



Radio & Television Museum News



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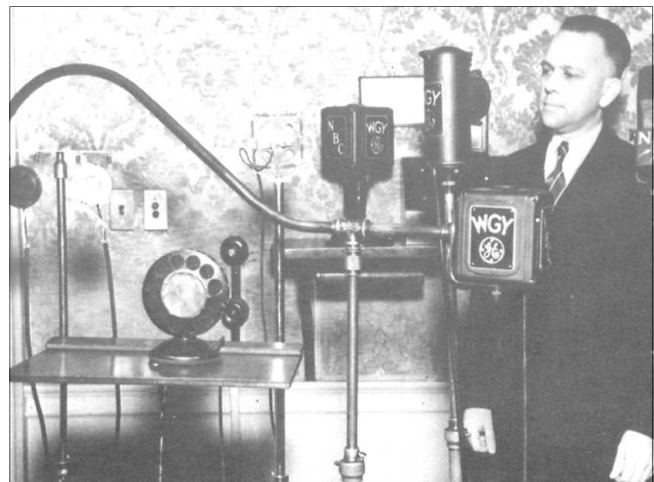
Radio Station WGY¹ (The First in an Occasional Series Noting Significant Radio Stations) By *Brian Belanger*

Radio station WGY is historically and technologically significant because of its close association with the General Electric Company. The station, GE's research laboratories, and several important manufacturing operations are located in Schenectady, New York. Because GE played an important role in the development of radio and television, it is not surprising that the company would have a premier station of its own to serve as a technology test bed for its radio and TV experiments.

This article is not intended to be a history of GE's involvement in early radio. Suffice it to say that GE made many important contributions, particularly in the area of vacuum tubes, transmitters, and receivers. GE was the key company involved in the formation of RCA, and GE, along with Westinghouse, designed and built radios for RCA during most of the first decade of RCA's existence. General Electric's Ernst Alexanderson developed the high-frequency alternators used by RCA and others as high power trans-Atlantic transmitters. GE scientists such as Irving Langmuir put Lee deForest's triode tube concept on a solid theoretical foundation and developed tubes that worked much better than the originals with which deForest tinkered.

Because of GE's interest in all things electrical and its involvement in developing the first successful high-frequency alternator for Reginald Fessenden's

early experiments with radiotelephone transmissions, the company began research on radio-related technology early in the 20th century. No doubt the company anticipated business opportunities in military and ship-to-shore applications. GE received a provisional Class 3 experimental license dated August 13, 1912, from the Department of Commerce's Bureau of Navigation (the government entity issuing radio station licenses at the time). Call letters 2XI were assigned to the station. Presumably GE used this early station to test prototype equipment. It is unlikely that in 1912 GE management



WGY's first announcer, Kolin Hager, with a collection of vintage WGY microphones. [1]

envisioned the broadcasting boom that would occur a decade later. When that boom developed, GE had the expertise to draw upon. While WGY was not the first station licensed to broadcast entertainment to the public, it was a station that tended to be state of the art throughout its history.

GE rival Westinghouse's pioneer station KDKA began broadcasting late in 1920, and by early 1922, entertainment broadcasting to the public had become a national craze. GE's response was to establish station WGY, which broadcast its first program on February 20, 1922. (Another source says it was February 22.²) Announcer Kolin Hager began that inaugural broadcast by saying, "This is station WGY. W, the first letter in wireless, G, the first letter in General Electric, and Y, the last letter in Schenectady."

The next day WGY did its first remote—a speech by Governor Nathan Miller from Schenectady's Union College.

In August 1922 WGY launched a locally produced Friday night drama series. The WGY Players' first effort was Eugene Walter's play *The Wolf*, complete with orchestral accompaniment. The microphone was disguised as a floor lamp lest the actors and actresses be intimidated by it.

When legendary announcer Graham McNamee of station WJZ broadcast the World Series in October 1922, WGY carried the program via a long-distance hookup.

In 1923 the six-year-old son of GE engineer Ernst Alexanderson was kidnapped, and radio found a new role. Alexanderson broadcast an appeal on WGY. A listener in the Thousand Islands area of New York State heard the program and recalled seeing a couple in one of the cabins nearby with a child who resembled the missing boy. The police arrested the kidnapers, and *Radio Broadcast* magazine carried an article about the incident titled "Radio Repays Its Genius."

WGY's first studio was located in Building 40 at the GE main plant complex in downtown Schenectady, with the antenna towers on the roof of that building. The initial transmitter power was 1000 watts, which at the time was considerably more powerful than typical stations. Soon the transmitter was upgraded

to 1500 watts, and then to 5000 watts.

