

Peek-A-Booth is now made available to its dealers at actual cost by the Allen B. DuMont Labs., Inc., of Passaic, N. J.

The Peek-A-Booth was conceived and designed by Leonard F. Cramer, General Sales Manager of the DuMont organization. Attractively finished in colors and taking a DuMont console or a table model television set, this booth forms a huge shadowbox so that television images can be viewed under ideal conditions of dim illumination.

## TWO-WAY TELEVISION COMMUNICATION WITH SINGLE C-R TUBE

PASSAIC, N. J.: An improved system of two-way television communication in which a single cathode-ray tube at each station serves both as pickup device to develop picture signals for transmission and as a receiver or viewing device to reproduce images transmitted from the remote station, is disclosed in U. S. Patent No. 2,157,749 just issued to Allen B. DuMont, Assignor to Allen B. DuMont Labs., Inc., of Passaic, N. J.

This system greatly simplifies and reduces the cost of the apparatus over that of prior systems in which separate pickup and viewing tubes must be used at each station. Another advantage is that of simultaneous two-way communication, instead of having to go from one tube to another for the respective transmitting and receiving functions.

The DuMont two-way television communication system is based on the use of a dual-function cathode-ray tube which includes both photo-sensitive screen (pickup) and fluorescent screen (viewing) side by side or in an otherwise convenient arrangement, but served by a single or common cathode-ray beam. Thus when the tube is transmitting an image, the cathode-ray beam swings over to the photo-sensitive screen or photo-electric mosaic, which it scans in the conventional manner, while at the other end the cathode-ray beam swings over to the fluorescent screen which it scans in order to reconstruct the images being transmitted from the remote station. This switching of cathode-ray beams may be accomplished manually or automatically, the invention covering various means of switching, climaxed by a revolving switching means which alternates the beams from transmitting to receiving positions, for simultaneous two-way television communication.

## NBC DOUBLES PROGRAM HOURS FOR TELEVISION

NEW YORK, N. Y.: A new television program schedule, more than doubling the number of program hours offered to home viewers by the National Broadcasting Company over Station W2XBS, was announced today by Alfred H. Morton, NBC vice-president in charge of television. The new schedule will become effective Tuesday, June 20.

Under the plan, evening studio telecasts from Radio City are to be increased to three a week. Two are telecast at present. These studio programs, which will include several features of one hour's duration in the

(More S & S News on page 62)



by SAMUEL KAUFMAN

THERE'S been considerable talk these early television days regarding the limited service area for sight-and-sound entertainment. The old theory that video signals on ultra-short waves won't go beyond the horizon has been disproved in various tests but, chiefly to protect the consumer from possible disappointments, the television engineers of leading companies still see fit to adhere to the fifty-mile range when discussing "guaranteed" reception areas.

At this stage of the game, it is best to be conservative in video claims. This is true, particularly from the merchandising angle, manufacturers feeling that they can break down sales resistance more readily in a concentrated area than over a vast section of the country. And once the ice is broken in

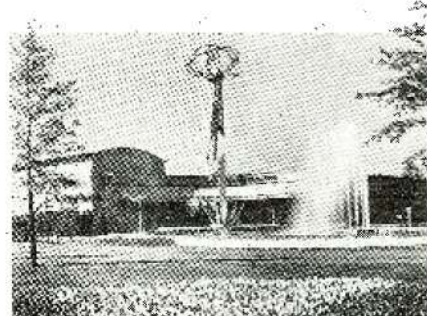
proved conclusively that huge television receiver sales can be anticipated throughout the heavily-populated suburban areas.

The General Electric Company has reported good reception of New York's television transmissions at its Schenectady, New York, laboratories. This is a distance of 130 miles. Reception was achieved through a very elaborate antenna arrangement. And A. H. Whiteley, head of the Whiteley Electrical Radio Co., Ltd., who recently visited the U.S.A., told the writer that London's television programs are received in his Nottinghamshire plant on an ordinary commercial receiver over a distance of 120 miles.

It seems that the idea of bringing television to the entire nation is not as fantastic as it once seemed. But the conservative ap-



Your Video Reporter (left), interviews A. H. Morton, NBC's vice-prexy.



G.E.'s New York World's Fair Bldg., where crowds gather to see telecasts.

one spot, it is believed a gigantic thaw will set in and television on a mass commercial scale will become an accepted thing in many parts of the United States.

Breaking the television ice is the big job now on manufacturers' hands and they have picked New York to do it in. To the date of this writing they haven't chipped off enough of the frozen water to cool a small glass of lemonade. And yet everyone concerned seems content with the way things are going. And that's because they have been making progress. Slowly but surely the public is being won over to the new art. NBC, at huge expense, has been staging sensational programs which have done much to stimulate a sales interest. And other key centers are watching the New York video activity avidly so that, on short notice, duplicate systems may be put into operation.

