

FCC Scans NBC Program Coverage

Duplication of Signals Queried at Network Hearings

TESTIMONY and cross-examination of B. F. McClancy, traffic manager of NBC since 1934, occupied the morning session Nov. 30 as the FCC continued its chain-monopoly investigation (Running account of proceedings from the opening session Nov. 14 through Nov. 29 was printed in BROADCASTING Dec. 1.)

Mr. McClancy previously had outlined the functions of his department and described the method of purchase and use of telephone lines. He began the Nov. 30 session by explaining how affiliates are advised of available commercial and sustaining programs and how the traffic department keeps track of routings on its traffic board.

The NBC chimes have been used for cueing and identification from the beginning of NBC in 1926, he said, and in addition Morse lines paralleling the network lines were maintained for cueing until 1933. Since then, the cue technique has been confined as completely as possible to the program itself to save line charges. Dependability of circuits is the great factor in this change in cueing technique, he added, although Morse lines still are used, especially in important circumstances. Monitoring costs have declined in recent years because of the increased dependability of circuits, operators becoming accustomed to working with cues and outlets becoming accustomed to cueing methods, he said.

Speaking of the importance of timing, Mr. McClancy said programs that run short or those likely to run long do not present much of a problem, but unexpected "slopovers" are a big bugaboo when they occur. He cited an instance of a 15-second "slopover" that resulted in a 2½-minute delay of the following program. In cases where programs are thought likely to run over, enough lines are bought to protect the program, he added.

Describes Facilities For Foreign Broadcasts

Although reverse circuit facilities are available, most purposes are served generally by the regular dual lines and the reverse circuit ordinarily is used only between Chicago, San Francisco and Hollywood. Repeat broadcasts of network shows he characterized as "an attempt to overcome the problem of time zone changes". Temporary wire facilities, as used for programs on small regional hook-ups, cost NBC about \$150,000 a year, he said.

Interruptions to service, Mr. McClancy said, have decreased, largely due to the increased use of underground cables, which are requested wherever possible. Time lost by interruptions during the last year has amounted to only .0009% of total net hours, he stated, of which 80.82% was due to storms, 6.56% to equipment failure, and 12.62% to errors. He also gave a general explanation of the rebates made to advertisers for interruptions.

Regular AT&T lines used in NBC's Canadian transmission are the only permanent NBC lines outside the United States, according to Mr. McClancy. An RCAC cable to Honolulu is bought only when it must be used, and RCAC or AT&T facilities are used for European programs, depending on "which-ever best suits our purpose". He explained that "the purpose in tying up facilities is not to exclude any other broadcaster, but just to make sure we get the program".

Under cross-examination by Commission Counsel George B. Porter, Mr. McClancy said that with the main traffic office in New York and because of the time zone situation, the West Coast traffic manager deals directly with AT&T in routing programs in that section. However, his orders are subject to those from New York, and the main office can spread a program over the West Coast by ordering lines direct from AT&T in New York, countermanning previous orders from the San Francisco office.

NBC sets up a cue circuit on a temporary basis occasionally, Mr. McClancy said, but no permanent telephone circuit parallels the regular NBC lines. For its transatlantic broadcasts, which are affected more or less by magnetic conditions, NBC checks with both AT&T and RCAC and takes the one least disturbed atmospherically. Adding that "it's purely a matter of rates with me" in choosing between the two, he said that with conditions equal, RCAC is ordinarily chosen, and that about two-thirds of the NBC European service is handled by RCAC, one-third by AT&T.

He explained also that RCAC offers the only purely reception service available, from its receiver at Riverhead, and that the only service from England comes via Canadian Marconi and AT&T facilities. AT&T operates its transmitters and receivers only in pairs, he pointed out, and will not split its receivers for reception of a program transmitted on another company's line, as will RCAC.

It is about an even break between the networks in tying up facilities, he continued as questioning formed around the NBC "scoop" in handling the recent Munich pact broadcast of Max Jordan. Pointing out that both RCAC and AT&T lines were available to other broadcasters, Mr. McClancy declared, "the Munich scoop was a scoop be-

Behind 8-Ball

WHENEVER an NBC witness appears before the FCC Network Inquiry Committee, he is literally behind the eight-ball. It started when O. B. Hanson, vice-president and chief engineer, took the stand in latter November. A miniature button-type eight-ball, black with the numeral in the usual white circle, adorned his buttonhole. Each succeeding witness has been handed the "boutonniere" and relinquishes it as soon as he leaves the stand. John F. Royal, vice-president in charge of programs, who to date holds the laurels as NBC's star witness, is reported to have formed the "NBC Witness Club", which hereafter will hold regular meetings.

cause we had the program information, and not because we had the channels tied up."

