



**A seminar on Photographic Science and Engineering in Medicine** will be held July 20-21 by the Society of Photographic Scientists and Engineers at the Marriott Motor Hotel in Newton, Mass., near Boston. Sessions will cover Patient Photography, Photomicroscopy, Instrumentation and Radiography. Papers and discussions will explore present and future photography including fiber optics and liquid crystals; optical, scanning electron and holographic interference microscopes as well as diffusion techniques for cancer research; diagnostic imaging involving acoustical techniques, nuclear scanners, thermography and autoradiography; image quality of radiographs, reduction and analysis via CRT; and xeroradiography. Further information is available from SPSE, Suite 204, 1330 Massachusetts Ave., N.W., Washington, DC 20005.

**An Engineering Foundation Conference on Technology Assessment: Problems and Practice** will be held July 23-28 at New England College, Henniker, N.H. The purpose of the conference is to stimulate interest in the operational problems of performing technology assessments. It will provide a forum for the exchange of reports on current assessment efforts. The emphasis will be on small group workshops. The conference is particularly timely in view of the Office of Technology Assessment Bill recently passed by the U.S. House of Representatives. At the beginning of the conference, Peter Goldmark, President of Goldmark Communications Corp., will present a paper entitled "Its Later Than You Think — Communications Technology: A Pivotal Solver of the Societal Crisis." Participants will be assigned to small groups with an assessment leader to work out the dimensions of a Technology Assessment of Interactive Television and New Communications Technology based upon Dr. Goldmark's paper and additional materials to be provided.

Subjects of other technology assessments include Weather Modification, New Towns, Intelligent Computers and Robots, the Cashless Society, Recycle Society, Genetic Engineering and Bacterial and

Viral Substitutes for Chemical Pesticides.

The conference is limited to 100 persons. Further information is available from Engineering Foundation, 345 E. 47 St., New York, NY 10017.

**New Methods in Optical Design and Engineering** is a course to be held January 8-19, 1973, at the Optical Sciences Center at the University of Arizona. The purpose of the course is to acquaint both the specialist and nonspecialist engineer or scientist with the latest techniques in the design and engineering of optical systems. Central to the course will be discussion of methods of optical design and image analysis. In support of the general subject of systems engineering, there will be discussions of detectors and scanning systems, thin films, lasers, methods of fabrication and testing of optical components and some details of the tolerancing and specifications of complete systems. Further information is available from Dr. R. H. Noble, Optical Sciences Center, University of Arizona, Tucson, AZ 85721.

**Six intensive Hologram Workshops** will be held during August at Lake Forest College, Lake Forest, IL 60045. Session 1, In-

## New Sustaining Members

**Hervic Corp./Cinema Beaulieu**, 14225 Ventura Blvd., Sherman Oaks, CA 91403 (213) 981-2395

Hervic Corp./Cinema Beaulieu is the exclusive United States importer and distributor of Beaulieu 16mm and super-8 motion-picture camera systems, which are marketed through a network of some 600 franchised dealers. Among the many Beaulieu 16mm camera models available, the R16B(PZ) with built-in power zoom and the Beaulieu "News 16" professional single/double system sound camera are the two most recent additions. The new Beaulieu 4008ZM2 super-8 camera is now supplied with a super wide angle 8-66mm zoom lens (11:1 ratio). All Beaulieu camera systems offer complete lens interchangeability. The company also exclusively distributes in the United States many other motion-picture equipment lines such as Heurtier Projectors (Heurtier stereo and monaural sound super-8 projectors, and Heurtier P6-24B Dual 8 Projectors); Uher 1000/N Neo Pilot ¼-in. sync tape recorders; Hervic/Minette super-8 and 16mm viewer editors; Hervic/Multilapse unit for time lapse photography; and Hervic projection screens and tripods. Hervic Corp./Cinema Beaulieu maintains two offices: its executive offices located in Sherman Oaks, Calif. and its eastern branch office in New York City, New York. Both offices maintain full service, warehousing and shipping facilities.

*Address inquires to:* Christy Mc Manama, address above.

