

# SMPTE ALMANAC



**By Michael Dolan**

*In this column, we provide interesting historical briefs from the Journal articles of days past. The purpose of this column is primarily entertainment, but we hope it will also stimulate your thinking and reflection on the Society's history, how far we have come in the industry, and (sometimes) how some things never change. This is not meant to be an authoritative reference, and no attempt is made to correct any past errors or omissions of the Journal. We simply hope you enjoy the material.*

## 25 Years Ago in the Journal

The April 1982 *Journal* published in "Systems Aspects of Digital Transmission of Television Signals" by Ernest J. Tarnai: "Communication networks and television studios are rapidly changing from analog to digital environments. Ultimately, digital studios will be interconnected via digital facilities. The interface between the broadcaster and the carrier will likely be defined for a number of different grades of service (at various rates of tariff). High-bit-rate-high-quality transmission will preserve the program producers' ability to process the signal. Lower bit rates will be used for distribution purposes. Still, less capacity will be required for services such as electronic news gathering. The system issues to be resolved include encoding, transcoding, bit rate availability, transmission performance, etc. Meanwhile, composite video may have to be digitized. To accomplish this, a number of auxiliary signals will be multiplexed with the video. These signals include audio, test signals, captioning, teletext, etc. The combined bit stream must fit inside a standard transmission hierarchical rate. In addition, the system to be implemented must accommodate the characteristics of both the network (performance, availability, surveillance) and the input signal (S/N)."

## 50 Years Ago in the Journal

The March 1957 *Journal* published in "Education, Industry News: The British Amateur Television Club:" "An Introduction to Amateur Television Transmission" by Michael Barlow is a recent publication of the Club. The 31-page booklet is priced at 3/6 in Great Britain and 50 cents in the United States and Canada. The book contains, besides an introduction called Fundamentals, parts on the scanning system and video amplifier, time bases and power supplies, simple "live" camera and pulse generator, mixers and modulators, and r-f equipment. The requirements for obtaining a British Amateur Television License are included. The Club's Electrical and Mechanical Standards are set

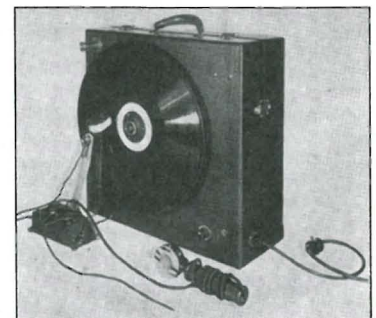
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forth after this introduction: "To enable members to run their equipment with units of other members' equipment, certain standards have been recommended by the Committee. You are not, of course, in any way obliged to comply with the standards, but many members are doing so, and all units available on general loan conform to these standards."...The Club publishes a quarterly journal, *cq-tv*, which has now reached 31 numbers."

## 75 Years Ago in the Journal

The April 1932 *Journal* reported in "The Animatophone: A New Type of 16mm. Synchronous Disk Reproducer" by A. F. Victor: "Two years ago the Victor Animatograph Corporation made a decidedly original contribution in reproducer design by introducing the vertical turntable. For the first time in the history of reproduction of sounds from disks the conventional horizontal turntable had been abandoned, the vertical turntable making possible a more compact design than is practicable with the horizontal turntable, and also makes possible a rigid direct drive that is absolutely positive. The close coupling of the turntable and projection mechanism in turn made imperative a positive speed control. No mechanical control could supply the necessary smoothness and uniformity of drive for perfect sound reproduction. This necessity was supplied by a new electro-pneumatic control. A current of air originating in a rotary blower is made to fall upon a thin membrane, which carries an electrical current. The counteracting force is gravity, hence the governor is not dependent upon the action of springs. When the blast is increased to a certain intensity, the contact opens, causing the current supply of the motor to flow through a resistance, immediately causing the motor to run more slowly. When the projector is operating at the correct speed the contact

is made and broken at a rapid rate, thus always maintaining the proper speed within close limits... The latest model of the Animatophone is enclosed in a carrying case which also serves as a "blimp," reducing the projector noise to an unobjectionable level."



*View of the disk, floating pick-up, and microphone attachment of the Animatophone.*