

By Michael Dolan

Sponsored by Television Broadcast Technology



*In this column we provide interesting historical briefs from 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 September 1978 *Journal* reported in "A Quality Assurance Vehicle for Radio and Television Broadcasting," by D. A. Bennett, P. Kaiser, and S. F. Quinn: "In 1975, the Canadian Broadcasting Corp. began to perform off-air audits of picture and sound quality of its extensive television and radio services with the aim of discovering how well it was serving its public. The success of an initial feasibility study has led to the regular use of a Quality Assurance Vehicle (QAV) equipped with home receivers and test equipment. This vehicle tours the country making subjective and objective assessments of CBC services...The feasibility study utilized a rented recreational vehicle equipped temporarily with home receivers and test equipment....The vehicle is parked at an appropriate motel in the prime coverage area of the broadcast services to be monitored. AC power is obtained from the motel by previous arrangement...The quality control inspector monitors for periods of up to eight hours per day...The Corporation is in the process of developing two sets of performance standards: first, picture and sound quality objectives and, second, delivery system performance specifications."



Exterior view of the QAV.

## 50 Years Ago in the Journal

The September 1953 *Journal* reported in "Visual Monitor for Magnetic Tape," by Rowland L. Miller: "The Magnescope is a visual monitor for magnetic tape. It gives visual presentation of the information recorded on

the tape without employing auxiliary equipment such as movable scanning heads, amplifiers, etc. The presentation is a variable-area display and thus gives indication of frequency and amplitude. The display remains stationary as long as the tape is motionless in the Magnescope, but movement of the tape is accompanied by corresponding movement of the display. Magnescope consists of two units connected by a single cable. One of these units houses a unique cathode-ray tube, which produces the visual display. This unit is equipped with proper guides to accommodate various magnetic tapes...The [2-in. or 3-in. diameter] cathode-ray tube which produces the display is similar in shape to electrostatic deflection tubes of comparable size...Near the center of the anode and at right angles to its axis there is cylindrical trough known as the saddle...When the Magnescope is in use the magnetic tape passes through the saddle with the recorded area directly against the window...and at right angles to the axis of the tube."

## 75 Years Ago in the Journal

The September 1928 *Journal* reported in "An Electrical Synchronizing and Resynchronizing System for Sound Motion Picture Apparatus," by William H. Bristol: "In the most successful type of sound picture reproducing systems, the synchronization is accomplished by driving the projector from one end of the motor shaft and the record turntable from the opposite end of the same motor shaft. Although perfect synchronization is maintained by positively driving the turntable and projector by the same motor, this method of synchronization does not afford any simple means for resynchronizing during the projection of a picture on the screen and if an error is made in locating the starting points of the film and record, there will be a lack of synchronization of the sound and picture throughout the full length of the film. In case a correct start has been made and it happens that the film has been broken and in splicing one or more frames have been omitted, the picture will be in advance of the sound after passing such a place...This [electrical] synchronizing system...consists of two special synchronizers, one of which generates the electrical energy in its magnetic field to feed the field of the other. The rotors or armatures of both synchronizers are energized from an alternating current line...The unique resynchronizing feature is accomplished by mounting the field winding frame of one of the synchronizers in trunnion bearings within which the armature bearings are located, thus allowing the field frame of one of the synchronizers to be rotated with reference to the main frame independently of the rotation of the armature."