

Asheville - Radio broadcasting RADIO STATION WWNC IS GIVEN BOOST IN POWER

Expansion Of Facilities At
Cost Of \$80,000 To Be-
gin Immediately.

TO HAVE 5,000 WATTS
New Transmitter And An-
tenna Will Be Erected On
Old Leicester Road.

Radio Station WWNC has been granted authority to increase its power from 1,000 to 5,000 watts and will begin immediately construction of a new transmitter and antenna system to cost approximately \$80,000.

The expansion program was announced by Don S. Elias, vice-president of the Citizen-Times company, on the station's 19th anniversary, and is the materialization of plans made in the 1930's but delayed because of the war.

Mr. Elias said he has been informed that materials and equipment needed will be immediately available, following action of the Federal communications commission granting authority to resume the expansion program.

The new transmitter and antennae will be erected on a 66 and one-half-acre tract on the west side of the old Leicester road, just beyond Emma. This tract was purchased by the radio station in April, 1939.

On this land, four antennae will be erected, nearly 40 miles of wire will be plowed into the ground, and a one-story building, housing transmitter equipment, a shop, and including a three-room apartment for a resident engineer, will be erected.

WWNC applied to the FCC for the power increase in 1939 and the original plans for the expansion were prepared in that year.

Plans were modified somewhat in 1941 and the station was granted a conditional construction permit. The station was ready to carry out these plans when the war began and materials became unavailable.

Application Reinstated
In the spring of 1942, the station, through its attorney, requested permission of the FCC to withdraw its application "without prejudice" and permission was granted. Then, last year, the FCC announced that during a 60-day period beginning in August; applications, on request, might be reinstated. The WWNC application was reinstated.

Increase in the station's power and use of the new antenna system are expected to make a vast difference in the reception of WWNC programs throughout Western North Carolina and in Tennessee and South Carolina. It will put Asheville on a par with radio stations in other Southern cities.

The launching of the program was seen here as evidence of the progressive spirit of Station WWNC and of the desire on the part of its executives to continue the leadership it has held in Western North Carolina for 19 years.

Hundreds Of Feet High
Three of the four antennae will be 300 feet high and the fourth, 425 feet high. They will be placed in the pattern of a parallelogram with the tallest antenna occupying the southern point. Radiating from the base of each antenna will be wires which will be plowed under to a depth of about eight inches. There will be 120 radiating wires from each tower (at three-degree intervals) and each wire will be 425 feet long—requiring the use of, approximately 50,000 feet of wire for each antenna.

Distance between north and south antennae is 1021.5 feet and between east and west antennae, 527.3 feet.

Four telephone circuits, to be leased from the Southern Bell Telephone and Telegraph company, will link the WWNC studios, in the Asheville Citizen-Times company building, to the transmitter. Power for the operation of the transmitter will be furnished by the Carolina Power and Light company, and an auxiliary line will be provided so that the interruption of service over the main line will not interfere with broadcasting operations. Transformers will step up the voltage from the Power and Light company to 10,000 volts, the amount needed for operating WWNC.
The transmitter house will be a

simple structure of brick or block. The transmitter room, which will house the transmitter, special measuring and test equipment, control console, transformer vaults, rectifiers, and other equipment, will occupy the center of the structure. On the right will be a three-room apartment for the resident engineer and on the left will be an office, rooms for storage of spare parts, a shop for making repairs, and a shower and lavatory for employes.

Anthony Lord is architect for the building and the Merchant Construction company will erect the building. Construction will begin at once.

The contract for the construction of antenna towers has not yet been let.

The station will operate on 5,000 watts both day and night, but there will be a difference in day and night signal patterns.

During the day, the waves will go out evenly throughout the 360 degrees of a circle.

At night, the pattern will be directional—that is the waves will be concentrated in certain directions. This is necessary to meet the engineering requirements of the FCC so that the station will not interfere with other stations in the nation operating on the same frequency.

Greatest power will be beamed toward the southeast, but the signal strength throughout Western North Carolina will be greatly increased.

Throughout its existence, the transmitter for Station WWNC has been atop the Flat Iron building. None of the equipment now in use will be employed in the new transmitter station. All equipment will be new, and, of course, vastly improved as the result of recent scientific developments.

Started As Chamber Project
Station WWNC was originally a Chamber of Commerce project, made possible through various contributions. It was opened with great ceremony and a tremendous amount of interest on the part of Asheville persons on February 22, 1927. J. Dale Stentz was director of the station for the Chamber of Commerce. It was operated principally as a local unit, broadcasting weather reports, road information and local musical programs.

In August, 1928, the Chamber of Commerce leased the station to G.

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