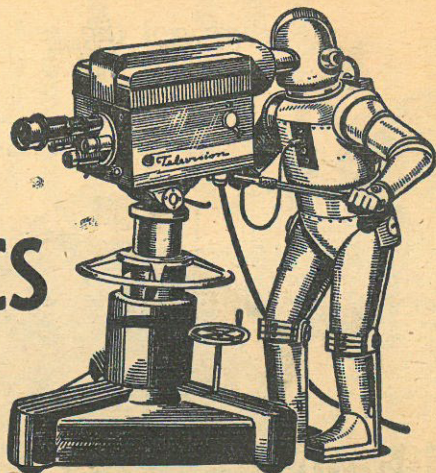


# VIDEO-TECHNICS

by PAT JONES



**W**ERE NOT going in for any political rehashing. The elections are over, and for the most part, the fever has subsided. Some of the improvements in tv techniques which brought the election results quickly and accurately before the public will continue to make news.

To get the story, we talked to NBC's Charles H. Colledge. Newsman and engineer combined, "Joe" Colledge works on the theory that news, like ice cream, "is best when it's a scoop."

In getting facts and figures rapidly to the public, two items struck us as being of special interest. One was the way statistics were handled, the other how human interest highlighted the evening.

Special computers were built by the National Cash Register Co. and the American Totalizer Co., each of which had the equivalent of 27 mechanical memories. Thus it was possible to flash up-to-the-minute results of the nation's balloting.

The six unique tabulators broke down the results into states and electoral districts, popular and electoral votes, enabling commentators to analyze trends as fast as they developed.

To secure news scoops of human interest from out of the way sources, 16mm movie cameras were often useful. Having the advantage of complete mobility, only one major drawback had prevented their extensive use: the slowness of ordinary film developing processes.

In conjunction with professors from MIT and two NBC cameramen, Colledge

conceived and constructed a radically new developing unit for preparing 16mm film.

Unlike other film developers used by networks (some of which occupy an entire room) the "hot developer" is contained in a box about half the size of a home refrigerator. Weighing 225 pounds, it is portable, and film can be developed en route from its source.

The unit can turn out 1,220 feet of negative film an hour. Only 67 feet pass over its flock of rollers at a given moment, taking roughly two minutes to develop one minute's worth of film. Though spray developers have been built which are faster, commercial immersion developers of this type are larger, and take almost six times as long to develop film.

The trick is the developing formula: it utilizes a 20 second developer, a 15 second shortstop (the bath between the developer and the hypo) and a 55 second fixing agent. Operating at room temperature (65°-80°), a thermometer within the machine rigidly regulates its temperature. Plugged into an ordinary wall socket, it operates with or without running water. Film made this way can be aired in 15 minutes.

Having taken every conceivable feature into consideration, the unit was found to have one flaw: ordinary steel disintegrated in the solution. The roller chains in the experimental model had to be greased carefully to keep it in working order!

Future models will eliminate the necessity for elbow grease in getting on-the-spot news scoops to your tv screens.