**Ballantyne of Omaha, Inc.**, 1712 Jackson St., Omaha, NB 68102 (402) 342-4444

Shortly after the advent of sound motion pictures, Ballantyne of Omaha, Inc. was established in 1932 in Omaha, Neb., by R. S. Ballantyne to manufacture soundheads for use in professional 35mm theater projection booths. During World War II its entire output of theater sound systems and speaker systems was purchased by the U.S. Army and Air Force Service. Following the War, in the late 1940's, Ballantyne became a specialist in drive-in theater equipment, furnishing high-wattage amplifiers and sound systems, as well as the in-car speakers. They bought the Gardiner Projector Co., and for a short time continued to market its products.

Later, they marketed the BW projector, manufactured by the Wenzel Company. In 1961 the Company was sold to ABC Consolidated of New York which in turn merged with Odgen Corporation in 1967. During this period Ballantyne introduced to the United States the Norelco FP20 35 mm Projector, manufacturing parts of the projector as well as parts of the Norelco AA2 35/70mm projector. In March of 1970, a group of investors, headed by J. R. Hoff who had been with the company since 1945, and E. J. Nelson, who joined the company in 1952, re-purchased the company from Odgen. In February, 1971, the company introduced to the trade the PRO-35, the first new American-manufactured projector in over 25 years. Coincidentally, they introduced a completely new Model 7 Sound System, and both the PRO-35 and Model 7 are now in hundreds of theaters throughout the United States and the world. The complete projector and sound system were specifically designed for use with automation, and Ballantyne now supplies a complete automated equipment package for use by any size theater. Products are distributed through selected theater supply dealers in the United States and Canada and marketed world-wide by selected exporters.

*Address inquiries to:* Mr. E. J. Nelson, at the address above.

**Tiffen Optical Co.**, 71 Jane St., Roslyn Heights, NY 11577 (516) 621-2700

Tiffen Optical Co. offers a unique integration of prototype and production facilities used by the world's leading photographers and technical community. Among the various items produced are all standard colors and Special Effects filters including Diffusion, Star, Low Contrast, Split/Field lenses and Organic and Metallic Neutral Density filters. On call for your every requirement is a large optical production department, modern vacuum coating department, extensive metal machining facilities and the world's leading scientific and optical color laboratory. A complete range of sizes and colors is available to fit all lenses and related equipment.

*Address inquiries to:* Nat Tiffen and Stan Ernenwein, at the address above.

roduction, will present the subject of holography with physical demonstrations of lasers and various types of holograms. The theory of the process will be explained without the use of mathematics. Filmstrips and color slides will be used. Session 2, Techniques, will include physical demonstrations of each piece of equipment used in the hologram-making process. Sessions 3 through 9, Practice, will consist of participants working in small groups to make holograms. They will be under supervision. Session 10, Concluding Discussion, will answer questions on various phases of hologram-making. Instruction will be given on how to construct home-made systems with inexpensive materials.

**PLATO**, the computer-based teaching system developed at the University of Illinois (*Journal*, p. 240, Mar. 1972), is expected to be used in the operation of some 4,000 student stations at the end of 1975 as the result of a \$10 million development and expansion program. The program will include equipment and teaching programs for a minimum of 15 college courses, eight community college courses and reading and mathematics for two elementary grades. PLATO will be used in three elementary schools and two community colleges in Chicago, plus two elementary schools, a community college and the University of Illinois. The present PLATO system is centered in a large electronic computer at the University. Each student communicates with the computer and carries on his work at a console or student station which has a display screen and a keyboard. The screen is a thin, flat display panel which can be operated over ordinary telephone lines. Thus, a large number of courses can be offered simultaneously with each student progressing at his own speed.

**The Fifth Motion Picture Seminar of the Northwest** was held June 2-3 in the Seattle Center Playhouse in Seattle, Wash. The Seminar opened with a film, *Cassandra*, produced by Robert F. Brown and Frank Olvey, which was supported in part by a grant from The Motion Picture Seminar of the Northwest. Papers on various phases of film production were presented on Friday by well-known authorities. Highlighting the Saturday (June 3) morning program was a seminar on professional super-8 production. Keynote speaker at the luncheon was James Wong Howe, ASC, Director of Photography. Friday evening (June 2) was devoted to showings of the best in films produced in the northwest. The Motion Picture Seminar of the Northwest is an annual event. Further information is available from the Motion Picture Seminar of the Northwest, P.O. Box 1068, Seattle, WA 98111.

