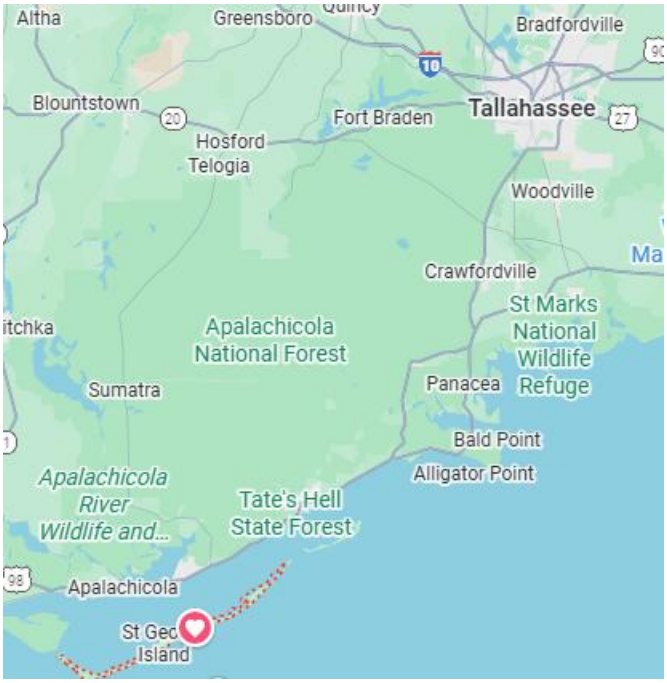
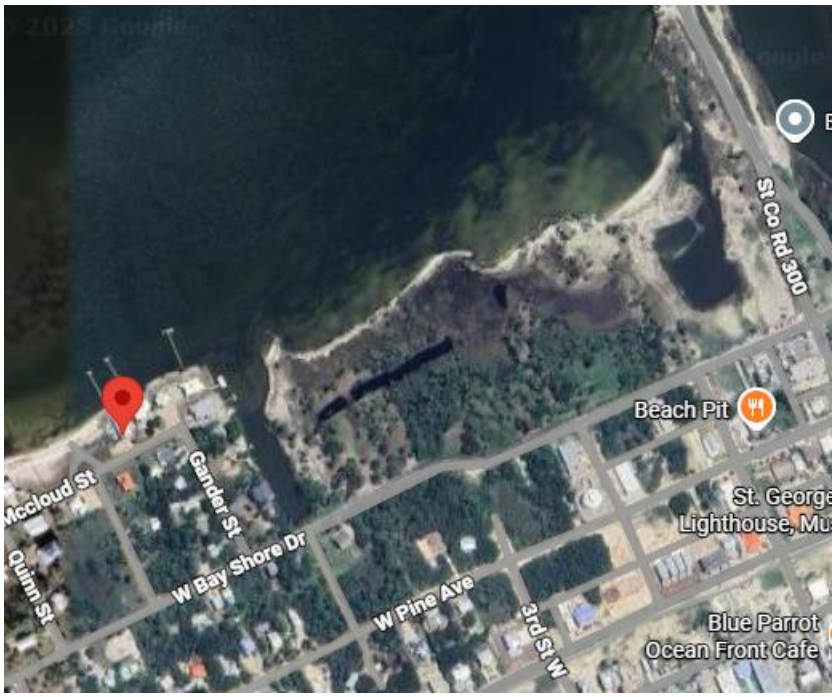
Stew Perry 160m contest on St George Island, FL

Ignacy Misztal, NO9E Jan 5, 2026



Like every year, my family came to St George Island, FL, for a family end-of-the-year vacation.

This time we rented a house overlooking a bay, with a 150ft pier over the salt water and almost pointing North.



It looked like an excellent opportunity to set up a 160m antenna and participate in the Stew 160m contest on Dec 27th.

