1910 +- Amateur Transceiver?

By Bart Lee, K6VK, CHRS Fellow in History

This is a crystal set with a buzzer, homebrew, from anywhere between 1908 and maybe 1928. Many a kid used a keyed buzzer connected to an antenna to send Morse code to a nearby friend. Each listened on his crystal set. This is what kids did before they could get their hands on an automotive spark coil.



This set seems to be a buzzer transmitter and crystal receiver. Note the homemade key on the front.



It is likely that a father and son, or a young man, constructed it from plans, although such plans are not now easily found.

Some sources say that for a test -only circuit, the buzzer is connected to the ground terminal. But in this set, the buzzer is connected to the rotor of the middle rotary switch that selects taps on one of the sets three coils (the one in the interior of the coil form). That rotor also goes to ground. This interior coil would act as an energized primary coil to the other two if buzzed. Then, RF from the spark would go out the antenna, and at the receiver's frequency (very broadly). Two such sets could communicate with each other very well over short distances, being in tune.



Tom Perrara has a nice web page that deals with buzzer sparks. http://w1tp.com/perwirls.htm. That's his illustration of a key buzzer. He says that this code practice set, with a wire attached to the buzzer, worked as a transmitter.



Boys' Life in the 1920s often warned boys not to transmit signals with buzzers without a license. As Mike Adams has remarked: Use a Buzzer, Go to Jail. (de K6VK)