In 1923 GE constructed a transmitter laboratory and antenna complex on a 54-acre site south of Schenectady. Tests in 1925 of a 50,000-watt experimental transmitter were successful, and by 1926, the Federal Government granted GE permission to operate regularly with 50,000 watts, an awe-inspiring power level at the time, giving WGY coverage over much of the Eastern United States. (Even today, 50,000 watts is the maximum power for AM stations). In 1925 the *Cedar Rapids [Iowa] Gazette* included some program listings for WGY, demonstrating the station's far-flung audience.³

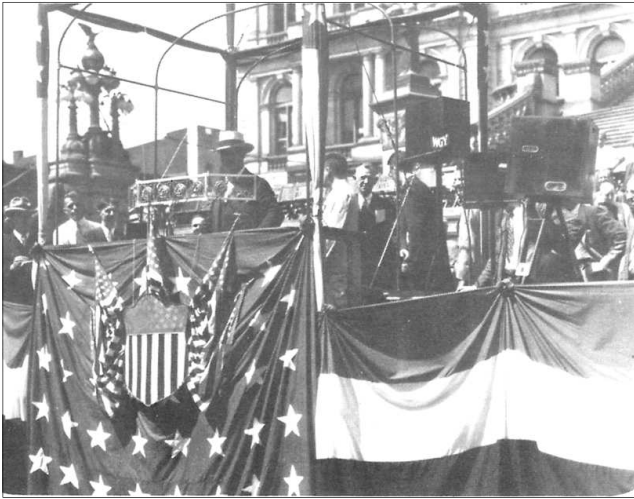
An early attempt to network stations succeeded in June 1923 when stations WEAJ (New York City), KDKA (Pittsburgh), and KYW (then Chicago) teamed with WGY to present a program on the anniversary of the electric light.⁴

Cincinnati station WLW gets credit for having the highest regular operation power level (500,000 watts for a time in the 1930s), but GE's WGY paved the way for high-power operation, with transmitter tests of 100,000 watts in 1927 and 200,000 watts in 1930.

GE began experimenting with shortwave transmission early in the 1920s. The company established a shortwave link to its station KGO in Oakland, California so that WGY's programs could be heard on the West Coast. In 1930 GE staged an "Around the World Broadcast" promotional event in which a program was relayed from Schenectady to the Netherlands, then to Java, to Australia, and back to Schenectady. Via shortwave links, WGY regularly broadcast programs from Australia and England. In 1929 the station carried Admiral Richard Byrd's shortwave broadcasts from Little America in Antarctica.

As noted in the January 2006 issue of the *Radio & Television Museum Newsletter*, WGY began scanning disc television broadcasting in 1928. The photo on page 3 documents an early remote.

Before Franklin D. Roosevelt made his "fireside chats" to the American people as president, he did similar radio broadcasts to his state constituents over WGY during the time he served as governor of New York. Later, President Harry Truman broadcast over WGY. (Photo on page 3.)



Governor Al Smith's acceptance speech in Albany, N.Y., when he received the Democratic nomination for president, was televised by WGY. This was claimed to be the first TV remote. (It is not clear to me whether that claim would withstand scrutiny.)

On January 1, 1927, WGY became one of the first stations to join the new NBC radio network. WGY originated network coverage of the Lake Placid Olympic Games in 1932.

The station quickly outgrew its first primitive studio at the main plant. In 1924 WGY's expanded studio facilities at 1 River Road were dedicated. In 1938 WGY moved to new studios on Washington Avenue, across from GE's main plant complex. (Those facilities were used until 1957 when a much larger radio-TV complex on Balltown Road in suburban Schenectady was built.)

When it was erected in 1938, WGY's 625-foot tall transmitting tower was claimed by the company to be the tallest in the country. However, like many companies, GE sometimes exaggerated its claims to fame. Crosley-owned Cincinnati station WLW erected an 831-foot tower in 1933.

During most of its early years, WGY was at 790 on the AM dial, but in 1941 the station moved to 810 kHz. When WGY began regular electronic television broadcasting in the 1940s, the TV station was called WRGB-TV (named after W. R. G. Baker, a GE engineer and manager).

Today, with the crowded AM band, WGY cannot be heard over much of the country as it could in its earlier era, but it continues serve its less substantial



WGY's studios were housed in this building from 1938 through 1957, when the station's radio and TV operations moved to a much larger facility.

listening area. It certainly deserves to be counted among the pioneer stations that made important contributions to the broadcasting art.

Endnotes

1. The material for this article is taken largely from an undated WGY promotional brochure titled *This is WGY - Schenectady Radio 81*, donated to the Museum library by Ken Mellgren.
2. Christopher Sterling and John Kittross, *Stay Tuned* (Belmont, Ca.: Wadsworth 1990), p. 62.
3. Erik Barnouw, *A Tower in Babel* (New York: Oxford University Press, 1966), p. 207.
4. Sterling and Kittross, p. 69. ■



President Harry S. Truman broadcasting over WGY.