

W9XAT

One of the most interesting aspects of the Dr. Young era was his entrance into the field of television. The exact date of his first television broadcast is unknown, but his station is listed as receiving its first license in 1933.²

Dr. Young's experimentation was not the first television activity in the Upper Midwest. As early as 1923 the State University of Iowa experimented with various forms of television and received a license to broadcast in early 1932.³

Dr. Young's television station was the first television station in Minnesota.⁴ Because television was considered an experimental service, the station's call letters were not WDGY-TV, but W9XAT.⁵ The "X" indicated that the station was experimental.

Like the Iowa station, Dr. Young's equipment was primitive. The concept of image dissection was accomplished by a scanning disk with pin-hole perforations. As the disk rotated, the scene in front of the lens was

¹Clifford Larson, President, Northwestern Electronics Institute, interview, Minneapolis, September 1, 1970.

²Radio Annual, 1938, p. 463.

³E. B. Kurtz, Pioneering in Educational Television. Iowa City: State University of Iowa, 1959, p. 17.

⁴Young letter.

⁵Radio Annual, 1938, p. 463.

converted, line by line, into electrical impulses by a photo-cell. On the receiving end a similar disk with a fluctuating light source behind it changed the signal back into a picture. Photographs taken of the lowa station's transmissions shows the picture quality to be comparable to a poor quality newspaper photograph.¹

Radio Annual's description of the W9XAT equipment stated "This station is using 125 line definition with a triple spiral, multiple disk...." The station operated in the 42-56 and 60-86 mc. ranges with a power of 500 watts. The sound portion of the programming was carried on WDGY.² The transmitter location was listed as "portable" as Dr. Young planned to experiment from the Foshay Tower.³

The studios and transmitter of W9XAT were in the WDGY building at 909 West Broadway. The television studio itself was on the third floor attic of the building.⁴

One of the first "performers" on W9XAT was a bulldog belonging to WDGY salesman, Miss Vivian Bulmer. He was black and white, and Dr. Young thought the dog would show up well on television.⁵ "Slim Jim" Iverson, a popular radio performer, also was one of the early television

¹Kurtz, p. 91-115.

²Radio Annual, 1938, p. 463.

³Dr. George W. Young, letter August 4, 1933, in FCC WDGY file.

⁴MacKnight interview

⁵Bulmer and Johnson interview.

"stars": He had difficulty squeezing his lanky frame into the small attic.¹

The nature of the camera required that the room be totally dark. Performers were required to memorize their musical selections as they could not read music in the dark room. Performers who could "play by ear" had an advantage. A WDGY announcer of that period, John MacKnight recalls seeing performers standing in the dark, playing and singing while dots of light emanating from the camera danced across their faces.²

Dr. Young's staff also developed a means of televising motion picture film. Young claimed to have the earliest patent on such a device. A photograph of this camera shows it to be a scanning disc mounted on a motion picture projector. The sound head was also on the projector and its output would be transmitted simultaneously over WDGY.³

Unlike Dr. Young's other activities, W9XAT was not publicized in the Dr. Young manner. He wrote that he had not promoted the new venture because he felt commercial application of it was a long way off. However, he was intrigued with the idea of a model demonstrating ladies' hosiery over the air while WDGY carried an accompanying singing commercial.⁴

¹ ibid.

² MacKnight interview.

³ Dr. George W. Young, letter in Broadcasting, July 1, 1935, p.108.

⁴ ibid.

Dr. Young relinquished the W9XAT license in 1938 and on September 20 of that year its call letters were dropped from the FCC's roles. The station had never operated on a fixed schedule and had transmitted primarily to test new circuitry designed by the WDGY engineering staff. When he sought to renew his license in 1938, the FCC informed him that his renewal application would have to be put before a hearing. Dr. Young apparently considered W9XAT to be worth less than the expense he would incur by going through the hearing process, so he offered no evidence in support of the station. The FCC then deleted the call letters.¹ Young probably saw that his work with the mechanical scanning system was headed in the wrong direction as other experimenters got better results with the all electronic iconoscope system.

Courtesy of Lois Rakov