RCAC informs the three major networks simultaneously of situations in which its facilities might be used, he continued, but "it is not true" that if RCAC finds it can furnish facilities to only one network, they go to NBC. "If that were true, the other networks would not deal with RCAC as they do," he commented.

Growth of Network Reviewed by Merryman

Dr. C. B. Jolliffe, engineer in charge of the RCA Frequency Bureau and former FCC chief engineer, took the stand at the afternoon session Nov. 30 to clarify RCA and subsidiary operations in the foreign field. He explained both AT&T and RCA Communications maintain telephone service to Europe but do not operate transmitters on the continent. Their arrangements on the other side are with the British Post Office and the French Communications Ministry respectively, he said. RCAC is primarily in the business of transmission and reception of telegraph message service, but in addition has an addressed program service operation for transoceanic relays. There are agreements with a number of European organiza-

tions for relay service, he said. Philip I. Merryman, NBC station relations and an engineer, introduced a series of exhibits preparatory to the opening of the NBC case on duplication of programs, a main subject in the inquiry. One exhibit showed the growth of NBC since its creation in 1926 to the present, from the standpoint of affiliated stations. Another depicted in graphic form the NBC rate structure and the rate differentials for day and night. A third dealt with broadcast hours and a breakdown of programs.

At the end of 1926, NBC had 19 affiliated stations. In 1927 the number grew to 48 and in 1928 was 56. The number gradually increased through the years to the present total of 159, he said. This exhibit also showed deletions and changes in network status of the various stations.

Prior to NBC's formation AT&T established the first hookup in 1923. The stations were WEAJ, New York, and WJAR, Providence. In 1924 there were seven stations in the AT&T alignment, including WTAG, Worcester; WEEI, Boston; WCAE, Pittsburgh; WGR, Buffalo, and WFI, Philadelphia. The following year WOC, Davenport; WTIC, Hartford; WTAM, Cleveland; WWJ, Detroit; WSAI, Cincinnati; KSD, St. Louis; WCCO, Minneapolis, and WGN, Chicago, were added to the AT&T network. In 1926, the year of NBC's formation, the stations added by AT&T were WCSH, Portland; WDAF, Kansas City; WRC, Washington, and WLIT, Philadelphia.

Mr. Merryman testified that of the program hours actually broadcast by NBC network affiliates during 1937, 39.4% were commercial for all stations. Of all programs transmitted during the year by NBC, only 26.4% were commercial, he said.

W. C. Lent, allocations engineer of NBC, testified as to technical coverage of NBC stations in connection with duplication. Mr. Hennessey pointed out that his testimony would deal with the extent of program duplication in the primary and secondary areas of stations on the NBC networks, pursuant to the Commission's agenda for the inquiry.

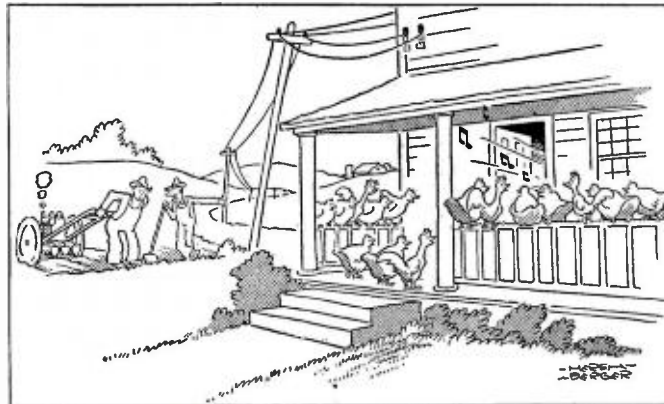
How Coverage and Program Data Were Computed

Mr. Lent explained that he had accumulated field intensity data for stations affiliated with the networks and that the entire study was carried on under his supervision. He said he had prepared all coverage maps and data in connection with propagation and also certain special tests which had been made.

Approximately 45 people worked 12,000 "man hours" from July 15 until the work was completed to get this technical data in shape. He explained that this did not include the time consumed by other personnel in the field in making technical measurements and in computing other factual material.

Asked to define duplication, Mr. Lent said it was the reception at a given location of two or more signals of the same program with the signals of the stations being "serviceable". Serviceability, he said, depends upon where the overlapping of the signal falls and upon a number of other variable factors.

Mr. Lent continued his direct



"Guess Ma's Tuned in on That Chicken Feed Program Again."

Cappers Farmer