

#### Allison McLellan

Most hams know about Guglielmo Marconi's revolutionary inventions with radio communications at the turn of the 20th century, including his notable work on the US east coast. He began building stations in Cape Cod, allowing for the first transatlantic radio transmission between the US and Europe in 1903. In 1912, his station in Chatham received distress signals from the Titanic and operators alerted the *Carpathia*, the only ship that came to the survivors' aid. As a marker of these advances. the Chatham station was added to the National Register of Historic Places in 1994 and is currently the Chatham Marconi Maritime Center. Marconi's work has also been preserved in another location across the country — the Wireless Telegraphy Station at Kahuku Point in Oahu, Hawaii, also called Marconi Point,

The station's powerhouse and operating building (upper photo), the largest in the world at the time of construction in 1913. [Makai Ranch, Ltd., photo]

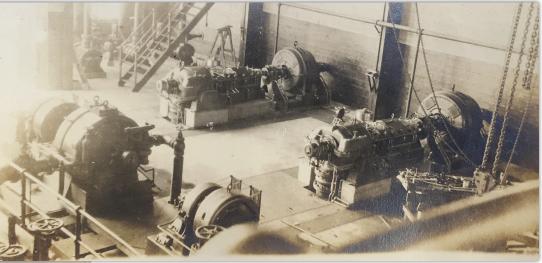


The powerhouse building during preservation efforts in 2007. [Jonathan Haeber, www.terrastories.com, photo]

#### Hawaii as the New Frontier

Marconi brought Hawaii to the forefront of global radio communication. Similar to Cape Cod's usefulness in its proximity to Europe, Hawaii was unique in providing a way to reach Asia.

In 1899, investors used Marconi wireless communications to form the Inter-Island Telegraph Company. Beforehand, the only way to communicate between the Hawaiian Islands was through mail carried by steamships. The Company not only provided real-time communications between the islands for the first time, but also formed the world's first point-to-point, commercial wireless service. In 1913, Marconi constructed the sending station at Kahuku Point (the northern tip of Oahu) as a long-range station, designed and built by the same J.G. White Engineering Corporation that constructed his <sup>66</sup> With time and distance annihilated and space subdued through wireless triumphs and impulse, the Territory of Hawaii conveys its greetings, profound respect, and sympathy to Woodrow Wilson, president of the United States. <sup>99</sup> — First transmission from the Marconi Wireless Telegraphy Station at Kahuku Point





Looking up a wireless mast at the Marconi Wireless Telegraphy Station circa 1910. [Makai Ranch, Ltd., photo]

The original De Larue steam turbine high-tension generators, able to make 5,000 revolutions per minute to power the station. [Makai Ranch, Ltd., photo]

Chatham station. A receiving station was also built at Koko Head on the southern tip of Oahu.

The two Hawaii stations began transoceanic communication in 1914. Its first message was sent to Woodrow Wilson, reading, "With time and distance annihilated and space subdued through wireless triumphs and impulse, the Territory of Hawaii conveys its greetings, profound respect, and sympathy to Woodrow Wilson, president of the United States, as he so earnestly seeks the blessings of peace and good will for all men and all nations."<sup>1</sup>

In terms of power and capacity, the Kahuku station was now the largest wireless telegraphy station in the world, operating at 300 kW on 32.9 kHz. By 1916, the station's regular transmissions to Funabashi, Japan, became the greatest distance covered by telegraph communications at 2,400 miles.

### Wartime Communication

As the US entered World War I in 1917, the Navy took control of the Kahuku station. Lewis Mason Clement had been the station's first engineer and operator, and during World War I, he and R. Heising developed the equipment to allow air-to-ground communications for the Army Signal Corps.

In 1919, The Radio Corporation of America (RCA) was formed and took over American Marconi, thereby taking control of the Kahuku station after the war. To keep up with evolving technology, RCA upgraded the station. In 1924, Alexanderson alternators — the latest and most powerful inventions at the time were installed at Kahuku to replace outdated spark transmitters. These alternators tripled the amount of electrical energy available for transmission, increasing both dependability and speed of messages.

<sup>1</sup>Star Bulletin, Sep. 24, 1914, p. 1.

### The Oahu Site in the Spotlight

The tropical scenery combined with the buildings' degeneration over the years has provided a unique shooting location for various American programs. One notable example is *Soul Surfer*, a 2011 movie based on professional surfer Bethany Hamilton's true story of surviving a shark attack when she was 13. According to the Honolulu Film Office, the site was used as Thailand for a pivotal scene in which Bethany comes to terms with losing her arm while helping victims of the 2004 Indian Ocean tsunami. It was also used as East Africa in the television show *ER* for a doctor outreach scene featuring the character Dr. John Carter, played by Noah Wyle. Honolulu Certified Film Commissioner Walea Constantinau told ARRL, "The former military buildings around the Marconi station served as a perfect background to help tell a story about the strife, danger, challenge, and heartache that doctors face when giving aid in undeveloped countries."



