

believed to be a working transmitter.

The Bureau assigned Alfred Thiessen to help with the radiotelegraphy experiments. When Thiessen learned of Fessenden's ambition to send audio over the airwaves, he was captivated. Fortunately, Thiessen was discreet in his reports to the Bureau, and for good reason. If word had reached the Bureau that Fessenden was working on telephony, he would have been fired immediately. Willis Moore was quoted as saying, "We want nothing to do with that sort of quackery. My superiors would laugh me right out of the Bureau, right out of the country if they found me wasting the taxpayers' money on such tomfoolery."

Fessenden did indeed improve on the radiotelegraphy system as promised, even

though his evening hours were spent pursuing telephony. The progress in radiotelegraphy wasn't wasted. In fact, Reg and his assistants worked diligently at extending the distances covered for radio transmissions of all types. For example, Fessenden developed a detector that greatly improved the sensitivity of receivers. He called his detector a *barretter*, which means "exchanger" in French. He named it so because the barretter "exchanged" the RF energy to audio that he could hear in his headphones.

The letters that Very sent home describe some of the Cobb Island work. In May 1900 he wrote, "I am studying the entire subject of wireless telegraphy. A good deal of the writing of the record will perhaps fall to me, and I must do it intel-

ligently. The ideas are novel, and the whole thing is very interesting." In August of 1900 he writes, "My part of the work has been largely the construction of apparatus. I have been winding a great many coils of wire of different lengths and diameters; some of these are found to work better than others. The results can be partly explained by theory, but there are some things whose meaning we do not yet know, and shall be able to explain in time if we keep on experimenting."

December 1900

The date is December the 23, 1900. Reginald Fessenden is on Cobb Island. Alfred Thiessen is one mile away. Reg fires up the steam engine to run the generator and checks the connections to his

Radio's First Voice—the 100th Anniversary

On December 23, 1900, from Cobb Island, the small isolated island in the Potomac River at the southern tip of Maryland, Professor Reginald Fessenden made history when he used a modified spark gap radio to transmit the first words over the air.

Many know the achievements of Marconi, but very few heard of Reginald Fessenden. Nevertheless, efforts by Southern Maryland Amateurs to recognize and preserve Fessenden's contributions to the origins of voice communications have been ongoing for more than a decade.

On December 1, 1990, members of the Southern Maryland Amateur Radio Club (SMARC) operated a 90th anniversary commemorative station in the historic Vickers House, Fessenden's Cobb Island laboratory and the site of the first voice transmission. Ten years later, while the world was preparing for global meltdown from the Y2K bug, SMARC and the Charles County Amateur Radio Club (CCARC) planned a unique collaborative commemorative effort. To recreate the event, each club operated unique special event stations located as close as possible to the original sites where Fessenden and Thiessen conducted their experimental telephony transmissions. With the flip of a coin, SMARC would set up at the Vickers House using W3F and CCARC would set up at the Cobb Island Community Center using W3T (setting up at Neale Sound, the actual location of Alfred

Thiessen's receiving station, was rather impractical).

Over the next few months CCARC and SMARC planned different aspects of the "Radio's First Voice" operation. Historical research was conducted at the Library of Congress, with local and county historical societies, on the Internet, and the most important source, information gathered over many years by Joanne Chapman, the current owner and resident of the Vickers House. We soon nailed down the technical requirements for establishing dual HF stations one mile apart from each other as well as the operating frequencies, times, modes, special postal cancellation stamps and participation certificates. Distinctive QSL cards were designed to tell the history of the event while uniquely identifying each station. The activity managers and public information officers sent press releases to QST, local radio stations, television stations, and newspapers.

