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Title: This One Almost Got Away

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OLD RADIO

This One Almost Got Away

I want to start off this month by thanking my friend Ray Chase, KA2JQG, of Plainfield, New Jersey. Ray is a collector who regularly attends local and national auctions looking for radios. At one general household auction in New Jersey he won a homebrew transmitter that had few bidders. The following day he telephoned me to see if I was still planning to attend the Dunellen Hamfest on the next weekend, as he had something for me.

Since I had traveled to the hamfest the night before it started so I could get a good spot for my museum, I was already there when Ray pulled in the next morning. I went over to help him set up. Buried in the back of his van was a 2 foot high relay rack. To see it, we would have to dig out everything else first.

When we finally got to it, it was too heavy to move as one unit, so out came the panel screws and we removed the chassis one at a time and set them on the ground. It looked to be a very well made 2 meter VHF AM transmitter from the 1960s.

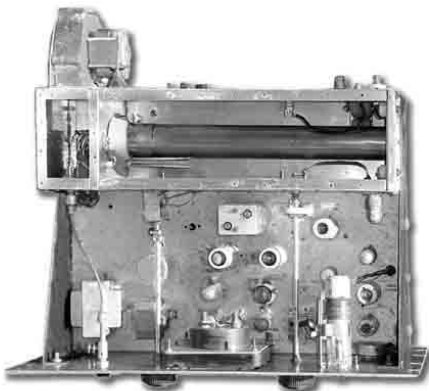
The early birds gathered around as we unloaded and Ray sold about half of his things right away. I was surprised that no one asked about the transmitter. Perhaps they thought I had already bought it.

For some reason I was in a negative mood that morning and suggested that Ray try to sell it, that someone would buy it just for the modulator. Ray tried to get me to change my mind, but I felt too lazy to carry it all the way across the field to my museum, probably because it was so heavy. Reluctantly Ray put a \$40 price tag on it and I went looking around the fest.

I passed Ray two times that morning, and both times the transmitter was still there. Each time I stopped to look at it, remarking that I couldn't believe no one wanted it, especially at 40 bucks. Both times Ray told me to take it.

At 9 o'clock I opened the museum and for the next two hours I was pretty busy with visitors and friends stopping in. Shortly after 11, Ray stopped by and told me I had to take it, as he wasn't allowed to bring it home again. So I caved in and said okay. I packed up the museum and drove around the field to Ray's location and he helped me load it for the ride home.

The next day I opened the museum and set up a strong table next to it so I



could examine the VHF transmitter more closely. The more I looked at it, the more I was impressed. After about a half hour, I came in the house and called Ray to thank him. I told him it was very well designed and was the most complex transmitter for its size I had ever seen. Everything on the front panels was perfectly symmetrical. It really looked good. So good in fact that I at first thought it might have been some manufacturer's prototype. Surely several engineers must have spent a lot of time working on the layout and the design to get it so perfect.

The Specs

It is a 2 meter transmitter, probably about 150-200 W with either a 4X50 or a 4CX250 in the final. It is capable of 100% AM plate modulation with a pair of 6146 tubes in the modulator. It also operates on CW, MCW, FM or on SSB with an external exciter. It is well metered with all the usual readings at every stage. Plus it has a built-in SWR circuit, a separate modulation meter and an FM deviation indicator. Frequency control is switched between five crystals or VFO input. It even has a spot switch for zero beating the transmitter frequency on the receiver.

The modulator unit controls on the combo mod-power supply unit are PHONE PATCH, MCW GAIN, MCW TONE, MIC GAIN, COMPRESSOR and MASTER GAIN.

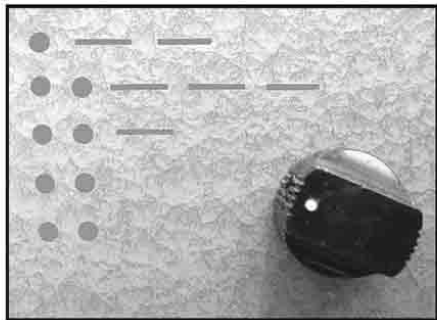
There are separate input jacks for MICROPHONE, CW KEY, MCW KEY, PHONE PATCH, one external crystal and VFO. A TRANSMIT switch, MODE switch, an AM-CW switch and power ON-OFF switches round out the front panel controls.

The rear of the transmitter chassis is even more interesting. There are jacks for connecting oscilloscopes, and controls to balance out the scope displays. The SSB input connector is there as well, and even a fast and slow blower switch is provided.

On the rear of the power supply there are a heavy-duty ground connector, three fuses and two auxiliary ac receptacles. The antenna relay jack and audio jacks are located there as well.

Who Built This?

