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Author: John H. Dilks III, K2TQN

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OLD RADIO

The Johnson Viking Navigator

Recently the on-line auction place sold a Johnson Viking Navigator for almost \$800. This surprised me even though I knew they were fairly rare and desirable. Checking around I found that some in good condition have gone for even more. I decided to dig mine out and take a look at it, to see what I would do with it.

How I found mine was an interesting experience and two long rides to Coal Country in Pennsylvania.

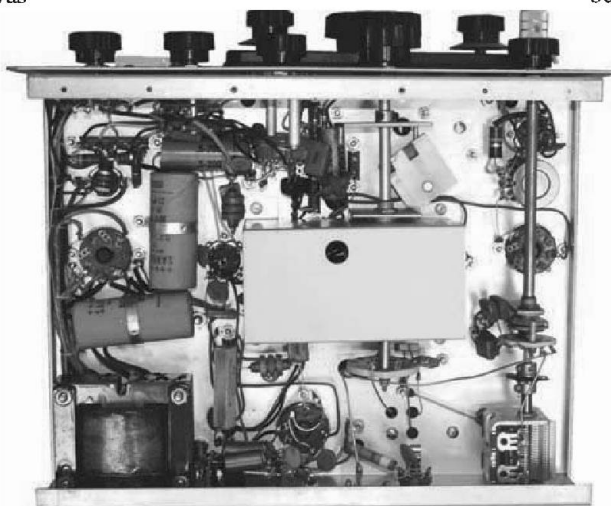
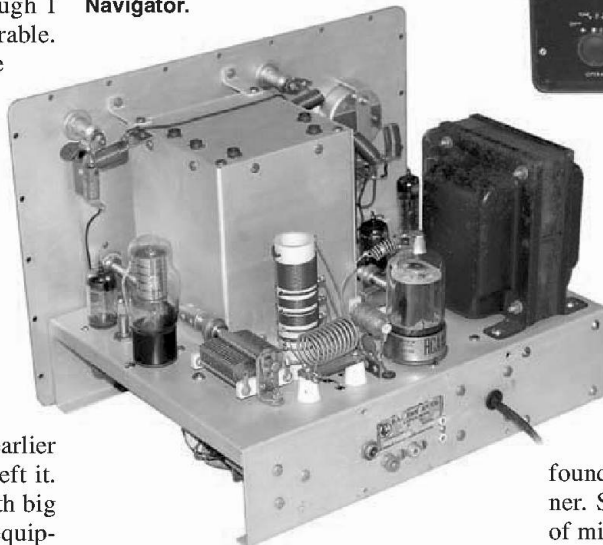
I received a telephone call some time ago from a woman in Pennsylvania offering to sell me her brother's ham station. She told me that he had passed away 20 years earlier and that the station was just as he left it. Other than the huge metal frame with big transformers in it, the only piece of equipment she could accurately describe was a Hallicrafters SX-71 receiver. Then she told me something that made me say that I didn't think I was interested. She said that I must wear old clothes and bring a mask, because the place was infested with mice. I thanked her and said I would have to think about it.

Two weeks later she called back and promised me that everything would be cheap if I would come there and pick it up, that she needed to have everything removed from the family farm before the new owners took it over. She said that besides the station there were several barns and outbuildings with parts and equipment in them. Thinking there might be a hidden goodie or two, I reluctantly agreed and we set a date.

The next Saturday I left at 4 AM for the trip to Pennsylvania. I met her other brother at the designated spot near the town's train station at about 9:30 and followed him several miles along some narrow mountain roads to the farm.

Pulling into the yard, I was amazed. It was a small, but charming turn of the century farm. I felt like I had just been transported back to 1910. I found that there was some electricity there, but it was very basic, running from building to building on

Inside view of the Navigator.



View of the Johnson factory wiring.

small poles and sometimes trees. There was no running water except in the pump house. The only bathroom facility was an old outhouse. The farm was on the side of a hill leading down from the road for about a thousand feet to a small stream and pasture; the barns were in the middle. Parking the car, I was escorted down the hill and around the big barn to a real "ham radio shack."

Early QSTs had photos and drawings of these. This was the first one I had actually seen. It had nice architectural lines and it looked great. It was about 10 by 12



feet, constructed with wide rough-sawn boards, having one door and one window, and one coal stove inside for heat. See the photo.