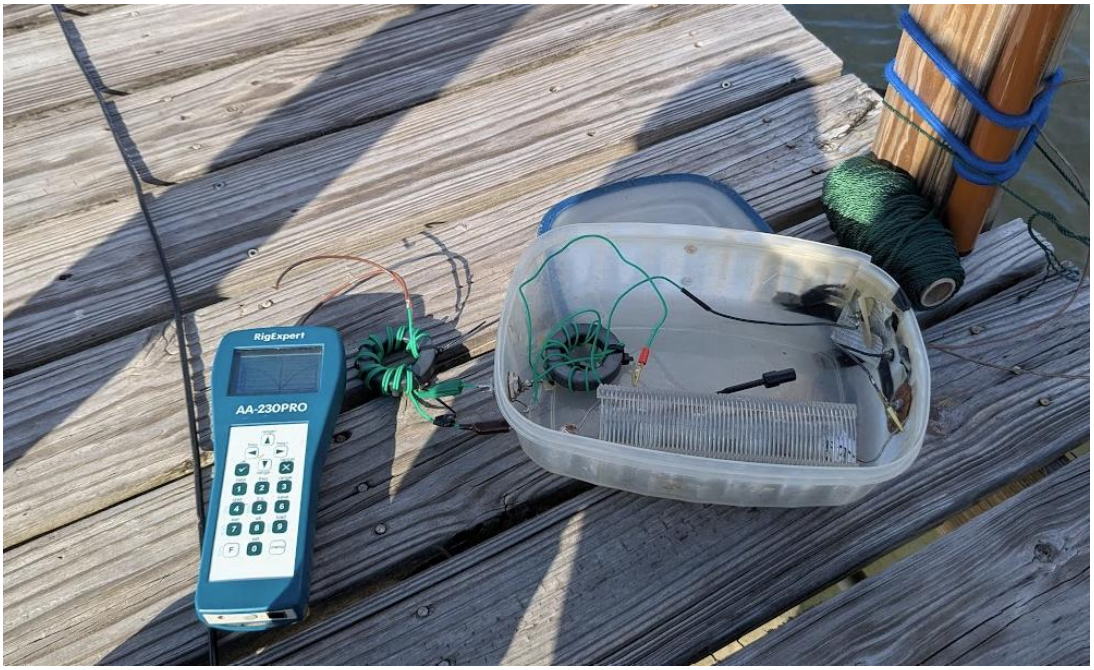
Based on past experiences, I decided on an inv L with one radial. One radial over salt water is enough; the radial cannot touch anything as it is under a very high voltage.

I had two set of poles: SOTA 10m that weighs 0.5 kg and Spiderpole 12m that weighs 2 kg. The vertical element as well as the radial were made of 18 ga (1 mm) insulate wire, and since that poles were wimpy on top, the top horizontal wire was 22 Ga (0.6mm) magnet wire. To simplify attachments to the pier, I (foolishly) used the 10m poles.

The poles were attached to pier posts with bungee cords.

An old matching box consisted of a transformer on a 240-61 ferrite and a 75 microH coil with a tap.

Almost the whole coil was required to bring the inverted L to resonance, and 2:1 SWR was very narrow at about 20 KHz only.



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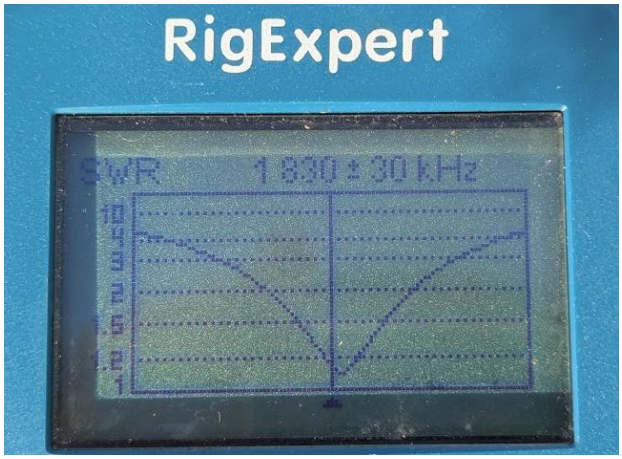


resistance at resonance was only 20 Ohm. For a perfect match, I removed a few turns from the transformer and then the minimum SWR was close to 1:1.

The antenna was fed by 60m (200ft) of M&P 5mm cable with a loss of < 1 db on 160m.

For transmit, the setup included KX3 with a very good receiver and Expert 1.3k-fa amp with a low power mod so that it could be driven to > 1 KW with 5W.

