



The California Institute of Arts, a new school (*Journal*, p. 650, Aug. 1969), will open in the fall of 1970. The Institute will be made up of six schools: Art Design, Music, Theater and Dance, Film and Critical Studies, all conceived as a total environment. The Institute will enroll between 600 and 700 students this year, and is planned for the benefit of students who are in search of new approaches to training in the arts. A bulletin outlining the concept, programs and admissions policy of the six schools is available from the California Institute of Arts, 2404 West Seventh St., Los Angeles, CA 90057.

Some of the innovative features of the Institute are the absence of a fixed curriculum, emphasis on projects or individual work and students and faculty performing as collaborators. Dispensing with grades, progress of a student will be measured by what's done as it is done, with evaluation an organic aspect of the process. Continuation in the programs will be dependent on demonstrated ability. The Institute will be located in Valencia, CA, a new city being constructed near Los Angeles. By 1973, with admissions at capacity, the Institute will accommodate 1500 students.

A course on Image Enhancement, Recognition, and Coding will be offered this summer at the Massachusetts Institute of Technology, Cambridge, MA, during the 1970 summer session. The course will cover basic digital computer, optical and electrooptical image processing techniques with applications to image quality enhancement, pattern recognition, and efficient coding of pictures for storage transmission. Subjects to be discussed are: two-dimensional Fourier analysis; nature of light-coherence and polarization; geometrical optics and projective transformations; diffraction theory; optical Fourier transform and spatial filtering; holography; computer generation of optical spatial filter and holograms; film scanners; image digitizing-sampling and quantization; digital computer Fourier transform and linear filtering; and non-linear operations and techniques pertaining to pattern recognition. Several guest lecturers will describe state-of-the-art achievements in this field.

A 17-member Associate Committee on Instructional Technology has been established by the National Research Council of Canada. The committee will study, coordinate and promote research concerned with the application of technological developments in instruction. Dr. F. E. Whitworth of Ottawa, Director of the Canadian Council for Research in Education, has been selected as the first chairman of the committee. Objectives of the committee are: (1) to bring together specialists

from the various disciplines involved in the field of instructional technology to formulate requirements and establish guidelines for research and development; (2) to promote interchange of information among workers in different disciplines throughout the organization of symposia; (3) to promote and coordinate relevant research and development in universities, government laboratories and industry, with the aim of establishing a strong Canadian-based capability in this field; and (4) to encourage a degree of standardization in instrumental systems sufficient to permit all provinces to benefit from the interchange of instructional material.

The fifth annual National Student Film Festival, sponsored by the American Film Institute and the National Student Association has been announced. The 1970 Festival will also be sponsored by the Jos. Schlitz Brewing Co. of Milwaukee, WI. Screenings of prize-winning films will be held in New York and Los Angeles in September. Entry forms have been sent to college film schools and entries must be submitted by May 1. Films must be 16mm or 35mm with optical sound. For the 1969 Festival 146 entireties were submitted from 44 colleges and universities. Some 300 entries are expected for the 1970 Festival. Twenty-five winning films will be selected by a panel of qualified judges. Prizes will be donated by Schlitz.

The Instrument Society of America (ISA) will sponsor the 4th ISA Analytical Instrumentation Short Course to be held June 7-12 at Temple Buell College, Denver, CO, and will also sponsor the 1970 Research Conference on Instrumentation Science to be held July 27-31 at Hobart and William Smith Colleges, Geneva, NY. The Short Course is designed to provide the scientist or engineer with an intensive survey of the current status of process analytical instrumentation as well as an insight into its fundamentals and applications. The Research Conference is intended to stimulate an informal exchange of ideas through discussion groups and presentations among those involved in instrumentation research.

Further information about the Short Course and the Research Conference is available from Thomas E. Tremellen, Manager, Education Services, Instrument Soc. of America, 530 William Penn Pl., Pittsburgh, PA 15219.

The University of Wisconsin has announced the Television Techniques Institute to be held May 5-6 at the Wisconsin Center on the University's Madison campus. The Institute will consist of a lecture sequence and a studio demonstration of a video-taping operation. The lecture sequence is designed to promote the exchange of ideas and problem solutions. Further information is available from David P. Hartmann, Institute Director, 725 Extension Bldg., 432 N. Lake St., Madison, WI 53706.

