

Watch 640 on Your Radio Dial

By SIGFRID FLOREN

WNAD, "The Voice of Soonerland," resumed full daytime operation September 22 with its program of public service broadcasting greatly increased as a result of important technical improvements and additional attention to efficient production of programs.

Geographical coverage of the station is more than doubled, and an augmented personnel is constantly working toward better program quality.

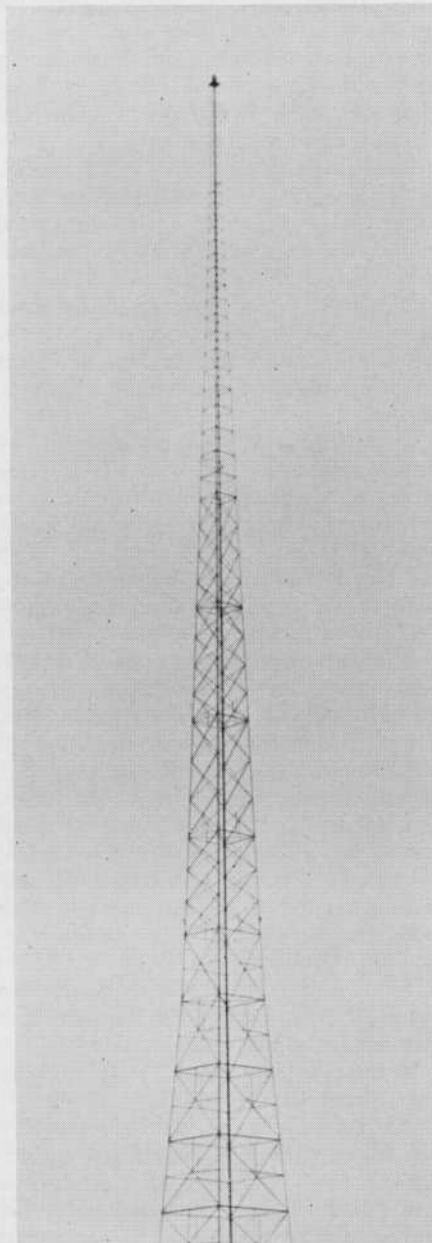
Greatest single step forward was the construction of a modern antenna tower and elaborate ground system, installed under the direction of Clyde L. Farrar, associate professor of electrical engineering who has been technical chief of the University station for many years.

The 29,000-pound steel tower, standing immediately east of the Stadium, is 24 feet square at the ground and extends 305 feet into the air. If it were laid on the ground, it would be longer than an ordinary city block. Large concrete piers sunk seven feet into the earth anchor the structure's four legs.

Connected to the tower and radiating from the center of it like spokes of a wheel are 240 strands of wire buried in the ground. Jay Kelso, of the University Utilities Department, designed a special plow which dug a ditch, laid the wire ten inches deep and covered it, all in one operation. The strands of wire are alternately 385 and 150 feet long. Purpose of this 64,000 feet of buried copper wire is to make firm contact with the earth, or more technically, to distribute the electrostatic field uniformly over the ground, because the soil as well as the air conducts radio waves.

Station engineers believe that the new facilities will more than double the area served by the University station and extend its range to statewide proportions. No scientific comparison is possible, however, between the new tower and the old "clothesline" antenna that has been in use for twenty years, simply because the field intensity of the old one was so weak that

Definitely Big-Time Now Is O. U.'s Radio Station With Its 300-Foot Antenna Tower



it was never considered worth while to measure it.

An indication of the difference is apparent in these few figures:

Height above the ground—now 305 feet, formerly 65 feet.

Amount of wire for ground contact—now 64,000 feet, formerly 200 feet.

Included in the setup is a transmitter room in the south end of the east wing of the stadium. The transmitter was formerly in the Engineering Laboratory Building. Three 750-foot cables connect the transmitter to the antenna, one to carry the programs to the tower, another for tower lighting, and a third for the reading of the antenna current.

Proof of the greatly increased range came in the broadcasting of the Sooner-Aggie football game September 27. WNAD received reports of good reception of the football broadcast at Amarillo, Fort Worth and Wichita Falls, Texas; Hobbs, New Mexico; Wichita and Scott City, Kansas; Guymon, far out in the Oklahoma Panhandle; Talihina in eastern Oklahoma; Stillwater and Claremore to the northeast, and many other Oklahoma points.

