

18 YEARS IN BROADCASTING

NBC Since Formation in 1926 Has Established Many Records in Providing "the Best Programs Available for Broadcasting in the United States."



By Niles Trammell

*President,
National Broadcasting Company, Inc.*

NETWORK broadcasting is the joint product of many inter-related activities. Each of these activities is indispensable to the final result, yet each is dependent upon all the others. A book might be written about any one of them, and how it has contributed to the broadcasting service initiated by Radio Corporation of America and carried on since 1926 by the National Broadcasting Company.

After broadcasting over a make-shift antenna the historic Dempsey-Carpentier fight, which took place in Jersey City on July 2, 1921, RCA built Station WDJ in Roselle Park, New Jersey, which went on the air with its first program on December 14th of that year. By February, 1922, RCA had transferred its broadcasting activities to Station WJZ, which it operated on a partnership basis with Westinghouse, the owner of the station. In the Spring of 1923, full ownership of WJZ was acquired by RCA.

Station WEAF, which was bought by RCA in 1926 when NBC was formed, had been established by the American Telephone and Telegraph Company in July, 1922. A month after it first went on the air, WEAF broadcast the first commercially sponsored radio program, on behalf of the Queensboro Corporation, a real estate firm.

The following January, the first network program in history was

carried by two stations connected by telephone wires—WEAF, New York, and WNAC, Boston. The program was a five-minute saxophone solo, but it was the beginning of network broadcasting.

When NBC was established in 1926, WEAF was the key station of its network. That the idea of a national network was immediately successful, and necessitated the creation of a second network only a few weeks after the first was formed, testifies to the soundness of the idea without detracting from the pioneering courage of NBC's founders. WJZ occupied a key position in the second NBC network, and remained an important NBC station until the separation of the Blue Network from NBC in 1942.

NBC Affiliates Increase

The original NBC Network comprised twenty-one stations and extended only as far west as Kansas City. By February, 1928, several stations on the Pacific Coast had become affiliated with NBC and on December 23, 1928, the network was fully established on a regular coast-to-coast basis.

The number of NBC affiliated stations has grown gradually and steadily through the years. Today, there are 150 stations in the full network—145 within the continen-

tal United States, three in Canada, one in Hawaii and one in Cuba. NBC itself owns only six stations: WEAF, New York; WRC, Washington; WTAM, Cleveland; WMAQ, Chicago; KOA, Denver; KPO, San Francisco. The remaining 144 stations are owned and operated by separate business organizations and associated with NBC in a contractual relationship.

The roster of NBC clients is a Blue Book of American industry and commerce. It is interesting to note that whereas 72 national advertisers sponsored programs over the NBC network during 1943, NBC had no less than 77 network clients during the year 1927. A comparison of NBC revenues tells a different story. The company's total revenue in 1927, its first full year of operation, was \$3,760,000; in 1943 it was \$49,000,000. There were 195 employees on the company's payroll when it started, compared with 2,286 on September 1, 1944. This increase is almost exactly proportional to the increase in the number of radio receiving sets in the hands of the public. In 1926, there were 5,000,000 receivers in the entire United States; in 1944, it is estimated that there are 57,000,000, of which 8,000,000 are in automobiles.

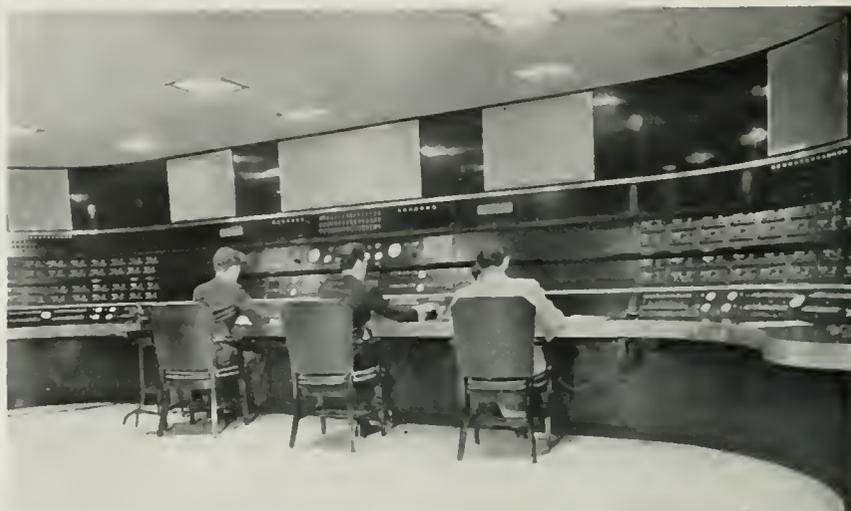
Music constituted approximately two-thirds of the network program fare in 1926. It now represents about half of NBC's total program time, although there are actually twice as many network program hours devoted to music today as there were eighteen years ago.

MUSIC AND SOUND EFFECTS ADD TO THE REALISM ACHIEVED BY ACTORS IN A DRAMATIC PRESENTATION FROM NBC'S RADIO CITY STUDIOS IN NEW YORK.





LEFT: FROM THESE LOFTY ANTENNA TOWERS ON LONG ISLAND, LISTENERS IN THE NEW YORK AREA RECEIVE PROGRAMS OF NBC'S KEY STATION WEAF. BELOW: NBC MASTER CONTROL ROOM FEEDS PROGRAMS TO AFFILIATED STATIONS ACROSS NATION.



