Television's First Roadshow Proves a Hit

Federal Officials Much Impressed
By NBC-RCA

By MARTIN CODEL

TELEVISION's first road show, a seven-day stand in Washington, ended Feb. 2 with capital officials still enthusing over the "miracle" they witnessed and with RCA-NBC officials highly gratified over the public reaction. At least 6,000 persons, chiefly government officials, diplomats and journalists, saw the demonstrations at both the sending and receiving ends and the comment invariably was favorable.

In fact, though the audience in charge of the mobile television unit had to turn down invitations to bring it to other cities since it is needed in New York for World Fair preparations, they did promise to televise the next inauguration of the President of the United States in January, 1941—not far away as television time is measured.

A Washington Station?

The idea of a Tannenbaum, who believed that Washington would get a local television station well ahead of that in view of the importance of the capital as an originating point and in view of the tremendous success of the Jan. 27-Feb. 2 demonstrations, RCA-NBC will inaugurate public television with the opening of the New York World Fair April 30 and receiving sets will be placed on the New York market at that time. The service, due to the peculiar characteristics of the ultra-shortwaves, will be entirely local at the outset, the RCA-NBC emissions from the transmitter atop the Empire State Building and the CBS transmitter atop the Chrysler Building being receivable for a dependable radius of only about 50 miles.

Just as it has authorized its receiver manufacturing licenses to manufacture video units under its patents, RCA has also authorized the manufacture of transmitter apparatus and has announced the availability of a new 1,000-watt visual broadcasting unit costing about $60,000 which can be purchased by any firm having FCC authorization to experiment with television [Broadcasting, Oct. 15, 1938]. Thus far, though many tentative orders are said to have been placed, the only one definitely announced in addition to the RCA installation for CBS is that of WTMJ, Milwaukee.

The fact that capacity of the shortwave spectrum reserved for television is limited because of the width of the bands required, and the fact that television at the outset must necessarily be a purely local service due to naturally restricted range of transmission, are expected to retard any sudden blossoming of television on a nationwide scale. However, about a score of television broadcasting outlets have already been authorized by the FCC [Broadcasting, Jan. 29, page 325] and these, at least, are expected to precede with renewed vigor and enthusiasm as a result of the Washington experiments and especially after the public reaction in New York can be gauged.

New York Proving Ground

In other words, New York—and perhaps the several other cities which have television broadcasting this year—will be the proving grounds for the future course of American television. That there will be competition in the developmental phases at least, despite the restricted bands available, is assured in New York by the fact that both RCA-NBC and CBS are operating two stations operating in other cities by the fact that such organizations as Allen B. DuMont Laboratories, Farnsworth Television Inc., General Electric Co., Philco Radio & Television Corp., Zenith Radio Corp., Don Lee Broadcasting System, First National Television Inc. and several universities have or will have transmitters in operation.

Network television, it was indicated during the Washington demonstration, may be dependent upon the highly expensive coaxial cable but may develop from interference-reducing techniques in the subject of experiments by RCA. Nor does television expect to rest upon programs or films until the Washington demonstrations and the tests being conducted in the New York studios by the NBC laboratories have proved that television can do on the spot and studio pickups of its own with remarkably good results.

What the cabinet officers, members of Congress and others saw in Washington during the RCA-NBC demonstrations were 7 x 7½-inch images reflected on upright mirrors on a half-deck receiving cabinets set up in a darkened anteroom of the National Press Club. The Kinescope images were of 411 lines framed at the rate of 30 per second, interlaced to provide 60 exposures per second. This is the standard for cathode ray television which the Radio Manufacturers Association, recently agreed upon and has asked the FCC to fix.

Sets Already Obsolete

The cabinets were laboratory models, which engineers said were already practically obsolete, and each contained 88 tubes besides the 15-inch cathode ray tubes on which the images were formed. Assembly lines at David are preparing for the production of a variety of receiver sets framing images of varying sizes, according to the size of the tube, the largest at first to be the 15-inch tube, subsequently produced for the Washington demonstration, and finally on the battery of televisions in the National Press Building, where it was witnessed, among others by FCC officials, who promised to put action, though regulations prohibit advertising in experiments. The human "viewer" is Gordon Hottenmark, NBC Washington announcer, who helped in demonstrations.

First from all angles was this television "all". Showing the RCA advertisement for television cathode ray tubes as published in the back cover of the Jan. 15 Broadcasting (the first full the type ever published), it was scanned by the RCA-NBC television camera during the Washington demonstrations and flashed on the battery of televisions in the National Press Building, where it was witnessed, among others by FCC officials, who promised to put action, though regulations prohibit advertising in experiments. The human "viewer" is Gordon Hottenmark, NBC Washington announcer, who helped in demonstrations.
one or more hours per day is offered. Starting with the opening of the World Pair, the only precedent they have to guide them is London, where for several years the British Broadcasting Corp., using EMI (Electrical & Music Industries Ltd.) apparatus of the same type as that developed by RCA, has been offering visual programs several hours daily and where less than 10,000 receivers have been sold. Most of these, it is said, are in hotel lobbies and other public places. Those who have seen the RCA-NBC pictures and the London pictures say there is little to choose between them.

