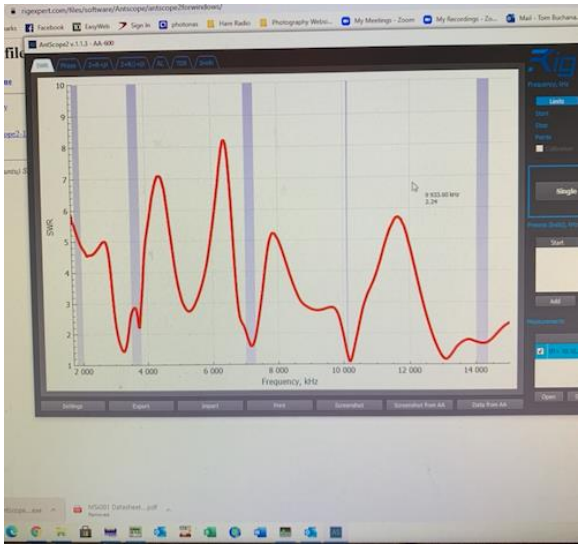
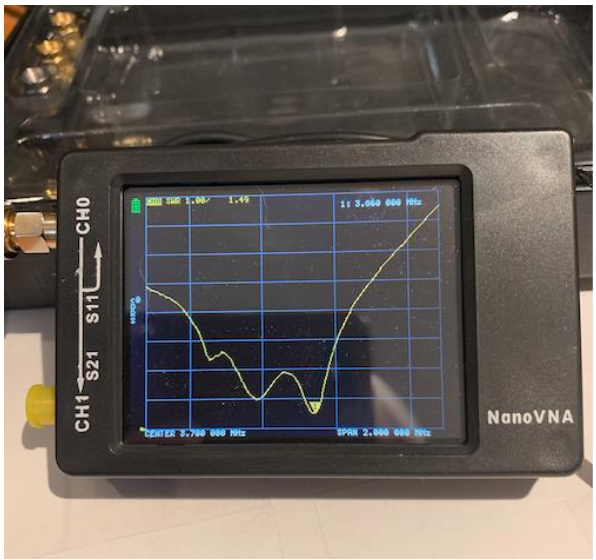
It's getting Cooler and Time to Get Ready for the Fall:

Yes, this is my annual message to everyone to get off your butts and refurbish your antennas before the cold weather sets in. Here is a list of things to look at:

1. Do an SWR sweep of all your antennas with a Nano VNA or Antenna Analyzer or even just an SWR meter. You can buy a NanoVNA for less than a hundred bucks on Amazon these days and they will tell you a huge amount about your antenna when sweeping them. It is probably one of the most versatile tools you can have as a ham for analyzing your antenna's health.



2. Physically go out to your antenna(s) and look at them and see if there is any corrosion on the connections. Especially if you are using aluminum tubing. Make sure you have a thin coat of Jet Lube SS-30 or equivalent spread out between the connections. This is almost pure copper and is highly recommended by antenna manufacturers to maintain connectivity between element pieces. I have used it on my Butternut vertical for over 30 years and it is still near new and works perfectly. I clean the aluminum and redo the connections every couple of years.



3. Look at your tower for loose parts and repair them immediately. If it has popped some rivets, replace them and make sure it is safe. If the cross braces are loose, they will fail eventually and that would be a catastrophe. Maintain your masts and towers properly according to the instructions from the manufacturers.

4. If something needs to be painted, paint it with some UV resistant paint. Make sure you prime the surfaces first so the paint will adhere.

5. Check your pulleys for sticking or gunge on the roller. Ensure they are free wheeling and not all rusted out. I use brass pulleys on all my wire antennas.

6. Check the halyards you are using for abrasions and fading. If the rope you are using is fading it means that it is being affected by the sun. Replace the rope before it becomes brittle and prone to breaking. I use only Dacron or equivalent rope. It can be purchased from GPS Central Radio World in Calgary for good prices or if you need large quantities go to https://www.mapleleafropes.com and look for polyester double weave rope that is dark in colour. Black or dark green is a good choice. This is the highest quality rope you can buy, and it is very reasonably priced from a Canadian company. It will last for years.

7. Check your insulators for cracks and replace them. You can buy new egg insulators from GPS Central Radio World in Calgary https://www.gpscentral.ca/accessories/mfj/mfj-16c01.html You can get a six pack for $9.00. That's a good price for glazed insulators. I like egg insulators because if they break your whole antenna won't fall down. They are not recommended for high power installations though because there is not enough distance between the halyard and the actual antenna element. Remember that the ends of your antenna is where the highest voltages are found and they can be considerable and will flash over if the conditions are right.

8. Check the lead in from the antenna to the shack. Make sure the outside of the coax isn't cracked or broken. Disconnect the ends and check for discolouration around the connector which might indicate water has gotten into the shield. Using the TDR function on your antenna analyzer check the coax cable for breaks or anomalies or bad connections.

9. Check your baluns and their cases or boxes for signs of rust at the coax connection. If you see rust around the connector, it may indicate that water has gotten into it.



10. Last but not least, make sure you wrap all your connections, PL259's, with some rubber vulcanizing electrical tape such as Magic Wrap. It comes in 1" by 16' lengths at Home Depot but is the best I have found for wrapping connectors. It is expensive, but worth it. I have never had it leak and easy to take off with just a swipe of a box cutter. One thing to remember with this tape is once you take it out of the package, store it in a sealable container because it will dry out and be a pain to use of you don't.

So, get out there and do your antenna maintenance while we still have some warm summer and fall days ahead of us. The benefits of doing so will be far reaching and it is so much easier to do it when it is warm that it is when it gets cold.

73
Tom VE6ARG