After a hardy breakfast on Saturday, December 16, a caravan of antennae vehicles worked its way to the southern tip of Maryland. We were grateful to find a well-maintained bridge onto the island, something that didn't exist in 1900. The weather cooperated by being rainy, damp, windy and cold. (Amateurs can't put up towers or antennas in nice weather. I believe that is a subset of Murphy's Law.) Slingshots in hand,



Here's most of the gang in the Cobb Island Community Center. From left to right: Lee Flick, N3YWZ; Ben Flick; Frank Carson, N3OCW; Jim Gormley, N3SFY; Vic Curtis, WA3YUV; Art Audley, AA3RT; Allen Stevenson, KA3ZPA; John Foote, KB3EHK; Greg Jones, K3GJ and Bob Martin, W3LZX (seated).



Frank, N3OCW, is making his first ever HF QSO from the house where Fessenden made his first voice QSO. Vic, WA3YUV, is struggling to stay awake (4 AM came awfully early!).

new telephony transmitter and interrupter.

He taps out a message in Morse to Thiessen, warning that he is about to attempt voice communication. Reg shouts into his microphone. Thiessen telegraphs back, "Professor, your voice sounds like the flapping wings of a flock of birds; I can make no sense from it!"

Reg is frustrated to say the least. He shuts down the steam engine and ponders the situation. He decides to try one more time. Reg fires up the steam engine and notices that it runs faster and smoother than it did before. Could this have been the problem? He telegraphs Thiessen that he would try again.

Fessenden shouts into the microphone, "One, two, three, four. Is it snowing where you are, Mr. Thiessen? If it is, tele-

graph back and let me know."

"Yes, it is!" is Thiessen's excited response.

Reg noted the event in his log excitedly: "This afternoon, here at Cobb Island, intelligible speech by electromagnetic waves has for the first time in the world's history been transmitted."

Wireless voice was born that instant on Cobb Island, Maryland.

The Limburger Incident

In 1901 Fessenden was directed by the Weather Bureau to relocate his operations to Manteo, North Carolina. This was a serious undertaking, especially when you consider that he wanted to transport several huge wood antenna masts along with the rest of the heavy cargo.

Winter is not the best time of the year to take an overloaded ship out on Chesapeake Bay. As luck would have it, there was a storm waiting for them. With the masts in tow, the captain headed into the storm while Fessenden used the opportunity to enjoy a snack of one of his favorite foods: pungent Limburger cheese.

The captain was already upset, fearing he might lose his ship, and the "fragrance" of Limburger sent him over the edge. He raged at Fessenden, demanding that the masts be cut loose and that the offending cheese be thrown overboard. Fessenden resisted and the two nearly came to blows.

They finally compromised. The precious masts stayed, but the Limburger was cast overboard in a sack and towed

we began to raise antennas, feed lines appeared and soon radios began to crackle.

Concurrently, the great folks of Cobb Island set up historical displays and got the coffee and cookies flowing. At 10 AM all four stations (two at each location) roared to life. The next six hours were indescribable as pileup after pileup was worked as fast as we could operate and log. We later found out that one of our members, JD, W3SMD, was posting special event information on every DX cluster he could find. Like a decade before, a link with the actual historic event was made when Gwynne Very-Griswold, granddaughter of Fessenden's assistant, Frank Very, again stepped up to the microphone to make a contact, this time with a station in New Mexico. Despite the rain, many of the Cobb Island residents visited, as did members of the press and people who had heard about the event. Even after making 523 contacts, everyone wished we could have continued to give more folks the opportunity to participate in this special event.

A joint special-event memory book will be developed and presented to the Cobb Island Historical Society. The book will contain the background, pictures, articles, and other related materials about our activities.

What will the future bring? Maybe there will be a 105th

anniversary of "Radio's First Voice"; only time will tell. But we are satisfied that we have done our part in telling the world about the event that occurred on Cobb Island on December 23, 1900. Fessenden changed the way the world communicated.—Gregory W. Jones, Sr, K3GJ



Bill, KE3RE, and Bob, W3LZX, keep W3T on the air in a big way.



The Charles county crew fights the cold and rain to get the antenna up at the community center.



Frank, N3OCW, is learning how to hold a wire the proper way.