Clear Despite Rain

The pictures shown in the National Press Club were extremely clear, even during the several days of cold and rain—so clear, in fact, that they drew exclamatory "ohs" and "ahs!" from the viewers as they saw persons they knew step before the microphones to be interviewed and as they saw clear panoramas of Washington's famed Mall, the Washington Monument and passing automobiles. The Feb. 1 program included shots of a platoon of cavalry ford the Potomac. They were going through maneuvers on the Mall within range of the Iconoscope camera, and the pictures were so good that the augured good possibilities in the televising of sports and other events on a commercial basis.

The demonstrations were by invitation issued by NBC officials in Washington. The invited guests viewed the received images in the Press Club for 20 minutes; exactly 92 of these demonstrations were staged during the seven days. Then they were horded cactations which were hordes cattings there to a free taxi ride to the Mall, a half-mile away, where the two mobile units were located just in front of the Dept. of Agriculture Bldg.

There they were able to see how the scanning was done, and there, starting with Speaker Bankhead of the House of Representatives the first day, several hundred persons including members of Congress, the FCC and other notables went before the Iconoscope and the microphones to be interviewed for those in the Press Club to see and hear. Each demonstration included a telephone conversation between a person being televised and someone in the Press Club viewing room.

One of the two mobile units carried the scanning apparatus and the other the transmitter, but these stood about 200 feet away from the actual scanning setup. Ordinarily the two telephones, as they are called, are to be used for remote pickups, such as man-on-the-street interviews, to relay to a central transmitting point—in the case of New York to the Empire State Bldg.

No Video Interference

In this instance the mobile transmitter, operating on 177 mc, transmitted directly to the specially constructed antenna atop the National Press Bldg., which was in line of sight of the antenna on one of the mobile units. Accompanying sound was alternated on 37.0 and 40.0 mc, according to conditions, and it was a peculiar fact that interchannel interference was experienced occasionally on the lower channel and not so much on the upper. Even during the heavy rains the images came through cleanly. During three of the days the scanning had to be done under protective
courtesy of Steve Dichter

canopies before batteries of lights, and announcers, apparatus, interviewers and all had to be clad in raincoats for protection against the driving rain. The opening barrage was borne by members of the NBC Washington staff, chiefly by Gordon Hittman, William Craig and Bryson Nash with occasional relief from Denis St. George, George Wilkens, Ed Linn, George Gunn, Jack Roney and Bud Barry.

No makeup was used and the directors, headed by Warren Wols with Thomas A. Prescott as his assistant and Carleton Smith of the Washington executive staff housing arrangements, were able to study scanning and production techniques under all sorts of conditions. Exceptionally adapted to television, it was found, were the features and personality of Gordon Hittman, whose informal and pleasant manner augur well for his future when television becomes a regularly established service.

Both RCA and NBC seat large contingents of officials to watch the reactions to the demonstration, and of course large crowds were needed to man the apparatus, which went through all seven days without a break. Heading the technical crew was C. B. Hanson, NBC vice-president and chief engineer, assisted by R. M. Morris, development engineer; B. E. Shively, television supervisor; C. C. Grunberg, television engineer; T. Buzik, chauffeur-mechanic, and the engineers attached to the telephile units—Harold See, A. E. Jackson, R. W. Pickard, S. L. Poeck, R. J. Plaisted and E. C. Willard.

On hand for nearly all of the tests were G. W. Farrier, NBC television coordinator; N. E. Kerst, his assistant; and T. H. Hutschmacher, manager of television programs. With them from New York came Frank Mullen, RCA director of public relations; Clay Morgan, NBC director of public relations; Vance Balbo, NBC press division manager; Leif Edl, press division; Burke Crosby, photo editor, and William Raussman and Sidney Desfor, photographers.

The Washington staff of both RCA and NBC devoted much of their time to the demonstrations, including Frank M. Russell, NBC vice-president; Oswald F. Schust, RCA; Kenneth H. Berkey, manager of WRCWMA; Carleton Smith and Fred Shaw, assistant managers; Stanley Bell in charge of the Press Club crowds; Mary Mason, home economics specialist, and Phoebe Gate, publicity.

Blackstone May Add
BLACKSTONE PRODUCTS Co., New York (Aspinall) is using six weekly spot announcements on WSB, Atlanta, on a 52 week schedule.

Tunns Expands on Blue
LEWIS-HOWE MEDICINE Co., St. Louis (Thomas), on Feb. 17 will expand its program of Library show, Bette Reads, including Dr.Vars. tunns are now on WJZ, New York, to a network basis. The program is heard Fridays, 5-11 P.M. by H. W. Kaster & Sons Adv. Co., Chicago, handle the account.