Though few persons outside the field of radio realize it, the federal government's re-allocation of frequencies, or wave lengths, last March, was a great boon to WNAD. It not only gave the University station a frequency of its own (instead of requiring it to share time with another station in the same broadcast area, as it formerly did with KGGF, Coffeyville, Kansas), but also gave it a much more desirable spot on the dial than it had previously.

That change from 1010 kilocycles to 640 kilocycles greatly increased the coverage of the station, according to station officials. An explanation of that phenomenon is almost beyond description in non-technical language. The basic idea is that the area over which a radio station's signal reaches is determined by

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"This gives them more volume of experience within the limited time they have for study," the sculpture professor says. His classes are informal. He believes discipline will take care of itself if students become interested in their work.

Only one or two degrees in sculpture are granted each year. There are several reasons for the small number, and one of them is Joe Taylor. Most people aren't born with the desire to spend hours working with shapeless masses of stone, clay and wood. Knowing this, Mr. Taylor doesn't attempt to recruit students.

"I don't encourage students to major in sculpture unless they show unusual aptitude. Art is a heartbreaking profession for any but the best."

Because Mr. Taylor takes only the good students, he can say with pride and veracity, "Of those who have graduated with a major in sculpture, not one has failed to attract attention for the excellence of his work."

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three things: power, which has remained the same for WNAD at 1,000 watts; antenna height; and the propagation factor, which is a function of the frequency. Thus with a frequency of 640 kilocycles the propagation factor is greatly decreased, which means that the strength of the waves the transmitter sends out is not reduced as rapidly as that of waves of higher frequencies. Consequently waves of the lower frequencies travel farther.

The general public, of course, is chiefly interested in the programs that a station produces, instead of the technical processes involved. Homer Heck, director of station WNAD, and H. H. Leake, production manager, are constantly improving the service that the station is now equipped to render to undergraduates, alumni, patrons and friends of the University, and listeners in general.

While there are several new programs on the regular broadcast schedule this fall, emphasis is on expansion and better production of established programs which have been well received by listeners in the past. At intervals throughout the day the station will continue to broadcast music of the masters from high fidelity recordings. The work of planning and directing the musical programs, as well as providing appropriate background music for other types of programs, is being placed in the hands of a special music supervisor this year, since the station puts so much emphasis on this type of program.

Plans to build up the station's record library are going forward through collaboration with the Union and the School of Music, and Mr. Leake this year hopes to be able to begin advance publication

of programs with notes and comments to aid listeners in the enjoyment and understanding of the world's fine music.

Other programs of general interest, such as the Spanish lessons conducted by Dr. Stephen Scatori, lectures on public problems, and broadcasts originating in University classrooms, are being continued on the regular schedule.

Broadcasts directed to special groups will be heard in increased number. In addition to the familiar "Indians for Indians Hour" conducted by Don Whistler, tribal chief of the Sac and Fox, and the broadcasts to state garden clubs, Mr. Heck and Mr. Leake are contemplating programs for Negro groups and for labor groups.

The Alumni Association will sponsor a variety program for alumni from 5 to 5:30 p. m. each Wednesday.

Undoubtedly the most popular of new broadcasts this fall will be the coverage of all Sooner football games. WNAD has been selected to originate the play-by-play description of both home and foreign games. The broadcasts are available to commercial stations at a nominal charge.

Improved and expanded facilities of WNAD provide greater opportunities for University students studying any phase of radio. Advance to full daytime operation last spring opened new positions on the engineering staff in which young men are now preparing for careers in operation of commercial radio stations. Greater time on the air also called for more announcers, continuity writers, artists and directors. Work on the University station in these fields provides experience that will make the students valuable to commercial radio when they finish school.

This year the "Radio Workshop," accredited in the schools of speech, drama and journalism, has been expanded to include work in radio music.

Now completely and modernly equipped, "The Voice of Soonerland" is carrying forward a program to the entire state.

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Paintings On Tour

Paintings by O. U. artists are among those which have been assembled by the Washington office of the WPA art program for national tours which will last for at least two years.

One exhibition is made up of oil paintings, while the other is limited to the works of Indian artists. Those who have pictures in the first group are Oliver Meeks, '38fa, Oklahoma City; Dorothea Stevenson, '31fa, Oklahoma City; Leonard Good, '27fa, Norman; and Jo Lee Rodke, '40ed, Shawnee.

Artists whose pictures will be included in the other exhibition are Franklin Gritts, '39, Lawrence, Kansas, and Richard West, '41fa, Bacone.

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