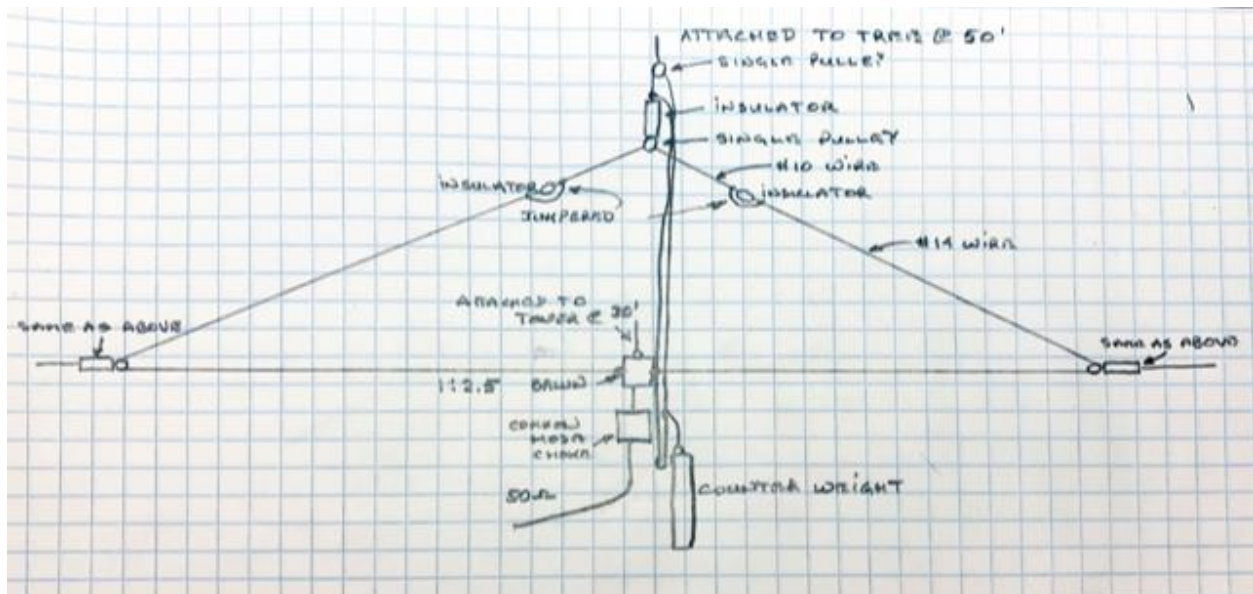


Don'tcha Just Love Living in This Windy Country?

All the best intentions and engineering practices (???) in the world don't hold a candle to Mother Nature. I found that out in spades this past week. Murphy prevails when it comes to antennas. I understand I'm not alone, though. A certain local personality had his loop fall out of the sky yesterday afternoon during the winds too and I'm sure many more antennas suffered a similar fate.

In my case the delta loop came down when the wind parted the wire at the top of a 50' tree. So, what happened, you ask? Well, if you remember when I put the thing up last year I factored in the movement of a tall spruce tree and made it so that the antenna line could move freely through a pulley at the top of the tree. It worked well until Tuesday when we received a few blasts of wind that went well beyond what was expected and stretched the line beyond the breaking point. Down she came. Now don't get me wrong, I am under no illusion that anything that I put up there is going to handle everything it's subjected to. But it had survived the enormous winds and other weather through the winter without incident. However, 130 km/hr (80 mph) winds gusting enough to blow Freightliners over on the highway are powerful winds and not much can withstand them for long even at the rare air pressure of our altitude.

So, what to do? Well, put it back up of course. I rebuilt the antenna yesterday afternoon and replaced the broken piece going through the pulley with a 10-foot piece of heavier gauge wire (#10) and spliced it into the line by using egg insulators at each end of the new piece so that if the antenna wire at each end breaks it won't take the whole thing down. Egg insulators don't feed through pulleys well I discovered. I simply jumped the two lines on each side of the insulators together and I got my



continuous loop back. I checked it out on the Rig Expert, and it looks good. Here's a very rough drawing of the layout:



And here's a shot of the Rig Expert right after I put it back up:

So obviously those readings are well within range of an auto tuner on any of my rigs or the manual tuners. The only part that needs to be finished now is to build the weight. I'm thinking that I'll build it into a piece of 2" steel pipe and weld a cap on the bottom and a hook on the top. Then hang it from the down line and pour dry concrete mix into it until it balances and set it with water. That will put a nice

constant tension on the antenna lines and prevent it from being pulled so hard in the wind. I thought about using a spring but rejected the notion as it would not provide a constant tension on the line. It also has a limit where it comes to the end of its wire so to speak and there is no more motion available whereas the weight will provide that tension continuously.

So, that's the project amongst other "honey do" things to get done this weekend of wonderful weather. Oh, and by the way, if you really want to reduce the amount of noise you have coming down the line into the shack, install a "Common Mode Choke" and watch the noise disappear. You never know how much noise is present that is being picked up by your feed line until you install one of those wonderful devices. Give it a try. If you need details, send me a note.

73

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