I started testing gradually increasing the power. The amp first switched off at 400W, then 200W and finally at 100W. What was going on? Was it a poor tap on the coil, a loose connection somewhere,

or a bad coax? After bringing the pole with the vertical element down, it turned out that that a piece of insulation on the vertical was burnt by touching a conductive carbon fiber pole. I added a piece of rope on top to insulate the wire from the pole, and the antenna was taking up to a KW on 110V. However, I ran with 600W most of the time to avoid potential problems since the antenna was flimsy.

Setup of N1MM+ with KX3 was not easy. Since KX3 does not have direct CW keying, the only keying option was sending a text via CAT. However, pressing F1 caused an endless loop of CQing without any break even though the CQ repeat was set at 6 seconds. A bug somewhere. Embarrassing. The solution was to press ESC once CQing started.

The conditions were well below those a few years ago when Europeans boomed. But lots of stations from Midwest. But my signal was strong. In many cases with pileups I was first, more than at home. KP4, TI, W6 and W7 were worked with ease. But only one loud EU RW7 and barely a copy of KH6. Definitely static from the powerline at about S7 did not help with copying weak signals.

Another problem was high SWR. The Expert has an ATU, but even with tuning, the max bandwidth was 35 KHz.

I went to sleep at 11 PM local time and got up at 7; the sunrise was at 7:35. A few stations called and then the amp turned itself off indicating high SWR.

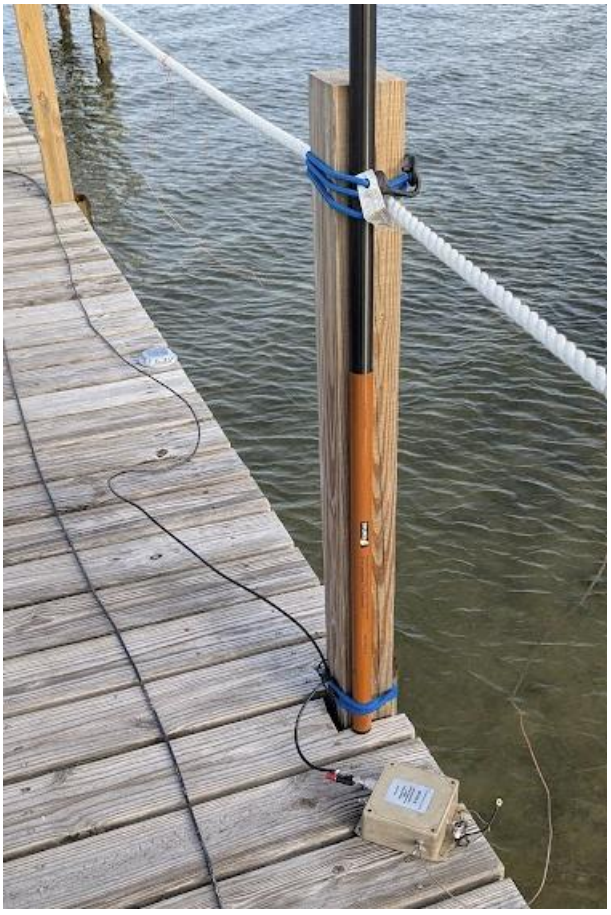
A look at the antenna showed that the end of the inv L was down. It was attached to the pole with a string, which became saturated with salt water, started conducting and melted.

I fixed it with a new rope but after a few minutes again high SWR, this time for unclear reason.

Later tests revealed that while the PL259 connector was soldered, the center conductor was not.

In the end I made 253 QSOs, my record. Still, I made many mistakes. The first one was using conductive carbon poles. The Spiderpoles would not conduct and would be longer, perhaps increasing the bandwidth to 50 KHz with a tuner. Another option to increase the bandwidth and reduce voltages would be to use longer horizontal elements. Another mistake was not making better CW arrangements with KX3. Two solutions exist: a mini Winkeyer as suggested by K9MA, or a custom cable with an RTS signal as once made by LZ5VK - SUCCI

Anyway the receiver in KX3 is pretty good, even with good APF available, and the Expert could pump any power that the antenna is willing to take.



Later, I tried to set up a 40-10 endfed antenna with a matching box by myantennas.com. Something was intermittent. First the box was not tight and had a water damage, with some connections loose. Second, the coax had a bad connector and pulled off as in the picture above.

I am not sure if my ham operation was a success. It took tremendous amount of energy that could be used for simply staying on the beach!