Opening the door was difficult, as I found the floor had collapsed under the weight of a huge homebrew 1 kW transmitter sitting in the center of the room. Working around the room by removing small items of trash, I found the operating table in the far corner. She was correct, there was evidence of mice everywhere, although it looked to be many years old and was dried up, for which I was thankful. She said that this shack had not been used since the early 1970s, when her brother bought a smaller station and located it in the farmhouse.

What I found on the table was his original 1930s homebrew transmitter, which he used to drive the big kW rig. This is the large two-panel transmitter sitting on the tabletop. I'll describe this transmitter and the kW rig in a future column after I clean them up and check them out. Sitting to the left is a surplus aircraft transmitter hooked directly to the kW rig. It was used as the VFO and driver. Sitting to the right, and completely unused, was the Johnson Viking Navigator.

There was evidence of mice and old nests in the homebrew transmitter, the Hallicrafters SX-71, and the RME-69 receiver on the right. Thankfully, Johnson built the Navigator very tight to be TVI proof, so there was no way for the mice to get inside. When I got home and checked it out, I found only a light layer of dry dust inside, which fell through the ventilation holes.

There was an old air compressor nearby, so I blew out all the mouse nests and

Operating table, as found, inside the vintage ham radio shack.

dusted everything off before I put them into the car for the trip home. I left there that day with a full load from the shack and some tubes and parts from some of the other buildings. The kW rig would wait for the next trip. I needed help to move it and a larger vehicle to get it home.

Two weeks later I returned and ended up taking the kW rig apart so we could lift it.

While there I offered to purchase the radio shack building. I told them I would tear it apart and remove the lumber, to be reconstructed later in my backyard. They declined the offer, saying that it had to go with the property. So I measured it and took notes on its construction, so that someday I can replicate it in my backyard. I sure hope I get around to it.

My Viking Navigator

This is a factory built radio, which was purchased at Hudson Radio in New York City on December 3, 1957, for \$174. He must have sent in the warranty card right away, because Johnson mailed him an errata sheet on December 18. The only damage to my radio from sitting around all this time is some surface rust on the transformer and some minor corrosion on the variable capacitors. Everything else inside is like new. Outside, the meter face has lost its paint, probably due to condensa-



tion and rust. I pasted in a photo taken of a good meter for this article. I'll need to disassemble the meter and repaint it, or glue in a photo if there is room behind the needle when I'm ready to restore it.

The rear view inside the transmitter shows the neat well designed little brother to the popular Johnson Ranger transmitter; only without the modulator. My guess is Johnson designed this transmitter for those needing a VFO controlled, low power exciter. The high voltage to the 6146 final is only 400 V, so the input power is rated at 40 W.

One of the great features of this radio is the keying circuit popular with later Johnson transmitters. It has a 12AU7 that serves as keyer to the 6CL6 buffer stage using grid-block keying, turning on the VFO ahead of the 6CL6 and turning off the VFO after the 6CL6. A good review on this transmitter is in the May 1958 issue of *QST*, page 46.



A classic 1930s ham radio shack.

The 7-tube lineup is a 6AU6 in the VFO, a 6CL6 buffer (or crystal oscillator) driving the 6146. The power supply tubes are a 6X4 bias rectifier, a VR-150 voltage regulator for the 6146 screen, and a 5U4GB power rectifier. The 12AU7 is the keyer.

Looking it over carefully, I've decided to keep it for Straight Key Night and for Vintage Field Day use.

Convention Time

Seventy-five years ago last month, the famous cartoonist Phil Gildersleeve, W1CJD ("Gil") had a great *QST* cover cartoon showing a radio shack being closed up while the club travels to the ham convention. This radio shack looks a lot like the one I found in Pennsylvania.

As the Dayton Hamvention approaches and you are making final plans to attend; remember that ARRL is sponsoring many forums and activities there, which will highlight the League's 2005 National Convention Friday through Sunday, May 20-22. You will have an opportunity to meet some of the ARRL publication authors, view software demonstrations, find out more about DXCC, ARES, clubs and mentoring, the ARRL Education and Technology Program, youth activities, amateur licensing, product review testing, RFI, BPL and much more. I hope you have a great time there.—K2TQN

QST

PHIL GILDERSLEEVE, W1CJD



Convention Time