The Third Motion Picture Seminar of the Northwest will be held May 8-9 at the Seattle Center in Seattle, WA. Four cate-

gories of films will be shown: Industrial, Educational, TV Commercials, and Public Relations/Entertainment. Films to be shown are limited to those produced in Western Canada or the Pacific Northwest since May 1, 1968. Film producers have been invited to submit films by April 8. To enable the showing of as many films as possible, films with a running time of 20 min or less will be selected. Further information is available from David G. Christensen of Coffin, Christensen and Todd, 619 East Pine, Seattle, WA 98122.

IEEE Reflects (Retrieval From the Literature on Electronics and Computer Sciences), machine-readable, magnetic tapes containing indexing and abstracts of papers in the fields of electronics, computers and control, and applied physics, are now available on a monthly basis from the Institute of Electrical and Electronics Engineers. The tapes will be produced in a variety of character codes and tape formats to suit a variety of customer requirements. Customers will also be able to select their areas of interest from eight broad subject categories including Electron Devices and Materials and Computer Science and Technology. Under a joint project with IEE of London, more than 1,200 journals, conferences, patents and books will be surveyed to produce a total coverage of an estimated 66,000 scientific and technical papers for 1970.

Another tape service, the IEEE Annual Index Tapes, will also be available in 1970. This once-a-year service will contain cumulative indexing of IEEE's own publications for 1968 and 1969. The two tapes will cover some 16,000 papers from the various IEEE publications. Further information about IEEE Reflects and IEEE Annual Index Tapes is available from Thomas H. Hogan, Information Services, IEEE, 345 E. 47 St., New York, NY 10017.

Shaded Linescan, a new technique for display of three-dimensional images by a digital computer has been developed at the Coordinated Science Laboratory of the University of Illinois at Urbana-Champaign. The new technique expands on previous work done at the Laboratory toward the development of the Linescan routines. Most computer routines for the display of objects have the disadvantage of displaying only the edges with a "wire frame" image. The frame-like picture allows the observer to see through the object to edges that normally would be hidden from view. For complicated structures, this characteristic can seriously impair the ability of the observer to visualize the object being depicted. The new shaded Linescan overcomes this difficulty by displaying shadows and opaque planes for a more realistic representation. The Linescan system allows the display of an object from any viewing angle and permits rotation of the object for the generation of a series of images. The images are generated from data specifying only the coordinates of the endpoints of edges. Through the use of a special algorithm, the computer itself can generate the information needed to complete the display. The computer can determine a set of

"key squares" which defines where changes in the image intensity should take place. Shaded Linescan then displays the image on a cathode-ray tube by employing a raster-scan technique similar to television pictures except that it uses sampled digital data.

**Will Szabo Associates Ltd.**, of New Rochelle, NY, and Francis Thompson (producer of *To Be Alive* and other well-known motion pictures) have collaborated in the designing of a theater for the presentation of the film, *The Cathedral at Chartres*, at the Metropolitan Museum of Art in New York. The museum is presently celebrating its centennial with special exhibits, one of the most important being *The Year 1200* which emphasizes the great artistic contributions of the late 12th, the 13th and the early 14th centuries, an era regarded as one of the turning points of western civilization.

Numerous problems were encountered in designing a theater to be contained in a 35- by 35-ft gallery. Projection equipment includes a 35mm motion-picture projector, four 2 by 2 slide projectors and a selsyn interlocked punched-tape programmer. The 15-min color film and 200 slides are shown to an audience of 100 people seated on bleachers. A central motion-picture screen 19 ft wide by 16 ft high is flanked by two screens 6½ ft wide by 16 ft high. High-intensity xenon light sources are used in all projectors. The gallery's hard walls and 24-ft ceiling required considerable design analysis to convert the gallery to an acceptable acoustical environment and an extremely short throw distance required modification of available lenses to fill the screen.