**EVR Partners**, Imperial Chemical Industries Ltd. of Britain, CIBA-Geigy of Switzerland and a Japanese consortium have agreed to worldwide exploitation of the Electronic Video Recording system, it was announced by John C. Lewis, Managing Director of The EVR Partnership, London. The Japanese companies are Teijin, Hi-yachi, Mitsubishi Electric and Mainichi Broadcasting System, which is one of Japan's leading TV networks and part of the Mainichi organization headed by Mainichi

Newspaper Publishing Co. The Japanese consortium evaluated all existing TV cassette systems and selected EVR, the announcement stated. An EVR processing plant will be set up in Japan. The EVR Partnership exports film cassettes to Japan from its processing plant at Basildon, Essex. It is expected that the agreement will result in considerably increased demands for EVR cassettes. Two operating companies will be formed, one in London and the other in Japan.

**The Vidtronics Company Ltd.**, of the United Kingdom, formerly a subsidiary of Technicolor, Ltd., has been acquired by The Vidtronics Company Inc., and henceforth will operate as a separate entity, it was announced by Harold Goldman, Chairman and Chief Executive Officer of Vidtronics. Ron Edgerton has been appointed Managing Director of the United Kingdom subsidiary.

**Producers Service Corp.**, 1200 Grand Central Ave., Glendale, CA 91201, has acquired the Photo Instrumentation Div. of Traid Corp., according to a recent announcement. Producers Service Corp. will continue to manufacture and market most of the products previously listed in the Traid Corp. Photo Instrumentation catalogs. It is also prepared to provide repairs and spare parts to equipment sold previously by the Traid Corp. Photo Instrumentation Div.

**Bell & Howell**, 7100 McCormick Rd., Chicago, IL 60645, has announced that it will no longer accept shipments that are in corrugated cartons sealed with asphalt laminated reinforced tape since asphalt laminated reinforced tape cannot be recycled. Bell & Howell is "conscious of our ecology (and) cooperates in reducing waste pollution by recycling our solid corrugated waste, we cannot go through the expense of separating our corrugated to meet recycling requirements," the announcement stated. The firm prefers corrugated cartons with a glued manufacturers joint rather than a taped or stitched joint provided the package allows safe transit.

**The Intelsat V**, the communication satellite being built at Lockheed Missiles & Space Co., Sunnyvale, Calif. (*Journal*, p. 242, March 1972) will have a capacity 10 times larger than Intelsat IV, according to Joseph J. Knopow, Manager of Lockheed Missiles & Space Programs, who spoke at the Fourth Communications Satellite Systems Conference of the American Institute of Aeronautics and Astronautics held in Washington, D.C., during April. The firm is doing a system design study for COMSAT for an "early version" of the Intelsat V satellite. The new satellites will be designed for direct broadcast television and ship and aircraft communications as well as for telephone traffic, Mr. Knopow said. A key element in a communication satellite is the repeater, a subsystem that accepts the signal directed to it from the ground station, switches it to a slightly different frequency, amplifies the signal and beams it to another ground station. In Lockheed's development test satellite, the repeater, composed of two active trans-

ponder channels and a dual-beam antenna, will receive, process and retransmit voice, digital data and video signals.

**A complex wide-field binocular colorimeter**, designed some 25 years ago by David L. MacAdam and built for Eastman Kodak Co. at a cost—at that time—of about \$25,000, has been donated to the Rensselaer Polytechnic Institute by Kodak Research Laboratories. The instrument will be used in RPI's Color Research Laboratories for research in color vision. Prof. Fred W. Billmeyer, Jr., Director of the RPI Laboratory said, "No commercial instrument approaches the precision of this colorimeter." He added, "The cost today of constructing a duplicate with its accuracy of adjustment down to two-and-one-half thousandths of an inch, would easily be double the cost of 25 years ago." The colorimeter will be used initially in several ongoing research areas, including the scaling of color differences larger than threshold sizes, and the effect of simultaneous contrast on color-difference perception.