The reason for this is that network programs are now on the air for sixteen or more hours a day, seven days a week. When NBC was established, WEAF was on the air approximately twelve hours each week-day and nine hours on Sunday; WJZ for approximately eight hours daily.

The Quiz type of program is not to be found in NBC's early schedules. It was only as recently as 1937 that this form of program became established. Dramatic programs filled only 2 per cent of NBC's total program time in 1926, compared with more than 26 per cent today. This increase of course is largely accounted for by the popular daytime serials.

News Reports Expand

The program change of greatest significance is in the field of news and special events. Except for a few sports events, there were no news programs broadcast over the network in its early days. Such programs now occupy no less than one-fifth of the network's total program hours. NBC had no news reporters or commentators in 1926; today, it has forty on its regular staff, in addition to a large news department. While the war is in large measure responsible for the present emphasis on news broadcasting, there is every likelihood that after the return of peace the reporting of national and interna-

tional news will continue to play a major role in NBC programming.

In 1926, the average number of Red network stations used on a sponsored program was nine, and on the Blue network, three. Today the average number of stations per commercial program on the NBC network is 110 in the evening and 85 in the daytime.

When NBC was formed, it broadcast no short-wave international programs. RCA, however, had in 1925 initiated international broadcasts to Europe over its Station W3XL at Bound Brook, New Jersey. This service was irregular until 1929, when programs provided by NBC were regularly broadcast via short-wave under the direction of RCA Communications, Inc. In 1930, this service was taken over by NBC, and has been a regular feature of the company's operations ever since. In November, 1942, the Government contracted for the full time of NBC's two 50-kilowatt international transmitters, WRCA and WNBI at Bound Brook, New Jersey. Since that time the seventy-six men and women of NBC's International Division have been engaged exclusively in the production and broadcasting of international programs in eight languages for the Government. This

war service of facilities and personnel is rendered by NBC on a non-profit basis. It is certain that after the war the broadcasting of international programs will continue to be an important factor in America's foreign policy.

Pioneer With FM

Eighteen years ago Frequency Modulation (FM) was scarcely more than a technical phrase, known only to radio engineers. By 1939, however, FM had begun to show promise as a technical improvement in broadcasting, and NBC erected its own FM Station W2XWG on top of New York City's Empire State Building. This was the first FM station to be established in New York City by any network broadcaster. It has been on the air regularly with FM programs since January, 1940. NBC has also applied to the FCC for additional construction permits for FM Stations to be installed in cities where the company maintains studios. In order to stimulate the progress of FM, NBC plans to make its network programs available to the FM stations operated by the company's network affiliates. Our objective is to make NBC programs available to all radio listeners,

RIGHT: TELEVISION PROGRAMS PRODUCED BY NBC'S PIONEER NEW YORK STATION, WNBT, ARE PUT ON THE AIR FROM THIS MODERNISTIC ANTENNA ATOP THE EMPIRE STATE BUILDING. BELOW: WNBT'S TRANSMITTING CONTROL ROOM.



whether they use standard band or FM receivers.

Television is a field which has held the close attention of the company's management and engineers ever since the formation of NBC. This company is the pioneer in television broadcasting in the United States, and has a long record of "firsts," both in engineering achievements and in the creation of television programs.

Develop Program Technique

NBC engineers have helped to perfect present-day television cameras, studios and studio lighting, and transmission systems. Practically the entire technique of putting a television program on the air is an NBC product—from author's manuscript to actor's make-up.

The following dates stand out in historical importance:

October 30, 1931—NBC commenced television broadcasting from transmitter atop Empire State Building, New York, with 120-line pictures, in experimental tests of RCA semi-electronic system, employing mechanical-scanning camera and electronic receivers. Commencing in 1933, NBC broadcast programs with 240-line pictures, in first field test from Empire State

tower transmitter of RCA all-electronic system.

June 29, 1936—Having reconstructed the Empire State tower transmitter on the basis of earlier tests, NBC began broadcasting programs in second field test of RCA all-electronic system, with 343-line pictures.

April 20, 1939—NBC's station WNBT inaugurated America's first regular television program service to the public, televising the ceremonies opening the New York World's Fair, with 441-line pictures broadcast throughout metropolitan area from Empire State tower.

July 1, 1941—Ten years after NBC television first went on the air, NBC inaugurated commercial television, broadcasting the programs of four advertising sponsors, with 525-line pictures. NBC had previously received the first commercial television license granted by the FCC, and had issued the first television rate card ever published.

With the exception of a brief period required in 1941 to adapt the transmitter and other equipment to new FCC standards, NBC's pioneer television station WNBT has been on the air continuously for five years, with regular weekly programs of sight-and-sound broad-

casting. Within the past two years, NBC has established America's first television network, over which it furnishes a regular program service. It is for the present a modest three-station hook-up of NBC's station WNBT with WPTZ, the Philco station in Philadelphia, and WRGB, the General Electric station in Schenectady.

All members of the NBC organization share with the rest of the RCA family a tremendous and enthusiastic confidence in television as a great postwar industry and service. With the cooperation of the Government and of other members of the radio manufacturing and broadcasting industries we hope the full possibilities of television will be brought to realization early in the coming years of peace.

Guide to Future

What I have said here about the past eighteen years of NBC history is a bare outline, with numerous omissions, of a fascinating period of pioneering achievement.

NBC started with only an ideal for guidance. Today, it has both the ideal and an eighteen-year tradition of faithful service to back it up. We could not ask for more trustworthy guides into a future that is full of significance and promise.

Buy War Bonds
