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Obituary

Lang S. Thompson

Lang S. Thompson, 1310 Hackberry Lane, Winetka, Ill., died July 9, 1957. He was Executive Vice-President of Wilding Picture Productions, Inc. He joined the firm in 1948 as account executive and was elected Vice-President in 1956. He was also President of Wilding-Henderson, Inc., a wholly-owned subsidiary.

The first state-sponsored educational closed-circuit television system will be installed in the Conley Hills Elementary School, Fulton County, Georgia, by the Radio Corp. of America during the summer. The multichannel installation will include four camera chains linked by closed-circuit with 26 receivers installed in classrooms throughout the school. Film and live TV programs will originate from a centralized TV studio within the school. The installation will be conducted on an experimental basis with a TV workshop established in Fulton County to acquaint teachers with the operation and scope of closed-circuit TV as an educational medium.

William Kenneth Cumming, former Director of Television Development at Stephens College, Columbia, Mo., and author of *This is Educational Television*, has been appointed Station Manager for WJCT, Channel 7, Jacksonville, Fla. A member of this Society, Mr. Cumming is also a member of National Association of Educational Broadcasters, Speech Association of America, University Film Producers Association and Association of Education in Journalism. Among other activities in the field of television he acted as consultant to RCA on the design of the TK-15 vidicon camera.

Loren E. Steadman has joined the Motion Picture Unit of Convair Astronautics, San Diego, Calif., as audiotronic engineer. Prior to his present position, he was technical director of Photographic Analysis Corp. North Hollywood. He served two years in the Army Signal Corps, Army Pictorial Center, Long Island City, N.Y.

S. W. Simmons of Dekko Cameras, Ltd., Telford Way, East Acton, London W.3, has been appointed a member of the Board. Mr. Simmons has been with the company since 1938 and has specialized in the development of cinematograph equipment.

Florman & Babb, 68 W. 45 St., New York 36, has announced two additions to the company's sales staff. Gerry Rich, formerly with Camera Equipment Co., has been appointed General Sales Manager. Leonard W. Hollander, formerly with De Luxe Laboratories, will specialize in nontheatrical and audio-visual services.

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books reviewed

Acoustical Engineering (3d ed.)

By Harry F. Olson. Published (1957) by D. Van Nostrand Co., Princeton, N.J. i-xix + 703 pp. + 14 pp index. 571 illus. 6 by 9-in. Price \$13.50.

This third edition of Dr. Olson's book on the subject of acoustics has had its title shortened to *Acoustical Engineering* from *Elements of Acoustical Engineering* that appeared as the heading of the second edition in 1947 and the first edition in 1940. The original edition made use of certain of the subject matter included in a series of 30 lectures prepared by the author for use at Columbia University. The second edition retained much of the material of the 1940 book, and, in addition, incorporated many of the advances that were made during the seven years intervening between the two editions.

There are 16 chapters and 703 numbered pages in the third edition, compared to 14 chapters and 527 pages in the preceding one. The headings of the 14 chapters that appear in the second edition have been used without change as headings for corresponding chapters in the third edition but the material in the chapters has been expanded and brought up to date where developments have been significant. The fourteen chapters cover such subjects as: sound waves, acoustical radiating systems, mechanical vibrating systems, dynamical analogies, acoustical elements and measurements, microphones, loudspeakers, miscellaneous transducers, architectural acoustics, speech, music and hearing, underwater sound, and ultrasonics.

In the second edition, the subject of "Complete Sound Reproducing Systems" is discussed in the last ten pages of the chapter headed "Architectural Acoustics," whereas in the 1957 edition it is expanded to 32 pages and occupies an entire chapter of its own. Stereophonic disk and magnetic tape reproducing systems are considered in this third edition, as is a binaural magnetic tape sound reproducing system and a multiple-channel sound motion-picture reproducing system (stereophonic). Transistor-type hearing aids as well as those employing subminiature vacuum tubes are included, and a number of block diagrams are provided showing both amplitude and frequency-modulated radio broadcasting system layouts as well as a perspective view of a complete television system.

The other added chapter is headed "Means for the Communication of Information" and covers a considerable amount of new material including such subjects as: sound generators, facsimile, visible speech, speech and music synthesizers, language

translator and control of machines by speech.

