

## ***What I did on my summer vacation! (Actually, what I did last weekend) or One Day to Get it Done:***

It is no secret that I love to build home-brew stuff. I actually do it as a form of reward after a hard week doing all the other stuff. My best friend of over 50 years, Terry, and I have been on a quest over those years to come up with the perfect one-day project. So far, we have done everything from renovations, painting a room, digging a garden, building a fence etc. you get the gist. However, I have turned it into a quest to do one day projects centred around amateur radio. Last weekend I looked in my junk box and saw that I had three items that could be put into something useful. I had a rather large dual 200pf high voltage variable capacitor, an old, modified rotary coil good for about 1500 watts and a high voltage 300pf variable capacitor. I have and use a differential T match antenna tuner that I built a few years ago, but as Perry VE6NX coined, "You can never have too many antennas and you can never have too many radios!" The same holds true for shack accessories like antenna tuners I figured. I figured I could take these junk box parts and put them into a wide range, high power Transmatch using ideas from the ARRL Antenna Handbook from 1973. What the



heck, they kept publishing that design for about a thousand year so why screw with a success.

So away we went on Sunday morning after the ARES nets and designed the chassis and bent it up and put all the parts into place. I had it working by Sunday evening before the APSN and used it to match my delta loop. It worked perfectly as I knew it would. Here's some pictures of it and granted it isn't finished because I plan on putting a digital power meter into it too. However, the tuner works and looks like it'll tune just about anything from a full delta loop to a wet piece of string which is what most hams use when the sunspot cycle is cooperating.



As you can see the metal work all came together rather nicely and it all fit in the box. The box is made of pieces of 12, 16 and 18 ga aluminum and measures W/D/H 14 x 12.5 x 6.5 inches. The counter is from Max Gains Systems Inc. (MGS) and it's called a RAV-T14 Deluxe. Now I need to get the bezel for the digital power meter over the top of the counter from Digikey and finish the front panel with a nice face and put a top on it and it's done.

So, the point being that if you set your mind to it you can create a home-brew project that will enhance your shack easily in a single day. Having the tools helps of course and the ability to bend metal. If you have access to some

aluminum flashing from a metal shop and a good non-ferrous metal saw blade for your table saw and a small 18" metal brake that you can buy on-line for about \$80 or less, or you can use a vice and a rubber hammer, you can create some amazingly perfect chassis from scrap aluminum. Parts to build these kinds of things are usually found at flea markets or on-line on eBay or other marketing sites. Keep your eyes open for bargains. A few years ago, I bought a whole box of variable capacitors for \$50. These two were in that box I believe. Check the swap and shop listings below for more goodies for home-brew projects.

Why not choose a small project to build this weekend and then go for it and create that masterpiece for the shack that gives you bragging rights as a home brewer? Now on to the next project...