The station again made history in 1941 by delivering the news of the Pearl Harbor attack to the US mainland, leading to US involvement in World War II. Beforehand, the Navy had been using the area as a bombing range. They took over operation once more and built runways on the property for cargo and bomber planes, forming the Kahuku Airfield Military Reservation.

In 1946, a tsunami flooded the site, ceasing Navy operation. Control was returned to RCA and, without the use of the airfield, the runways became a site for drag racing throughout the 1950s and '60s.

Under the RCA, Kahuku began transmitting "Hawaii Calls," a broadcast program created by Webley E. Edwards. Recorded in Honolulu, the show played a half hour of Hawaiian music every week, although sometimes drew criticism for the music being Americanized for a touristfriendly appeal. The program went on from 1935 to 1975, and at its peak, was carried to 750 stations in the United States, in addition to other countries. This broadcast introduced many radio listeners to the island territory and its rich culture for the

building in 2015 (below). [Makai Ranch, Ltd., photos]

The hotel building under construction circa 1914 (above), and the restored hotel

first time. Its success led to similar programs like CBS's "Hawaiian Hour" and NBC's "Voice of Hawaii," both also transmitted through Kahuku.

RCA continued operations until 1978, when advancements in technology put increasing emphasis on satellite communications, slowing and eventually stopping use of the Marconi Wireless Telegraphy Station at Kahuku.

## The Site Could Be Yours

The Marconi Point buildings have been listed for sale for a little over a year. Purchase includes all four remaining building lots from the station, with their original features: the powerhouse/operating building that housed the power and transmitting equipment for the station; the hotel to house the station's staff, which originally included 15 bedrooms, a club room, dining room, reading room, library, and kitchen; the manager's house where the station manager lived, styled similarly to the Chatham station manager cottage, and the administration building that served as the station's main office.

The last asking price stood at \$14 per square foot, or \$18 million in total. Located on the coast overlooking Kaneakua Cove, the property borders the Hilton's Turtle Bay Resort and the James Campbell National Wildlife Refuge.

### A Century Later

Through the years, the property had various owners until 2005, when Marconi Point, LLC - now Makai Ranch, LLC — acquired the land. The area has been a place of interest for film and photo shoots for decades, but Makai Ranch became the first owner to work toward preserving the buildings and their history. To this end, developer Jeremy Henderson and his team have removed trash and illegal structures across the property and cleared the land of invasive species, replacing them with coconut palms, fruit trees, and other plants. In 2013, he succeeded in having the four original Marconi Wireless Telegraphy Station structures listed on the National Historic Registry, where they are recognized as a site critical to the development of wireless communications in Hawaii and across the world.

Lynn Kenton from Makai Ranch, LLC, told ARRL, "The plan for Marconi Point is to create a sustainable agriculture, renewable energy, and conservation development, and preserve the historic Marconi Wireless Telegraphy Station through adaptive reuse." The Point is currently under construction and, when complete, will become a community and visitor destination, welcoming scheduled visits and tours.

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For updates to this article, see the QST Feedback page at www.arrl.org/feedback.

# QST Honored with E.T. Krenkel Medal for Outstanding Global Contributions to Amateur Radio

The Russian National Academy of Researches and Discoveries has honored QST with an E.T. Krenkel Medal for "outstanding global contributions to Amateur Radio." The award's namesake. Ernst Teodorovich Krenkel, was a radio amateur who, used the call signs RAEM, U3AA, and UA3AA. Born in Poland, Krenkel was an Arctic explorer who took part in the first Soviet "drifting station," North Pole-1. He was made a "Hero of the Soviet Union" in 1938. Krenkel's son, T.E. Krenkel, is among the four signatories to the award certificate, this being the 76th certificate presented. Several prominent radio amateurs have received the E.T. Krenkel Medal.

"Receiving the Krenkel Medal was a pleasant surprise," said *QST* Editor Steve Ford, WB8IMY. "The *QST* staff



QST Managing Editor Becky Schoenfeld, W1BXY, holds QST's E.T. Krenkel Medal.

and the many contributors to the magazine are in very good company, and we are honored."

Krenkel's son, a professor at the Moscow Technical College of Telecommunication and Informatics. said his father was an avid radio amateur who served as the first chairman of the Central Radio Club in the USSR. Krenkel authored a biography entitled My Callsign is RAEM, and his image appears on postage stamps from the USSR and Russia. In the era when all radio amateurs received QSL cards via Box 88, Moscow, Krenkel was allowed to have his own postal address on his QSL cards and was issued the non-standard RAEM call sign. For more information about Krenkel's contributions and the award that bears his name, visit krenkelmedal.org.