



Did You Know?



Navy Wireless Towers

In his July 19, 1929 *Washington Evening Star* article “Army, Navy and Marine Corps Country Club Course is Mapped Out from Plane”, Walter R. McCallum describes the locale of the Club’s golf course as follows, “Over a stretch of rugged country a stone’s throw away from the wireless towers of the Navy high frequency station at Arlington and a short distance from Fort Myer have been laid out 18 fine golf holes...”

Navy Wireless Towers

NAA was a major radio facility located at 701 Courthouse Road in Arlington, Virginia (see map) that was operated by the U.S. Navy from 1913 until 1941. The station was constructed as the Navy's first high-powered transmitter for communicating with its bases across the U.S. and the Caribbean. During its years of operation NAA was best known for broadcasting daily time signals, which were provided by the Naval Observatory. It also provided a variety of additional services, using multiple transmitters operating on frequencies ranging from longwave to shortwave. The station also conducted extensive experimental work, including, in 1915, the Navy's first transatlantic transmission of speech.



“Three Sisters” (1923)

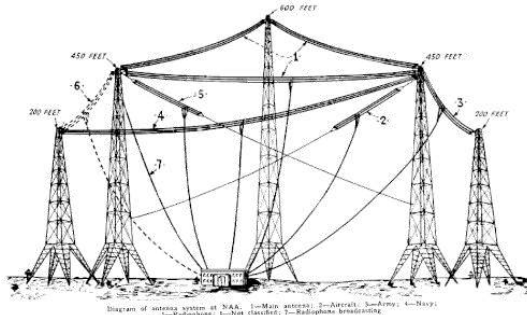
NAA’s most visible feature were the free-standing towers, known as "The Three Sisters", which supported the antenna wires. The main tower reached 600 feet while the other two towers were 450 feet tall. Two additional 200-foot towers were constructed in 1923.

Arlington was the first station in a proposed "High-Powered Chain" that would link the U.S. capital with much of the rest of the world. Test transmissions that began in November 1912 were promising enough to convince the U.S. Congress to finance the construction of similar stations at San Diego, California, Darien in the Panama Canal Zone, Pearl Harbor, Hawaii, and Cavite in the Philippines.

NAA's original transmitters were only capable of producing the dots-and-dashes of Morse code. The later development of vacuum tube transmitters made audio transmissions practical, and in 1915 the American Telephone and Telegraph Company (AT&T) received permission from the Navy to conduct a series of tests at the NAA facility. These experimental transmissions set impressive new audio distance records and were heard as far west as Hawaii. They were also received in Paris, France, which marked the first transmission of speech across the Atlantic.

With the entrance of the United States into World War I in April 1917 the federal government took over full control of the radio industry, and it became illegal for civilians to possess an operational radio receiver. However, NAA continued to operate during the conflict. In addition to time signals and weather reports, it also broadcast news summaries for the troops on land and aboard ships in the Atlantic. Effective April 15, 1919 the ban on civilian reception of radio signals was lifted, so NAA's time signal transmissions were again available to the general public.

Beginning in 1920, a Navy station located in Anacostia, D.C., NOF, began broadcasting occasional entertainment programs. In late 1922 it was decided that NOF would focus on experimental work, and all its former broadcasts were transferred to NAA.



NAA Antenna Configuration (1923)

In 1923, NAA had six transmitters in operation, providing, in addition to time signals and military communication, weather reports and navigational warnings.

By the late 1930s many of the activities conducted at NAA had been transferred to other sites, and it was decided that the Arlington operations were no longer needed. In anticipation of the shutdown, in 1938 three new 600-foot towers were erected at NSS

Annapolis. To avoid a hazard to aircraft, the towers were demolished in 1941 prior to the opening of National Airport.

The NAA transmitter building and the original NAA



administrative building at 701 Courthouse Road in Arlington are still in use by the Navy for administrative functions unrelated to radio.