**Videotapes for technical training** purposes are listed in a 10-page catalog available from Hewlett-Packard, 1601 California Ave., Palo Alto, CA 94304. They are available in ½-in EIAJ-1 and other formats. The catalog lists a 15-tape practical transistor course, tutorials on using s-parameters, microwave instrumentation and use of electronic counters. Also listed is a guide to digital magnetic tape recording and a course on oscilloscopes, among others. A number of tapes are on the use and maintenance of specific Hewlett-Packard Instruments.

**Gordon's Television Systems, Inc.**, one of the largest Sony VTR equipment dealers, has purchased the Sony D-100 Duplicator Printing System for production of videocassettes. The Duplicator/Printer has been installed at Consolidated Film Industries video facility which handles video source equipment systems for quad, helical, super 8, 16mm and 35mm. The combination of Gordon's TV Systems and CFI will give end users of Sony U-Matic Videocassette Systems an important source for program duplication requirements, according to Costas St. John, President of Gordon's TV.

**Dolby Laboratories, Inc.**, has moved its New York office to larger quarters at 1133 Ave. of the Americas, New York NY 10036. The British-based firm (346 Clapham Rd., London SW 9) also has a branch in Japan located in the Tiger Bldg. in Tokyo.

**G. Carleton Hunt** has been made Chairman of the Board of De Luxe General Laboratories in Hollywood. He is succeeded as President of De Luxe General by Robert T. Kreiman. Mr. Kreiman was formerly Vice-President and General Manager of The Suburban Companies. He is a Director of Pace International Corp. and he has also been Vice-President and General Manager of the Commercial and Educational Div. of Technicolor, Inc.

**Gale Livingston** is the new President of the Aero Service of Westrex divisions of

Litton Industries, according to a recent announcement. He will continue as a Vice-President of Litton's Professional Services and Equipment Group. Aero Service, based in Philadelphia, performs aerial photogrammetric surveys for economic development, oil and mineral exploration services on a worldwide basis. Westrex, based in Hollywood, is a pioneer in the manufacture and sale of professional motion-picture, sound-recording, projection and electronic communication equipment. Litton Industries, based in Beverly Hills, is a multinational corporation specializing in products, systems and services for business, defense, marine, industrial and professional markets.

**Norman McLaren** of the National Film Board of Canada, P.O. Box 6100, Montreal 100, Quebec, is the recipient of two major honors. He has been presented with the Public Service Achievement Award for exceptional contributions to the development of filmmaking in Canada and with the Molson Prize of the Canadian Council presented annually to "recognize and encourage outstanding contributions to the arts, humanities, social sciences or to national unity." The Public Service Award is the highest honor which can be presented to a public servant. Presentation was made by Governor-General Roland Michener and was attended by Prime Minister Trudeau.

**Donald Davis** and **Bart N. Locanthi** have been made Fellows of the Audio Engineering Society. Presentation of the Fellow Awards was made by J. G. Woodward, AES President. Both men are with the Altec Div. of Altec Corp. Mr. Davis is Vice-President, Marketing and Industrial Products, and Mr. Locanthi is staff assistant to the Senior Vice-President of the Audio Equipment Manufacturing Co.

**Israel Switzer** has been appointed Vice-President of Engineering for Maclean-Hunter Cable TV Ltd., 27 Fasken Dr., Rexdale, Ont. Can. He has been Chief Engineer of the firm since it was formed in 1967. Mr. Switzer is a pioneer in the cable television industry in Canada and was responsible for starting the first cable TV systems on the prairies in 1955. He is President of the Canadian Assn. of Broadcast Consultants. He was a participant in the Symposium on Cable Television held in New York in October 1970 and he is the author of a paper, "Receiver/Cable Television Problems and Case Histories" that appears in the *Proceedings of the Symposium on Cable Television* published by SMPTE.

**Edmond P. Hyatt** has been appointed General Manager, Technical Operations, Century Strand Inc., 3 Entin Rd., Clifton, NJ 07014. He was formerly President of Ariel Davis, Inc.. He also served as Vice-President of Operations for Solonix, Inc. In his new post he will be in charge of all technical operations of the company. Century Strand designs and manufactures lighting and control equipment for motion-picture, TV, theater and architectural applications.

