



## A 1922 Trans-Atlantic Story

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All Photos from the Risley Family  
Except Where Noted

What did it take to cross the Atlantic in 1922? The ARRL decided to have a test and see who and how many hams had stations capable of crossing the Atlantic.

From *QST*, "The tests covered a 20-day period from Dec. 12th to Dec. 31st, 1922, inclusive, which was divided into two equal sections, the transmission each night occurring from midnight to 0600 G.M.T. During the first ten nights



Cass Risley, shown here, operated his station 3BGT in 1920.

American and Canadian amateurs transmitted while European amateurs listened. The first two and half hours of operating period of each of these nights was given over to "free-for-all" transmission by each inspection District in the United States and Canada, in 15-minute sections, the schedule rotating each night. In the remaining three and a half hours of each of these nights, the 324 American stations which had qualified in the Preliminary Tests and won special identifying code letters transmitted for 15-minute periods in groups of from 22 to 25 each. ... [The reports showed] that a total of 315 different United States and Canadian amateurs were heard across the Atlantic!" See February 1923 *QST*, page 8.

A southern NJ station, Cass Risley, then 3BGT, was one of those stations heard. Seven times total, in England, France and Switzerland. These confirmation reports were sent by commercial wireless to the ARRL and the results were printed in the February 1923 *QST* and many other wireless magazines of the time.

### The 3BDT Receiving Set and Station

His receiver was the popular John Reinartz tuner followed by a 1-tube detector and a 5-stage audio amplifier. This drove two pairs of earphones.

Under the operating table is his power supply. It consists of a huge lead-acid battery, made by Titan. This most likely was used for filaments and to run motor generators for the high voltages needed. On the right side of the table is his Manhattan Electric Supply antenna switch.

On top of the table on the right is his early microphone, so it is assumed he was experimenting with voice transmissions around this time.

His eye-shade visor is hanging on the light above. On the wall behind this light is his QSL card collection which is impressive for the time. Note his prized "1AW" card front and center.

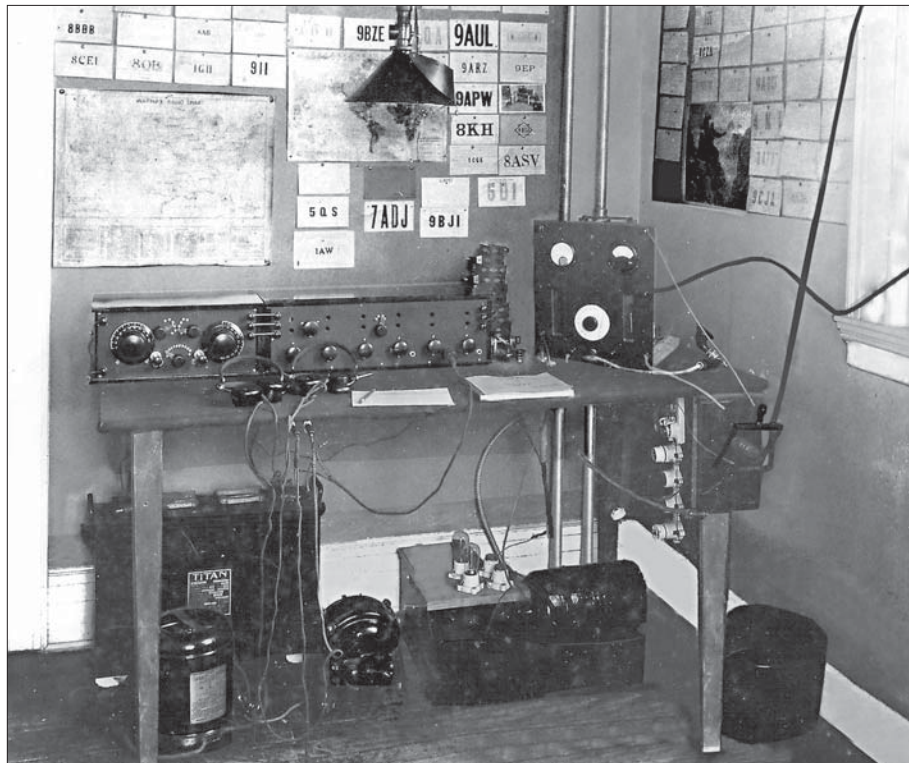
In a press interview, as printed in the *Sunday Gazette, The Atlantic City Press* February 11, 1923, Cass Risley said:

"I have been interested in wireless for 10 or 12 years, beginning with a crystal detector set. At first I was only able to hear a few ships and my transmitting apparatus would carry only about a block. There is a wide difference between my

apparatus then and now.

"The transmitting set I used during the recent oceanic tests is made of four five-watt, bulbs. These are fed by a 500-volt direct current motor generator. The set is tuned to transmit on a 200-meter wave length. I have been heard as far east as England, France and Switzerland; as far north as the Porcupine gold mining area in northern Ontario, Canada: as far west as Albany, Oregon, 60 miles from the Pacific Ocean, and as far south as Colon, Panama.

"My aerial is of the inverted L type, consisting of 12 wires stretched between two spreaders of wood, each of which is 20 feet long. One terminal of this aerial is supported by a mast 72 feet above the



The original photo caption for this print reads: "3BGT Now W2BGT as it was in 1921-22, One of the first to be heard across the Atlantic, Cass Risley Operator"



Cass shows off his 20-foot antenna spreaders.

ground; the other end being supported by the peak of the house, 38 feet high. Each aerial wire is carried by a three inch Insulator. Ground connection is the city water pipes, also six copper wires buried six inches in the ground, and a large piece of sheet iron buried six feet underground.

“The Wireless mast is of all metal Tubing. The iron pipe is four inches in diameter at the bottom, with a diameter at the middle of three and one-half inches, and a top width of three inches. This mast extends into the ground four feet. The height of the mast above ground is 72 feet, and it is supported by nine guy wires.”

**ATLANTIC CITY THE WORLD'S PLAYGROUND**

Radio..... Ur..... Sigs WKD Hr..... EST..... 193  
 QSA.....R.....  
 Pse. QSL? **W 3 B G T** Tnx es 73  
 OM. A. R. R. L.  
 Remarks .....  
 C. S. Risley, 3 N. Sumner Avenue, Atlantic City, N. J., U. S. A.



### **Cass Risley's Life Style**

His grandson, John Risley, told me, "Outside of family and business his interest was radio. He spent all of his available time experimenting with radio. He was financially able to buy the best components at the time and would frequently go into work late, as he would stay up to the wee hours experimenting and DXing.

He loved his hobby so much that he had it on his license plate, proudly displayed on his Rolls-Royce. It is ironic that he died in 1973 because his plate read "73s."

I was fortunate to have known Cass Risley as a teen. He was a friend of my father and father in law when they were young, all three active in the local ham club. I met him at a ham club meeting around 1956 and enjoyed hearing from him about his accomplishments. He was



a regular guy. One would not suspect, when meeting him, he came from a rich family.

He was well known in the 1950s as a big DXer, operating mostly on 20 meters from his home.



**Cass, then W2BGT, is operating his 20 meter station in 1955.**

***ER***