

SMPTE Education Committee

The first concrete results of the program undertaken by the Society's Committee on Education have been achieved with the initiation in mid-September in Los Angeles of three courses of instruction for film industry technicians. These courses are sponsored by the Society in cooperation with the University of California, and are meeting once a week for eighteen weeks at the John Burroughs Junior High School, 600 South McCadden Place, Los Angeles.

A course in "Motion-Picture Laboratory Practice" will be held Thursday evenings and will be conducted by six experts in the field. They include: Dr. John G. Frayne of Westrex Corp., President of the Society and Chairman of the Society's Education Committee; William Gephart, Processing Director of General Film Laboratories; Alan Gundelfinger, Plant Administration, Technicolor Motion Picture Corp.; Allen Haines, Chief Chemist, Pathe Laboratories, Inc.; Donald H. Kelly, Member of the

Research Staff, Technicolor; and Sidney P. Solow, Vice-President and General Manager, Consolidated Film Industries.

This course will include sessions on sensitometry, photographic chemistry, laboratory aspects of sound, practical laboratory practice and color. Prerequisites for enrollment is experience in motion-picture laboratory work.

On Monday evenings a course in "Illumination Optics" will be conducted by Ernest W. Silvertooth, Engineer, Librascope, Inc. This course will cover general image-forming optics; optics in illumination systems, light sources, optical glass characteristics, optical quality of film images and optical filters. College physics and consent of the instructor are necessary for admittance.

Roderick T. Ryan, Quality Control Engineer, Eastman Kodak Co., will conduct a course on "Duplication of Color Motion Pictures" on Wednesday evenings. Experience in printing and/or processing of color motion-picture film and consent of the instructor are necessary prerequisites for taking Mr. Ryan's course.

These three courses are the direct result

of the activities of the Education Committee's Subcommittee on Training of Film Laboratory Technicians of which Mr. Solow is Chairman. This was one of five subcommittees appointed by Dr. Frayne following the first meeting of the group held in Hollywood on April 5, 1955. At that meeting the Chairman discussed the need for supplying trained engineers and technicians for the industry as well as the need for continued training on the job of those employed in the industry. It was then decided that the future work of the committee should be built around the following items:

- (1) Making an inventory of jobs that might be available for the next ten years. A part of this study would aim to establish a roster of technical employees in the industry.
- (2) Establishing short courses or institutes to meet current problems in the industry.
- (3) Establishing a long-range training program.

The five subcommittees established to implement the various parts of this program include, in addition to the Subcommittee on Training of Film Laboratory Technicians: Studio Joint Subcommittee on Education Training, headed by Loren L. Ryder of Paramount; Film Laboratory Joint Subcommittee on Educational Training, headed by Alan Jackson of the Film Technicians Local; Subcommittee on Training of Sound Technicians, headed by Lorin D. Grignon of Twentieth Century-Fox; and a Subcommittee on the Training of Television Technicians, headed by Herbert W. Pangborn of CBS.

The Committee on Education is made up of representatives of universities, labor unions, motion-picture and television studios and laboratories who are anxious to cooperate to meet the growing need for trained technical people in the industry. Those on the Committee include:

- Herbert Aller, Business Rep., Local 659, IATSE, Los Angeles
- Charles Austin, Technical Rep., Mitchell Camera Corp., New York
- Chester Bahn, Editor, *Film Daily*, New York
- Wilbur T. Blume, USC
- L. M. K. Boelter, Dean of Engineering, UCLA
- Thomas A. Carman, International Sound Technicians Union, Hollywood
- John W. Ditamore, Manager, Hall of Music, Purdue University
- John Flory, Advisor on Nontheatrical Films, Eastman Kodak Co.
- Lloyd T. Goldsmith, Sound Department, Warner Brothers Pictures, Inc.
- E. E. Griffith, Research Engineer, Technicolor Motion Picture Corp.

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Supervisor, NBC, Hollywood
John Mahon, Producer, Newport Films
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H. W. Pangborn, TV Engineer, CBS,
Hollywood
Loren L. Ryder, Director of Engineering &
Recording, Paramount Pictures Corp.
N. L. Simmons, Motion Picture Engineer,
Eastman Kodak Co., Hollywood
Sidney P. Solow, General Manager, Con-
solidated Film Industries
Henry Ushijima, Director of Production
Services, Geo. W. Colburn Laboratory,
Chicago
Robert Wagner, Ohio State University,
Columbus

Commercial TV in Britain

Britain's first independent commercial television station began transmitting on September 22 from Croydon, near London, where equipment provided by Marconi has been installed and put into operation. The station has, in fact, been hand-built and the 10-kw vision transmitter and the 2½-kw sound transmitter are both "laboratory prototypes." Two more transmitters of approximately the same power outputs will be installed in the near future. These will be standard production versions. The three transmitters together will reach almost 60% of the English population. Stations will continue to be opened at the rate of one a year, until the total of 14 or 15 needed gives complete coverage.

