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# TELEVISION PRODUCTION

By **AUSTIN C. LESCARBOURA**  
*Telecasting—and its many production problems, affecting entertainers and engineers.*

**E**VER since King Solomon's famed parties, there rarely has been such high-price-per-capita talent as that cooped up in a dazzling studio on the 42nd floor of a New York skyscraper: Several evenings per week you can meet up with costly entertainment talent here on display, not to mention less glamorous but most impressive engineering skill, executive ability and advertising brains bubbling with enthusiasm and steaming from exertion—all for a mere handful of seen and unseen spectators. The cost per capita is truly appalling. But fortunately it's strictly on the cuff. The audience pays nothing. The sponsors pay nothing. Yet everybody hopes to cash in, some day. Meanwhile, it's just the television kindergarten in session.

For several years past Du Mont television station W2XWV in midtown Manhattan has been on the air on a strictly engineering basis. And now, despite the war, it provides scheduled entertainment programs for the several thousand television receivers in the metropolitan area, and strictly trade shows for those interested in the dollars-and-cents possibilities of the next step in home entertainment.

Television to be commercially successful—to make good on the lavish promises made in its name for years past—must first round out a three-point development program. First, it must be properly engineered. Second, the programs must possess genuine entertainment value. Third, the economics must be worked out, so that it will be on a self-supporting basis once the initial novelty has worn off and Santa Claus departs from the scene. Utilizing television station W2XWV as a laboratory, a three-point development program is being developed and the foundation of post-war commercialized television built.

First in importance is engineering! Television must be capable of flashing sharp, clear, action images to hundreds of thousands of television receivers in a given metropolitan area. This it can already do, thanks to tremendous engineering strides these past few years, further augmented by certain military developments and requirements in the cathode-ray field, fortunately applicable to television technique.

Today's television images are comparable with the pictorial quality of average home movies, or adequate for satisfactory entertainment. Definition is really good. Images are clear, bright, crisp. Subject matter is no

longer limited to closeups of one or two individuals. Nor is there any guessing as to what is really taking place on the screen.

Neophytes sometimes expect too much of television at this early stage, just as photo amateurs expect too much from those tremendous blownup enlargements. A director of a recent telecast presentation went to great pains to avoid exposing his left profile to the television camera. He happened to have a slight scar! No doubt the camera did record his self-consciousness, whereas it might fail to pick up the negligible facial blemish.

Television now takes in a full studio setting with several performers. It follows the fastest action such as dancing, ping pong, fencing. Definition is sufficient to enable the reading of charts, simple maps, labels, titles. Movies can be nicely reproduced with the necessary pictorial quality for real enjoyment.

If a mobile pickup is available, whereby to take the television camera to remote locations from which signals are flashed back to station headquarters by ultra-short-wave radio link, excellent outdoor scenes can be handled, such as street scenes, news events, baseball or football games, track meets and parades. In short, the engineering end of television is now at par, all set to go commercial, but...

There is more to television than good images. They must be interesting pictures—with sound. Engineering is the means rather than the end. The end spells entertainment pure and simple. And that means programming.

It so happens that telecasting or the actual practice of television is unique unto itself. There is nothing else just like it. It isn't broadcasting: some broadcast stars have already flopped miserably on television programs. It isn't the movies: some screen headliners have scored perfect flops before the television camera. Television is simply television, and that is what is causing considerable consternation in entertainment circles.

Television is somewhat like the movies because it takes in sight and sound. But it is quite different because it is spontaneous. In other words, it picks up and transmits what is happening at the moment. There is no such thing as "shooting" the scene several times and picking out the best "shot." Television is a one-shot proposition. The performance stands or falls on that one attempt. Of course there are re-

hearsals, but when the performer steps before camera and microphone it is his one chance.

Furthermore, unlike the stage, you can't repeat the same thing over and over again, night after night, week after week. Television, like broadcasting, calls for an endless flow of fresh material. "What, do you mean to say your station is on the air only five hours a week!" exclaims the impatient prospect for a home television receiver. Well, my dear Mr. Prospect, to provide even those few hours of entertainment means the endless corralling of hard-to-get talent, many hours of rehearsing, and a big fat money bag.

Ah! A big fat money bag. And where does that come from?

Until now, television has been one of Santa Claus' hobbies. Something new, something different, something thrilling, it has been sustained by several large and small organizations just as broadcasting was carried along for about five years before hard-boiled accountants had a chance to add up long columns of cost figures and scare earlier Santa Clauses into a sense of realities. Ultimately broadcasting went commercial. Program sponsors were invited to help themselves to publicity and advertising, at so-much-per-hour to 1 charges, plus the cost of programs.

