



Jupiter Wireless Telegraph Station

This postcard of the Jupiter Lighthouse shows in good detail the Jupiter Wireless Telegraph Station antenna masts. The mast to the left of the lighthouse was the main and original mast structure and was connected to the lattice tower seen to the right of the light house.



Superseded by the Jupiter Telegraph, built around 1870 , the original construction date of the Wireless Station is uncertain but is believed to be sometime after 1900. The U.S. Navy constructed the first wireless telegraph experimental facility in Arlington VA. The second wireless Telegraph facility was constructed in Jupiter. "The Jupiter site was chosen mainly because of its location. It was 1000 miles from Arlington, just far enough to make experimentation with wireless quite realistic and useful."

"It was linked with other wireless sites by land line telegraph and it was far enough south for ship-to-shore testing and the Gulf at the Caribbean waters." Additionally, the southernmost U.S. weather service station was located in Jupiter at the site.

Operational Imperative of the Wireless Facility

The primary mission of the wireless station was to provide aid to mariners. Part of the mission of serving maritime operations was to issue time checks for passing ships. Time checks were important because it helped the ship establish its exact location.

The ship's clock, or chronometer, is used to determine the longitude by noting the time difference between the chronometer and the known time of a celestial body. The Jupiter wireless station would transmit it's time check at 12:05 each day (Five minutes after the signal was broadcast from Arlington).

Additionally, the Jupiter station gave a visual time check to passing ships by dropping a time ball. A five foot diameter canvas ball was hoisted 100 feet up the antenna mast at 11:55 a.m. each day. At noon when the time-click from Arlington was received, the time ball was dropped down the mast. In this manner mariners were able to accurately fix their location, time, and distance to port.

Physical Attributes of the Facility "In the early days, the Jupiter facilities consisted principally of the main

building, a power building, a storage house, a boathouse with dock, quarters for the petty officer in charge at a 120-foot wooden antenna mast." The entire facility occupied about three acres of the government reservation property. "The antenna mast was made in the style of the early sailing ships, several long wooden poles lashed together with steel wire ropes. This mast was kept upright by a multitude of guy wires and stood magnificently on the north side of the Jupiter River for a good many years." The transmitter and receiver "was made of several wires stretch between two spreaders". The spreaders were mounted on the tops of each mast with the wires draped on a slant between them. The distance between the two masts was approximately 150 ft.

Also, because Jupiter operated a telegraph station at the same facility, mariners could have messages telegraphed to their destination ports. Early on this was accomplished by the sailors sending a man ashore with the message to be relayed. Later, however, when ships began deploying their own wireless equipment on board, the message to be relayed could be wired from ship to shore and then telegraphed across land lines.

A second operational mission was to provide for testing and evaluation of wireless facilities for the government. In this respect the wireless station served well acting as a test site for government transmissions and assisting in the development of wireless technology throughout the world.

The Wireless Station played a great role in Jupiter's early history as both a government site and as a port of call for South Florida.