## Obituary



### Keith B. Lewis

Keith B. Lewis, a Life Fellow of the Society, died April 6 in Washington D.C., at the age of 65. He had retired in November 1971 as Director of Government Liaison for Eastman Kodak Co. At the time of his retirement he had been with Eastman Kodak for more than 43 years.

**Patricia M. Bruch** has been elected to the Board of Directors of Capital Film Laboratories, Inc., it was announced by Peter Boyko, President. Mrs. Bruch has been closely associated with Capital for a number of years as the wife of the late Alfred E. Bruch, President of the company from 1963 until his death in December 1971. She is one of the founders of the A to Z Investment Club of Washington and is presently affiliated with Faye Cobb, a realtor, as a sales associate.

**John Ayotte** has been appointed Regional Sales Manager for Optical Radiation Corp., 6352 N. Irwindale Ave., Azusa, CA 91702. Mr. Ayotte was formerly Chicago Branch Manager for National Theatre Supply. In his new post he will have marketing responsibilities for theatrical and audio-visual products for the eastern states. He will maintain an office in the New York area.

**Ron Offerman** has been appointed Regional Sales Manager for Optical Radiation Corp., 6352 N. Irwindale Ave., Azusa, CA 91702. He was formerly Vice-President of Outside Sales and Service for the Slipper Theatre Supply Co. in Omaha, Nebr. In his new post he will have marketing responsibilities for theatrical and audio-visual products for the midwestern states.

**Clair F. Smith** has been appointed Technical Assistant to the Manager of Consumer Products Engineering at the Kodak Apparatus Div. of Eastman Kodak Co. Mr. Smith has been with Kodak since 1924, serving in various capacities. Prior to his present appointment he was Senior Supervising Engineer and Head of the Optical Engineering Dept. which was recently combined with the Optical Design Dept.

Mr. Lewis was graduated from the University of Georgia in 1928 and joined Eastman Kodak that same year as a trainee. He was appointed a salesman in the Florida-Georgia area in 1935 and in 1942 he joined the Washington, D.C., office. In 1945 he was made Office Manager and in 1970 he was appointed Director of Government Liaison.

He became a member of the Society in 1952 and he was made a Fellow in 1958 "in recognition of the rank he has attained among engineers in the motion-picture and television industries through his proficiency and contributions," the citation stated. Among other contributions to the Society he had served as Chairman of the Washington Section.

Professional organizations, other than the Society, of which he had been a member include the Society of Photographic Scientists and Engineers, American Society of Photogrammetry, Armed Forces Communications and Electronics Association, National Press Club, Navy League of the U.S., and Washington Film Council. He was also an Honorary Member of the Master Photo Dealers and Finishers Association.

**David B. Ubel** has been appointed Director of Sales and Marketing for Audio Visual Products for Charles Beseler Co., 219 S. 18 St., East Orange, NJ 07018. Mr. Ubel formerly operated his own company, Media Marketing, Inc., a firm serving a sales and marketing function for various manufacturers and producers of audio-visual equipments and materials. In his new post he will be responsible for providing leadership to the sales force. His duties will also include the identification and implementation of new product and program requirements to satisfy the growth goals established for the firm.

**Thomas R. Meyer** has been appointed Sales Applications Engineer for Telemation, Inc., P.O. Box 15068, Salt Lake City, UT 84115. He was formerly a systems engineer with Hubert Wilke, Inc., Communications Facilities Consultants in Los Angeles. In his new post he will provide Telemation's salesmen and customers with technical information on television systems and products.

**Fred Grover** has been appointed Director of Marketing for Photo Research, Div. of Kollmorgen Corp., 3000 N. Hollywood Way, Burbank, CA 91502, it was announced by James K. Branch, President. Mr. Grover's background includes technical marketing and advanced program development and planning in the areas of photometric and infrared systems.

**Nigel Shepherd** has been appointed Marketing Manager for Sixteen Millimetre Australia Pty. Ltd., 55-69 Murray St., Sydney, Australia. He has been with the firm since 1970 as Manager of the Microfilm Div.