Du Mont believes that, as with broadcasting, the manufacture of television receivers and the telecasting of programs will probably be thoroughly divorced so far as most participants are concerned. Hence telecasting will have

to pay its own way. Program sponsorship must be the answer to the economic riddle.

Thus station W2XWV's latest activities in the television kindergarten covers program sponsorship. But more about this later.

The television studio in midtown Manhattan makes up in ingenuity what it may lack in size. Television studios heretofore have been massive. One of them could actually house a full-sized circus. Equipment for television has been impressive, and so costly as to be limited strictly to a handful of leading metropolitan areas, leaving secondary communities of the nation pretty much in the lurch so far as television is concerned. This unit is built from a different slant. The designer believed that he could make a mole hill out of the television mountain. Station W2XWV is out to prove this.

In a studio space measuring approximately 30x30 feet, some of television's outstanding programs have already been presented. Two studio cameras handle the scenes. The adjacent control room is simplicity itself, with "chains" or groups of metal-cased units on wheeled racks providing all necessary controls, amplifiers, synchronous-signal generators, monitors, and other technical gadgets in place of those huge power-house switchboards usually associated with television.

It is claimed that a start can be made in television for a hundred thousand dollars. That is about the price of a purely local broadcast setup. Cer-

tainly it is well within reach of the average secondary community; likewise a welcome relief from the vast sums heretofore associated with commercialized television.

Much the same shrinkage applies to television station personnel. Heretofore such establishments have been staffed by several dozen engineers, studio hands, program directors and so on. At Station W2XWV the activities are handled by one program director who can also double as stage manager, two cameramen and one microphone man, in the studio. The control room has a couple of engineers. A third engineer operates the transmitter. That may sound like a lot of personnel. Actually, it is only two or three more than required by a small broadcasting station.

Another mole-hill-out-of-a-mountain feature of W2XWV is the lighting. Television studios have heretofore gone in for a terrific amount of illumination. One typical studio consumes as much electricity as a "city" in the Middle West or a sizable village here in the East. This station has simplified its general illumination to several dozen standard fluorescent lamps in polished aluminum reflectors, accentuated by a few bird's-eye bulbs, and then a couple of spotlights for dramatic effects. At the same time the studio is kept considerable cooler. Yet....

Recently Sam Taub, well-known radio sports announcer, was interviewing Jack Lavelle, former Notre Dame football star. Jack must weigh around 250 on the hoof. It was a terrifically hot evening. Cameramen, director, engineers and others out of camera range, were in shirt sleeves. Perspiration poured out of Jack, fully attired in a business suit, and in lesser measure out of Sam who wore a sport suit and sport shirt. Following his telecast Sam mopped his wet brow and exclaimed that he was parboiled. We consoled him by explaining that it might have been a thorough and permanent baking job if the usual incandescent lamps were being used instead of these relatively cool fluorescents.

As for backgrounds or scenery, just a few painted panels do the trick. A set of panels represents the New York skyscraper skyline. Others are neutral gray.

The cameras are mounted on tilting and pan heads which in turn are bolted on rubber wheeled carts serving as dollies. A recent addition to camera equipment is a red signal light which flashes on just below the lens as that camera is cut in by the control room and is therefore "on" so far as the performers are concerned. During telecasting the two cameras are alternately used so as to present interesting long shots and close-ups and varying angles.

Telecasting is different, as we said before. The coordination of the actual telecast is far more elaborate than in the case of sound broadcasting. Whereas broadcast performers stand or sit in one position convenient to the microphone, television performers are

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free to move about within the limits set by cameramen. They can be followed about by the cameras, not to mention the microphone swinging immediately above them and outside the camera range.

To direct the cameramen, the studio director speaks over a telephone system. Cameramen wear earphones connected with studio director and control room operator. Thus all parties concerned are in touch with each other. Cameramen are instructed where to move their cameras, what to take in, when they are "on," and so on. Performers out front can tell by the red light which camera is "on" and therefore direct their acting to that particular lens, which means the audience.

Speaking of performers, television is quite exacting in the matter of make-up. Sulphur-yellow face, purple lips, blackened eyelids and bushy eyebrows certainly destroy the last vestige of feminine beauty so far as the naked eye is concerned. But since we are seeing the performers through electronic eyes, all is well and television beauty is definitely enhanced by such make-up.