The phenomenal growth of interest in high-fidelity reproduction of speech and music in the home during the past few years, is reflected not only in the nearly 50% increase in the number of pages in the chapter devoted to "Direct Radiator Loudspeakers" in this third edition, but also in the number of new subjects presented in the chapter, under such headings as: compound direct radiator loudspeaker, drone cone phase inverter, loudspeaker mechanisms for small space requirements, and cabinet configurations.

The chapter devoted to "Miscellaneous Transducers" has been nearly doubled in size in this latest edition. Much of the new material covered is perhaps indirectly the result of the impact on photograph recording and reproducing techniques caused by the appearance of the long-play record in the interval between the second and third editions of the book that we are discussing here. Consider these topic headings that are newly presented: heated stylus, ceramic turnover pickup, feedback pickup, compliance of pickup, and tone arm resonance. The possibilities offered by the fact that magnetic tape can be operated over a range of speeds from a fraction of an inch per second to the order of a thousand inches per second, are also explored briefly in this chapter. These possibilities include frequency conversion, frequency compression (taking advantage of the fact that the redundancy in normal speech is comparatively large), and time compression.

The "Measurements" chapter shows a sizable increase (19) in its number of pages in the third edition of *Acoustical Engineering*, reflecting the availability of new tools, new techniques, and recognition of the increased importance assigned to subjective measurements. The topics covered in this last-named category also reflect the growth of high fidelity in the home, as witness: loudspeaker environment; loudspeaker housing, placement and mounting; relative loudness efficiency; relative directivity; frequency range; power handling capacity; nonlinear distortion, and transient response.

A major orchestra conductor would be somewhat disconcerted to come onstage and see a symphony orchestra seated as shown in Fig. 1138 on p. 549, or a concert orchestra as indicated in Fig. 1139 on p. 550, with the double reeds (oboes, English horn, bassoons) separated. The flutes and oboes should be interchanged in the first drawing and the clarinets and oboe in the second.

A certain amount of confusion may result in an attempt to interpret the three graphs at the bottom of p. 127 and the three at the top of p. 125. The description refers to loudspeakers having cone diameters of 1 in., 4 in. and 16 in., in that order. The graphs, on the other hand, are in the reverse order, and, reading from left to right, present data on loudspeakers having cone diameters of 16 in., 4 in. and 1 in. A notation on each graph as to the cone diameter represented would end the difficulty once and for all. This is a minor problem and one that will undoubtedly be resolved in future printings.

One convenience that has been incorporated in the third edition is the placing of

the chapter headings at the tops of the right hand pages. Each chapter is substantially complete in itself, requiring a minimum of turning to preceding and succeeding chapters when one is looking up a particular subject.

The content of the book are arranged in logical fashion, the material admirably presented and the typography excellent. Dr. Olson tells us on p. 661 that there are 55,000,000 telephones in this country. That figure was presumably obtained sometime prior to March, 1957, the date given on the preface sheet. The figure is already out of date, so fast does the communications business expand. As of March 31, 1957, the total number of telephones in the United States, served by the Bell System and the

Independents, was over 61,000,000, and by the time that this review appears in print, the March 31 figure will also be antedated.—*Iden Kerney*, Bell Telephone Laboratories, Inc., Murray Hill, N.J.

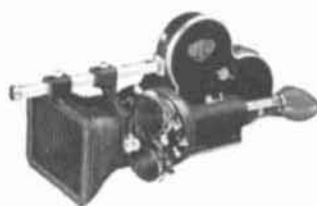
The 25th semiannual edition of Television Factbook published by Television Digest, Wyatt Bldg., Washington 5, D.C. (476 pp. priced at \$5.00 including TV wall map) gives information about every station in the United States and Canada. Altogether 43 countries now have TV, and for the first time the *Factbook* tally shows more countries with some form of advertising than without it — by a score of 23 to 20.

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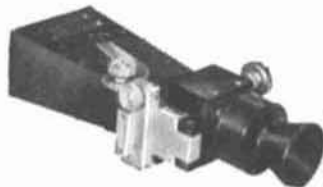
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