**The Golden West Production Center**, a new film production facility, utilizing the studios and space located on Gene Autry's Golden West Broadcasters 10-acre lot in the heart of Hollywood will be available for film producers who wish to use GWPC as headquarters for producing commercials, industrial films, TV series, specials and features. The facility will offer various size stages for both sound and silent shooting, editorial services, mill and scenic facilities, projection rooms and office space. All necessary equipment and technical personnel will also be available. A total of nine stages are located on the property, and all of them can be used interchangeably for video-tape or film. The lot was part of the Warner Bros. original Hollywood home. The new facility will be headed by Bill Watkins, a former independent motion-picture producer.

**Camera Mart Inc.**, encompassing Camera Mart Rentals, Camart Products, Camera Mart Lighting and Grip Division, has moved to new facilities at 456 West 55 St., New York, NY 10019.

**Sherwood Leasing Corp. (OTC)** has acquired The Optical House, Inc., and related companies. The Optical House is a privately-owned producer of optical film effects for motion pictures and television, and is located in New York City.

**The World Directory of Stockshot and Film Production Libraries/ Un Répertoire Mondial de Cinématheques de Production** is published by Pergamon Press Ltd., Headington Hall, Oxford, England. The directory, which gives a comprehensive list of sources of motion-picture stockshots throughout the world, is in English and French. Sources in 59 countries, including 310 film production libraries which can supply stock material are listed. The *Directory* includes an Index of Film Libraries and Organizations, an Index of Subjects and a Chronological Index which gives the date of the oldest film preserved by the various organizations listed, beginning in 1895. The Subject Index is a guide to the content of the material in the various libraries and organizations. Executive Editor of the *Directory* is John Chittock. The *Directory* was prepared with the assistance of UNESCO and is published with its authorization. The *Directory* is priced at \$12.50.

**Filmfacts**, a biweekly publication which lists all films released in the United States, including synopses, critic's reviews and artistic and technical credits, has become a publication of the American Film Institute, 1815 H St., N.W., Washington, DC 20006. *Filmfacts* continues to be edited by its founder, Ernest Paramentier, and the editorial offices will remain in New York. Queries about subscriptions or back issues should be addressed to the American Film Institute.

**F&B/Ceco Industries, Inc.**, has opened a branch office in Washington, DC, at 2215 M St., N.W., it was announced by Arthur Florman, President. Head of the new office will be John Bennewitz, Regional Director of Marketing. Mr. Bennewitz was formerly Motion Picture Officer for Management in the Joint United States Public Affairs Office of the U.S. Information Agency.

**Telonic Industries, Inc.**, 21282 Laguna Canyon Rd., P.O. Box 277, Laguna Beach, CA 92652, has announced an extension of its marketing policies to provide a test-equipment leasing program. Among equipments available for lease will be the firm's Save Time Machine, a sweep generator display system, normally priced at \$6,400, which will be available for lease at about \$165 a month. The Save Time Machine consists of Telonic's 2003 sweep generator system and the 201 Tri-Color display system, a three-color, multiple-channel display system.

**Technology Inc.**, has concluded an agreement to acquire the Westwood Division of Houston Fearless Corp., it was announced by Maurice F. Krug, President of Technology. The newly acquired division will be renamed CINTEL Corp. and will be operated as a wholly-owned subsidiary. President and General Manager of CINTEL will be James E. Remmer. The new subsidiary will work closely with Technology's other facilities, particularly the photographic group. Products to be manufactured by CINTEL will include the Silver

Recovery Unit, a system for recovering silver from photographic processing solutions. The unit was designed by Technology's CETEC subsidiary.

**Tele-Color Productions, Inc.**, 708 N. West St., Alexandria, VA, has announced expansion of its television production facilities to include an additional 11,000 ft<sup>2</sup>. The new facilities will include two additional studios.

**A series of 11 original programs for CATV (cable TV)** has been announced by National Telesystems Corp., 9125 Sunset Blvd., Los Angeles, CA 90069. The new programming package will provide CATV systems operators with 20 hours of color video-taped programming weekly. Price of the new program series will vary according to agreements with multiple systems operators and individual systems owners, but will be approximately 50 cents a month per subscriber for the full 20-hour package, the announcement stated. The series will include lecture programs, instructional programs, cooking, music and dance programs and childrens' programs.