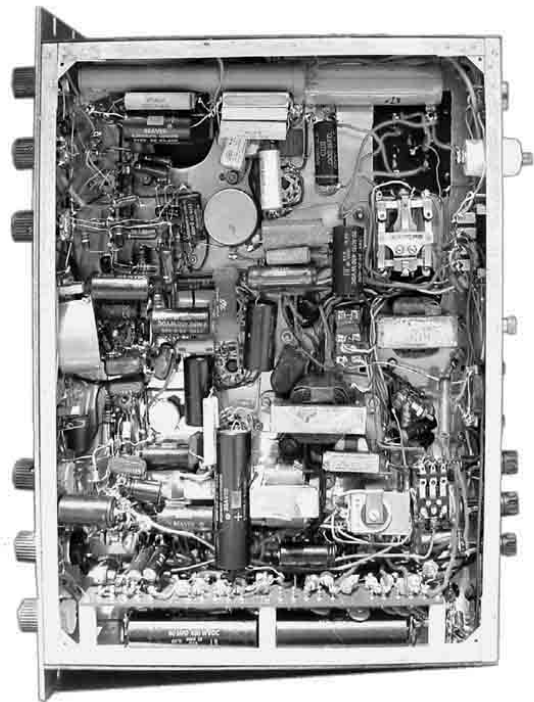
On the front of the transmitter, stenciled in red ink, are five letters in Morse code. They read W2UII. Looking up the call in a



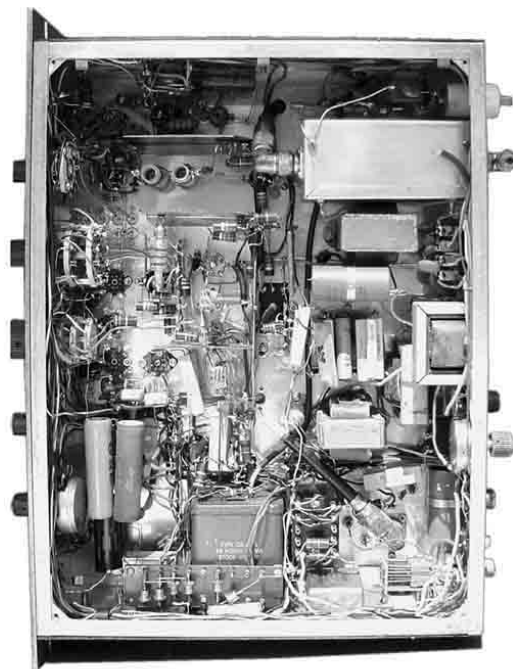
Dino Mastrojohn, W2UII, carefully stenciled his call letters in Morse code on the front panel. This is the first time I have seen someone do this.



Rear view of the power supply and modulator chassis.



I was amazed at the number of components under the power supply and modulator chassis, and how neat the wiring and layout is.



Under the transmitter chassis is a "Handbook" quality wiring job.

late 1960s *Callbook* I found the name Dino Mastrojohn. Checking QRZ.com I found the call listed to him in Florida. I called the telephone number listed for that address and learned that Dino was a SK.

Searching on-line, I found a few phone numbers of Mastrojohns in New Jersey and started to call them. I finally found a relative, who gave me the name and telephone number of Dino's son, Jim Mastrojohn, now living in another state. Jim, who was formerly licensed as WB2QPA, told me about his father and the story about the transmitter.

W2UII

Born in 1918, Dino served in World War II as a bombardier using the Norden bombsite. After WW II he went into TV repair at Daidone Electronics in West

Orange, New Jersey. Later he worked in Flushing, Long Island, in electronics. Still later he worked at Channel 13 as a Broadcast Engineer and Camera Technician, and was one of the first to use $\frac{3}{4}$ inch videotape. In the late 1960s he experimented with it and had a home Video Production Company making TV commercials.

Dino was self-taught. He spent all of his spare time reading technical books and magazines, and building ham radio equipment in his cellar workshop.

Jim told me he helped his dad build this transmitter at home, that it was all his dad's design and work. I was surprised, thinking all the time a team of engineers designed and built this, never expecting a regular ham would build something this fine. Jim said there was also a matching receiver with a built-in

oscilloscope on the front panel and a separate VFO that went with it.

Jim also told me that he and his dad had taken this transmitter, and all of the other necessary gear, to the top of a mountain one Field Day and worked a lot of stations. (This transmitter weighs over 100 pounds. That must have been some project by today's standards in view of our 5 and 10 pound rigs.)

When Dino was planning his move to retire in Florida, he sold his station to friends. This is where I lose the trail. Somewhere out there is Dino's homebrew receiver with the built-in scope and his VFO. I sure hope they have survived, and perhaps someday his station could be put back together again. What a wonderful display it would make for a New Jersey radio museum.—K2TQN

QST