unit, making the operator's control over all systems and functions simpler and more precise.

Life is made simpler yet by the fact that every necessary function control, metering facility, and electronic module is accessible from the front.

Even the way the tape moves through the recorder has been simplified. One innovation—an extremely precise servo mechanism



The BVH-2000 (shown with Type-III control panel).

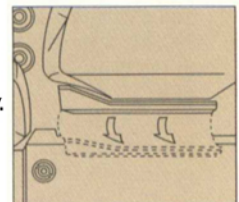
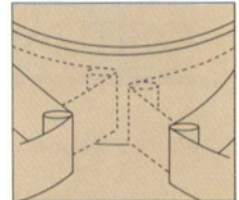
—permits the entrance and exit guide posts to move about 10mm away from the drum during threading. The result is the easiest threading system ever in a 1" video recorder.

THE MOST ARTICULATE VTR EVER BUILT.

The BVH-2000 removes much of the mystery from maintenance, too. It literally tells you about malfunctions—usually well before you'd notice them yourself—through a microprocessor-governed self-diagnostic system.

The system includes various alarm functions and numerous checks to confirm that everything is working properly. Most defects can be easily found—allowing for far less complicated maintenance and repairs, and reducing downtime considerably.

And because the best way to simplify maintenance is by lessening the need for it, the Sony BVH-2000 has been designed to be virtually maintenance-free down to the last detail. For example, only brushless DC motors are used, and all incandescent lamps have been replaced with high-brightness LED's.



To simplify threading, guide posts automatically move away from drum, and audio head cover opens.

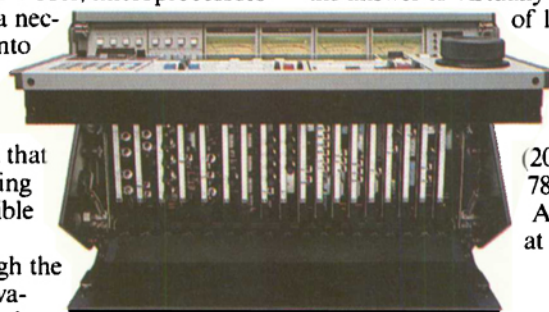
Other welcome advances include a greatly expanded dynamic tracking range (from reverse at normal speed to forward at 3 times normal); programmed play (allowing you to vary playback speed across a range of ±20% of normal speed); and video and audio confidence.

Remarkably, these are only some of the Sony BVH-2000's innovations. All of them add up to form the answer to virtually every need ever expressed by the users of 1" video.



Display board for self-diagnostics and other data-processing functions.

To find out how it can answer yours, write Sony Broadcast, 9 West 57th St., New York, NY 10019. Or call us in New York/New Jersey at (201) 368-5085; in Chicago at (312) 860-7800; in Los Angeles at (213) 537-4300; in Atlanta at (404) 451-7671; or in Dallas at (214) 659-3600.



Front access to all electronic circuits and modules.

SONY
Broadcast

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cans, reel packs, and shipping cases; Video Vault storage and shipping cases; and the Modu-Line film/tape storage system.

Continental Resources, Inc., 175 Middlesex Turnpike, Bedford, MA 01730, has released its 1982 Electronic Instrument Rental Catalog. The 64-page catalog contains over 1500 items including analyzers, generators, meters, oscilloscopes, recorders, and telecommunications equipment.

ABSTRACTS FROM OTHER JOURNALS

Evaluation of the EBU's Position in Respect of the Digital Coding of Television, Y. Guinet, *EBU Review-Technical*, 187: 111-117, June 1981.

The article is an historical account of the study of the digital coding of television within the EBU, starting with the creation of Working Party C in September 1972 and coding with the adoption of a component coding system, common to both the 525- and 625-line systems, in March 1981.

In retracing the various phases of this study, the author shows how the concept of digital television has evolved in the minds of broadcasters: seen first as a means of facilitating international program transmissions, digital coding has progressively come to be considered as a means of making programs of a high technical quality through its easing of the post-production processes. However, since the very beginning, the broadcasters have sought, through this technique, to overcome the limitations imposed by the existence of many different television systems.

OBITUARIES

Harry F. Olson

Harry F. Olson, a pioneer in acoustics and electronic sound recording and a Life Fellow of the SMPTE, died April 1, 1982, at the Princeton Medical Center at the age of 81.