Another thing is the confusion that attends a television show. Prior to the starting time, which is 8:30 for most programs, there is confusion plus in the tiny studio, control room, powder room, offices, and reception room. Operators are running through a film which will be included in the program, so as to know how to "shade" or monitor for satisfactory telecasting. An

operator is trying out a new electrical transcription over the studio sound system. Out in the studio a pianist in shirt sleeves is coordinating his playing with the comedienne who is headlining the evening program. The program director is dictating a few notes to be memorized by the announcer—you can't read a script in television, please notice. The girl announcer—she won the popularity contest in the plant where she works—is doing her memorizing under considerable stress and strain; audibly so. Confusion plus. Yet a few minutes later, everything clicks with clockwork precision. Such is the show business of which telecasting necessarily partakes for better or for worse.

The Wednesday evening program at W2XWV is the real television kindergarten. There is a regular scheduled program every Sunday evening, intended as true entertainment for the several thousand television receivers in the New York area while serving as a programming laboratory. But the Wednesday evening show is "for the trade" only. That is to say, it is intended for advertisers, advertising men, agencies, would-be telecasters and others interested in television as a business proposition. They are invited to come, see, try. They can kibitz to their heart's content. They can look through the camera electronic finders—actually television receivers showing actual telecast pictures. They can go in the control room. They can watch audience reactions in the reception

room where a giant 20-inch tube receiver presents the sight-and-sound programs just as they are being picked up outside. And when the kibitzing stage leads to the itch to try telecasting on one's own, the facilities are available at no cost whatsoever. The would-be telecaster can bring in his own program. The would-be telecast advertiser or sponsor can try his own ideas. Hence the telecast business laboratory at work.

Recently Mutual's Station WOR staff has undertaken telecast experiments. The Station W2XWV is being used once a week, on Tuesday evening, for a series of experimental casts. Artists associated with WOR now have the opportunity of trying telecast delivery, make-up and other facets of the new field. Jack Poppele, WOR's chief engineer, is following the technical angle personally, while J. F. Seeback, Vice-President in Charge of Programs, and his staff of program executives, are programming via the new medium.

It is a television kindergarten indeed. Here telecast youngsters, though they be oldsters in broadcasting, advertising, movies, stage or other fields are mastering the rudiments of this new art. Many an outstanding television executive, engineer, director or performer of the postwar era is learning to crawl right now in that blazing television kindergarten. Infants today; television giants tomorrow.

It's this sort of thing—bubbling en-



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Working a two-way radio set, Corp. Priscilla Wilson, USMCWR, contacts a plane at the marine air station, Braintree, Mass. A graduate of the Control Tower Operators' School at Atlanta, Ga., Corp. Wilson is one of the first women Marines to handle the work of directing planes about to land or take off. Standing is Sgt. Marvin H. Silas of Jacksonville, Fla.



Soldiers who took part in a recent large scale maneuver under war conditions somewhere in the Southern Command, shown with a telephone set by which orders are received and transmitted.



Attu Island—when American forces landed north of Holtz Bay and then clawed their way up and over precipitous cliffs under heavy sniper, machine gun and anti-aircraft fire, to smash and capture the Japanese base at Holtz Bay. Within one week, forces under Col. Frank Culin and Maj. Albert V. Hartl advanced over the difficult terrain to capture the well-stocked and well-fortified Japanese base. In the foreground are shown Signalmen testing their newly erected equipment.

thusiasm, real sweat, overtime work, personal sacrifice, sheer experimentation—which is paving the way for truly commercialized television. And likewise reaffirming the saying of that famous Chinese sage about a picture being worth ten thousand words. Similarly a telecast program, no matter how experimental, is worth far more than thousands of words of loose talk regarding television's future promise.

-30-

### Mfrs.' Lit.

(Continued from page 46)

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-50-

### Radio in Its Infancy

(Continued from page 39)

read: "Two tons blutwurst; four tons wienerwurst; two tons liverwurst; one-half ton limburger; fourteen kegs pilsner." It sounded pretty good at that, although I couldn't conceive of a half-ton of limburger cheese.

We old-timers, who pioneered radio, had our fun. But it wasn't all fun. Sometimes we found plenty of grief awaiting us. As, for example, the time when I copied erroneously one word of a coded cablegram from the Navy Department, relayed out to our commanding officer from that same Cavite wireless station.

The captain, fortunately, caught the mistake. I caught something else, when he called me down to his cabin. "Do you know what this message says the way you took it down?" he shouted at me. I shook my head.

"It orders us to proceed to Yokohama and open fire on the Japanese!" he roared.

Well, maybe it would have been a good idea at that. But I shudder to think what would have happened to me if the skipper hadn't figured out that I had copied "fishes" for "dishes."

In conclusion, let me say that there is no finer avocation for young men than amateur radio. It is a hobby which gives both pleasure and useful training in a field of ever growing importance.

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