**Ed Shaw**, Vice-President and Director of the Motion Picture Dept. of Tech Films Corp., 1484 Main St., Waltham, MA 02154, will direct the firm's high-speed photography film, it was announced by William McCrea, President of Tech Films. Mr. Shaw organized, staffed and trained the Motion Picture Dept., the announcement stated. He has directed a number of films. Two of his recent films, *Boston: The Freedom Trail*, released by Paramount Pictures, and *Micromembrane Filtration*, A World-Wide release, have received a number of major awards including the Freedom Foundation George Washington Medal.

**John G. Hance, Sr.**, has joined Tech Films as Director of Film Processing Services. Mr. Hance brings to Tech Films over 30 years of experience in the field of professional motion-picture processing. He was most recently Technical Director of Movielab, New York.

**R. Bruce Hill**, a corporate officer and vice-president of Mitchell Camera Corp., has announced that he has resigned his position to pursue other personal endeavors. Mr. Hill joined Mitchell seven years ago and has headed up the company's sales and marketing activities. He is a member of the Academy of Motion Picture Arts and Sciences, SPIE, SMPTE and the Technical Committee of ASC. Mr. Mitchell reports that he will remain active in the cinema industry.

**Marvin E. Diers**, Manufacturing Vice President for Pako Corp., 6300 Olson Memorial Hwy, Minneapolis, MN 55440, has announced several executive level promotions as part of a major realignment program within his division. R. J. ("Jim") Reed has been named to the newly created position of Manufacturing Manager. He will be responsible directly to the Manufacturing

Vice President. Prior to assuming this responsibility Mr. Reed was Manager of Production Planning and Control. He joined Pako Corp. in 1968 after extensive experience in the production control areas of several major electronic and aero-space companies.

The new Plant Superintendent is John H. Sodergren. He moves up to this assignment from the position of Assistant Plant Superintendent. A Minneapolis native, Sodergren has 24 years service with Pako.

**Cornelis Hofman** of Amsterdam, Holland, has been appointed Vice President Marketing and Sales for the Sennheiser Electronic Corp. in New York. He has had 20 years experience with Sennheiser products and other professional sound and film equipment with N.V. Kinotechniek in Amsterdam.

**Theodore F. Phillips** has been appointed St. Louis District Sales Manager for the Photolamp Division of Sylvania Electronic Products Inc. Phillips joined Sylvania in 1964 as a sales representative in Washington, DC. In 1969, he was named a specialist in tungsten-halogen studio lighting. Prior to joining Sylvania, he was a purchasing agent for Crown Photo Service.

**Vernon H. Jungjohann** has been appointed Program Manager, Still Picture Products, Eastman Kodak Co., Rochester, NY. He was first employed by Kodak in the development department in 1938. He was placed in charge of the development and design of slide projectors in 1955 and the following year was appointed senior supervising engineer of design. In 1963 he assumed the responsibility for the design of new motion-picture cameras and in 1965 was named program manager, motion-picture camera engineering.

**Bruce L. Elle** has been appointed Program Manager, Motion-Picture Cameras, Eastman Kodak Co. He joined Kodak in 1940 in the scientific department at the Hawk-Eye works. From 1945 to 1956 he worked in Recordak engineering as project engineer for several developments, and the following year was named supervising engineer for Minicard Cameras and Processor. From 1960 to 1963, he was at Lincoln Plant on proprietary work on photographic equipment. In 1963, he was named project manager and later assistant program manager for the Lunar Orbiter photographic system. Early in 1969 he was appointed program manager for the Apollo Lunar Surface Close-up Camera.

**Dr. Hans Chr. Wohlrab** has been appointed to the new position of Technical Director, Sales, Hollywood Film Company, 956 N. Seward St., Hollywood, CA. In his new position Dr. Wohlrab, a well-known technical industry figure, will furnish the necessary technical support for the company sales staff.

**James R. Rochester** has been appointed technical director of Xenotech, Inc., 7824 Sepulveda Blvd., Van Nuys, CA 91405.