Considerable sales resistance arose from the much ballyhooed theory that the signals won't go beyond a half-hundred miles. To many persons this would infer that the impulses would be proportionately weaker on the fringe of the announced service area than they would be close to the point of emanation. The *Video Reporter* was very much concerned with this belief so, one recent night, he journeyed some forty-seven miles out of New York to the home of O. B. Hanson, NBC Vice-President and Chief Engineer, at Westport, Connecticut.

There he witnessed a solid hour of flawless television entertainment coming from W2XBS atop the Empire State Building. Reception on an RCA Victor receiver at the virtual extreme service location was equal to any reception the *Video Reporter* witnessed in New York! Image definition and audio quality were tops! The demonstration

proach of the trade on the point of coverage is to be commended.

New Yorkers are getting used to television program surprises. There have been so many eye-opening demonstrations and telecasts recently that pioneer observers are becoming a bit calloused about the whole thing and are accepting video developments in a matter-of-fact rather than awe-stricken way. And this definitely infers that the new art is catching on. In becoming a work-a-day medium, television is rapidly passing the novelty stage.

Although the trade observers—and that goes for the *Video Reporter*, too!—have been calm and cool over numerous excellent demonstrations, one particular test came along that showed them that the new art has by no means stopped springing sensational new things.

This particular eye-opener was the demonstration of the Baird Television Corporation's theatre-sized television system. The program the *Video Reporter* witnessed in the Gaumont-British movie projection room was observed on a screen twelve feet by nine feet! It was only the physical limitations of the room, Baird engineers assured the on-lookers, that prevented showing the images as large as twenty by fifteen feet—the size that will probably be adopted by theatres expected to use Baird apparatus at an early date. Television for theatres is quite a thing in England and there have been impressive stories from London regarding the popularity of the system with persons paying ten shillings each to fill several Baird-equipped theatres to witness the Derby.

The big Baird picture is achieved through

(More *Video Reporter* on page 61)

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done trying to bring him to, Al moved a little. I fanned more rapidly. He opened his eyes, spit out some water, and his face ran through the spectrum to pink.

"At last!" I shouted happily, "good old Al! Speak to me!"

He groaned some words I couldn't understand.

"What was that, again?" I asked, bending closer.

"Landlord, what weak walls you have," he murmured.

"Forgive me, Al, for acting and talking the way I did this afternoon—I've learned my lesson—believe me, I'll study first aid until I can bring a rock to life—I didn't know—"

When his eyes came into focus, the first thing he saw was the pamphlet I was fanning him with. He grabbed it disgustedly, as Hardy would from Laurel, and handed it back to me.

"Here," he said weakly, "take this home with you, and let me walk back from the Valley of the Shadow alone!" I took my arm away; he sighed, closed his eyes, and laid his head back resignedly on the floor.

I held the impromptu fan up to the light and saw it was titled "Resuscitation Following Electrical Shock."

It's a swell little book, and I know it by heart now.

### The Video Reporter (Continued from page 44)

the use of a projection-type cathode-ray tube. The intensely bright image on the screen end of the tube is adequately enlarged by a lens arrangement. The projector, when used in theatres, necessitates the ripping out of about fifteen seats some twenty-eight feet from the screen. The unit is somewhat bulky due to the fact that all equipment is in duplicate to prevent any lull in a performance due to the failure of any part. All controls are mounted on the projector so that the entire unit can be manipulated by a single operator.

Approximately 50,000 volts are required to operate the projection tube and a special rectifier unit is employed. This power unit, too, is in duplicate and is in a caged compartment some distance from the projector itself. Ian C. Javal, Baird's commercial director, who supervised the New York demonstration, declared that his organization would soon be in the market with made-in-U.S.A. home television sets of a non-projection type.

### 1.4 V. Ham Revr. (Continued from page 24)

occasionally in order to obtain the proper "tracking" between the two r.f. circuits.

Having progressed thus far, most readers undoubtedly will wish to know just what results may be expected from the little receiver. At the author's home in West Virginia (which is by no means the ideal receiving location) numerous VK, K6, XU, G and other long distant stations have been heard on the 14 and 28 megacycle amateur bands. Also, the usual British, German and other popular short-wave broadcasters are received with almost local-like regularity and volume. The antennae used are a single wire 25 feet high and 50 feet long and a Johnson "Q" 10 meter beam.

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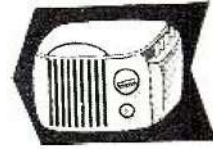
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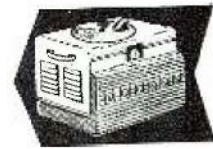
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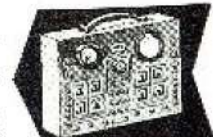
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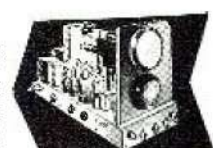
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