He had been associated with RCA for almost 40 years, joining the Research Department in 1928. He retired in 1967 as Staff Vice-President, Acoustical and Electromechanical Research for RCA Laboratories. He held more than a hundred U.S. patents on devices and systems in the acoustical field. During his career with RCA, Dr. Olson developed several types of microphones for broadcasting and recording, underwater sound equipment, and sound motion picture systems. He also guided and contributed substantially to the development of the RCA magnetic tape recorder for television and the RCA music synthesizer. Other developments included the phonetic typewriter and a speech processing system.

Dr. Olson was born in Mt. Pleasant, Iowa, and attended the University of Iowa, where he received the B.S. degree in 1924, the Ph.D. degree in 1928, and the degree of Electrical Engineer in 1932.

He joined the SMPTE in 1948 and was made a Fellow in 1954. He was the author of *Elements of Acoustical Engineering* (published by D. Van Nostrand in 1940 and in 1947), *Applied Acoustics*, and *Musical Engineering*. He was also the author of more than 130 articles and professional papers, many of which were published in the *SMPTE Journal*.

He was a member of a number of professional organizations including the National Academy of Science, to which he was elected in 1959. He was also a Fellow of the American Physical Society, the Institute of Electrical and Electronic Engineers, the Audio Engineering Society, and the Acoustical Society of America.

Dr. Olson received numerous awards for



Harry F. Olson

his configurations to the field of audio engineering, among the John H. Potts Medal of the Audio Engineering Society (1949), and the John Ericsson Medal of the American Society of Swedish Engineers (1964). He was awarded the first Silver Medal in Engineering Acoustics of the Acoustical Society of America in 1974, and the Gold Medal in 1981.

He is survived by his wife, Lorene, and a sister.

Edward R. Farber

Edward R. Farber, 67, a pioneer in electronic lighting and the inventor of portable strobe flash units for still cameras, died suddenly on January 22, 1982, in Delafield, Wis. He began his career as a press photographer with the *Milwaukee Journal* after his graduation in 1936 from the U. of Wisconsin with a B.S. degree. During World War II he was stationed at the Ballistic Research Laboratory of Aberdeen Proving Grounds, where he worked as an electrical engineer.

In 1945 he formed his own company, Strobe Research, where he developed the relay type of electronic flash unit. Later, he provided flashing light instrumentation for early tests of intercontinental missiles at the White Sands, N.M., and Redstone, Ala., testing grounds.

Farber joined the SMPTE in 1949. He was also a member of other professional organizations including the Society of Photographic Scientists and Engineers, and the IEEE.

E. David Rosen

E. David Rosen, President and Chief Executive Officer of TVC Image Technology and Chairman and Chief Executive Officer of its subsidiary, TVC Laboratories, Inc., died of a heart attack on February 28, 1982 while on vacation in the Caribbean. He was 46 years old and lived in New York City.

He was graduated from Yale University in 1957. While at Yale he was President of the Ivy Network, a network of Ivy League radio stations. Prior to joining TVC in 1974, he held executive positions at Fabian Theaters, and was general manager of WAST in Albany, N.Y.

Mr. Rosen was a member of the SMPTE. Active in a number of social and religious organizations, he was a member of the Board of Trustees and of the Executive Committee of Congregation Kehilath Jeshurun in New York City.

Karl Struss

Karl Struss, a well-known portrait photographer and cinematographer, died December 16, 1981, at the age of 95. He was a Life Fellow of the SMPTE. In World War I he joined the Army Air Force and became an instructor in aerial photography. After the war he became a motion picture cameraman with Cecil B. DeMille in Hollywood, filming such classics as *The Sign of the Cross* (1932) and *Dr. Jekyll and Mr. Hyde* (1931).

In the 1950's he became an expert in 3-D photography and was Director of Photography at RKO-Pathe Studios, using Stereo-Cine Corp. camera equipment. A major photographic exhibition, *Karl Struss: Man With a Camera*, was shown first at Ann Arbor, Michigan, in 1976. Karl Struss, at the age of 90, addressed film history classes, spoke to film audiences, and gave lecture/workshops in both still photography and cinematography.