Xenotech is an exclusive licensee to Spectrolab, a Textron division, for the manufacture and sales of Lightsun searchlights. Mr. Rochester formerly served as project manager of research and development at Spectrolab, Sylmar, CA, where he was responsible for the development of high-intensity xenon light sources and other related photoinstrumentation products. At Xenotech, he will have complete charge of all technical programs relevant to the development of the high-intensity Lightsun sunlight simulator, and a new line of Sunbrute xenon floodlights for motion-picture and television set lighting.

**Walter H. Mills** has been appointed Vice President, Marketing, for Magnasync/Moviola Corp., North Hollywood. He was formerly Director of Marketing.

**Edward W. Herold** and **Howard Rosenthal** have been appointed to newly created Director positions on Corporate Engineering Staff of RCA Corp. Their responsibilities will include coordinating the engineering activities of the RCA product divisions with corporate research and planning functions. They will also provide li-

aision between the divisional engineering organizations and the office of the Executive Vice-President of Research and Engineering, James Hillier. Dr. Herold, as Director of Technology will be primarily concerned with research and engineering efforts dealing with electron tubes, solid-state devices and related technology. Mr. Rosenthal as Director of Engineering will be primarily concerned with electronic equipment and system projects.

**Charles Intrator**, inventor of Clipstrip and other motion-picture lighting equipment, has announced the opening of consulting offices at 666 Tenth Ave., New York, NY 10036. He designed the Clipstrip to overcome problems he had encountered while working as a lighting supervisor when lighting confined areas. The Clipstrip mounts on doors or walls or on grip equipment to leave floor space free.

**Robert H. Hansen** has been appointed National Sales Manager for International Nuclear Corp., 608 Norris Ave., Nashville, TN 37204. The firm manufactures and markets video television switcher systems and video distribution equipment.



BOSTON, Jan. 15 — W. J. Hannan, David Sarnoff Research Center — RCA, Princeton, NJ, described techniques for recording and replicating low cost holographic movies. Specific topics covered were techniques for suppressing speckle and scratch noise in reconstructed holographic images, image immobilization property of Fraunhofer holograms, the process for embossing phase holograms in vinyl tape, and color encoding. Playback black and white images from replicated tapes were demonstrated. — R. A. Rubenstein, *Secretary-Treasurer*, Boston.

CAPE KENNEDY, Jan. 17 — Frank J. Eberhardt of Eastman Kodak presented two papers originally presented at the 106th Technical Conference in Los Angeles. "A New Eastman Ektachrome Commercial Film," was presented with 35mm slides and a 16mm silent film. Eberhardt described the new Eastman film 7252 and the ECO-3 process in detail. Slides were shown comparing the current 7255 and the 7252 emulsions. Improved latitude and sharpness appeared to be the outstanding qualities of this new emulsion.

The new ECO-3 process was discussed and slides were shown to illustrate possible consolidation of the ECO-3 and ME-4 processes in a single processing machine. The second paper, "Silver Sound Track on 7389," was presented by Mr. Eberhardt with the assistance of a sound motion picture describing the new product. Techniques required to convert from the present sulfide track application to the new silver applications on 7389 were shown. A

sound demonstration utilizing the new product concluded the program. An active question and answer session followed the presentation. A "Dutch" cocktail hour and dinner were enjoyed by members and guests. — Clayton O. Kelly, *Secretary-Treasurer*, Cape Kennedy.

OHIO, Jan. 20 — The January meeting was held at the General Electric Lighting Institute, Cleveland. Ken Preschel, Supervisor of Production Planning in the GE Photo Lamp Department presented a paper, "Projection Lighting Fundamentals." He then assisted Charlie Clark, Product Planner for the GE Lamp Department, in presenting a paper, "What's new in Lamps for Photography and Television." The newest developments in projection lighting and in tungsten-halogen light sources for stage and studio were presented and demonstrated. A question period was followed by a social hour during which time the members had a chance to inspect the equipment and continue questioning speakers. For content and interest this meeting started the Ohio Section off on a promising new year. — Byrl L. Sims, *Secretary-Treasurer*, Cleveland.

NASHVILLE, Jan. 17 — The January meeting was held at TRAFICO in Nashville. Thirty-one members and guests attended. The program consisted of five papers, some of which had been previously presented at the Los Angeles Conference. Gene Murphy and James Parker of Eastman Kodak Co., made the entire presenta-