The new station is owned and operated by the Independent Television Authority, or ITA, set up in August 1954 by Parliament, with a statutory life of 10 years. Programs are produced by private companies called "program contractors." These companies must get ITA's approval regarding taste and subject matter, in order to maintain a balance in the types of programs presented.

A private specialist organization, the Independent Television News Ltd., will produce all news shows and supply them to the private companies. ITA will pass on the accuracy and impartiality of the news.

To finance ITA, the Government is lending the organization up to £2,000,000 (\$5,600,000) within the next five years, with arrangements made for additional, special government grants if necessary. The bulk of its finances, however, will come from selling time on its stations to private production companies.

The companies that produce the programs will sell advertising time within the shows but advertisers will not be permitted to "sponsor" shows. ITA controls the amount of time allotted to advertising and prescribes that commercials can come only at the beginning or end of programs, or in natural breaks in the script or program. There must not be more than six periods of advertising in an hour and none in programs of religion, royalty or national ceremonies.

BBC will continue its present program and may begin a second channel when allotted a wavelength but it will not become a commercial television service.

The Director-General of ITA, Sir Robert Fraser, has stated that there are likely to be 40 or 50 stations when commercial television is fully developed, all operating independently of each other.

10-kw Transmitter

The production version of the Marconi Band III 7½/10-kw vision transmitter will consist of a 2-kw transmitter together with a Band III Amplifier. The transmitter is housed in four standard cubicles, and the amplifier in three, all of which may be bolted together to form a continuous front.

The complete transmitter is designed to give a peak output power of approximately 10 kw under vestigial sideband conditions, at any chosen channel in the upper frequency band of 170 to 216 mc. using the British standard 405-line system. Other editions give similar facilities on 525- and 625-line systems.

Air cooling is used throughout for normal operation, and the transmitter incorporates the most advanced constructional techniques, the general design being based on the policy of generously under-running all components and valves so as to secure long life and high reliability. All units are readily accessible for maintenance.

Pushbuttons are provided on a Transmitter Control Panel for normal day-to-operation of the transmitter, which may thus be brought up on power from the control desk. The voltage and feed of the final amplifier are metered; a black level control and calibrated input attenuator are also provided on the control panel.

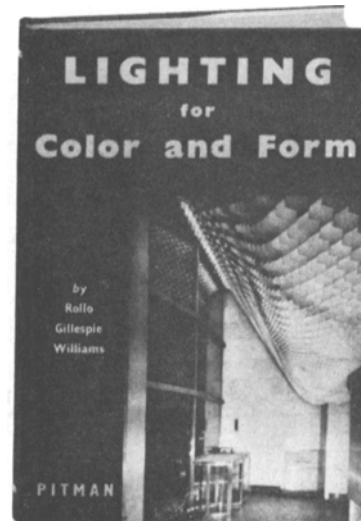
2-kw Transmitter

Drive Circuits: Crystal controlled. The crystal itself is oven-controlled and operates at a submultiple of the output frequency. Long-term stability better than 0.0002%, which permits offset carrier operation of two adjacent transmitters on the same channel. The crystal oscillator, together with associated frequency multipliers and stabilized HT supply, form a complete unit with an output of approximately 15 w at the operational frequency.

RF Circuits: The first and second RF amplifiers consist of triode valves working in single-ended grounded grid circuits, using coaxial lines as circuit elements. The final (modulated) amplifier employs an air cooled tetrode in a single-ended coaxial line circuit.

Modulator: The output signal from the control desk is bridged across the input of

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Written by the world's leading authority on mobile color lighting, this new book is chock full of new and vital information on lighting and offers hundreds of fresh viewpoints on light and color. Of special and timely interest is the author's discussion of photographic, motion picture, and television studio lighting. Mr. Williams, Member of the Illuminating Engineering Society, is the designer of the famous *Lobby of Light* in New York. *Illustrated \$8.50*

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