Many people ask about a “measuring tape” Yagi…

In my opinion, this is just a waste of a perfectly good measuring tape.

Use the measuring tape for what it was intended for…. measuring !

The real question is not what to measure with, but what to measure.

Along comes an antenna designing software called “EZNEC”, which you can download for free

(if your careful), use our friend “google” and google “EZNEC’, and download it, and install it

On your computer. However, all it will tell you is how long to make the elements, not how to

mechanically connect them, this is where you either must look somewhere else or figure it out for yourself.

I have figured out the easy stuff, start with a one-inch piece of PVC conduit, and a

2 inch “U” bolt, that is your boom,> the next thing is (or is it “are”) the elements and the connection to the boom, these are part of the biggest decision, because one determines

the other. I have been told NOT to use threaded rod, because the threads affect the size of the elements., so like a “good student” I will not use threaded rod.

¼ inch tubing seems to be where I have settled, but there is a reason for this, saddles for the connection of the elements to the boom can be printed with a 3D printer, we know this,

Because I have an old KLM Yagi that has some problems, and a ham friend was able to print

New saddles, there are three different ones that he made, and I will add pic’s of all three later…

EZNEC can drive a sane person a little nutty, (I am proof) so I will give the element leighs for a GMRS Yagi here is what the output will look like.

Now is a quick primer on how to read the EZNEC output...

“Wires” are the elements, with the length in inches, as shown. Note two “ends”.

“Y” is the element length , (note 2 halves)

add the negative number to the positive number to get the total elements length.

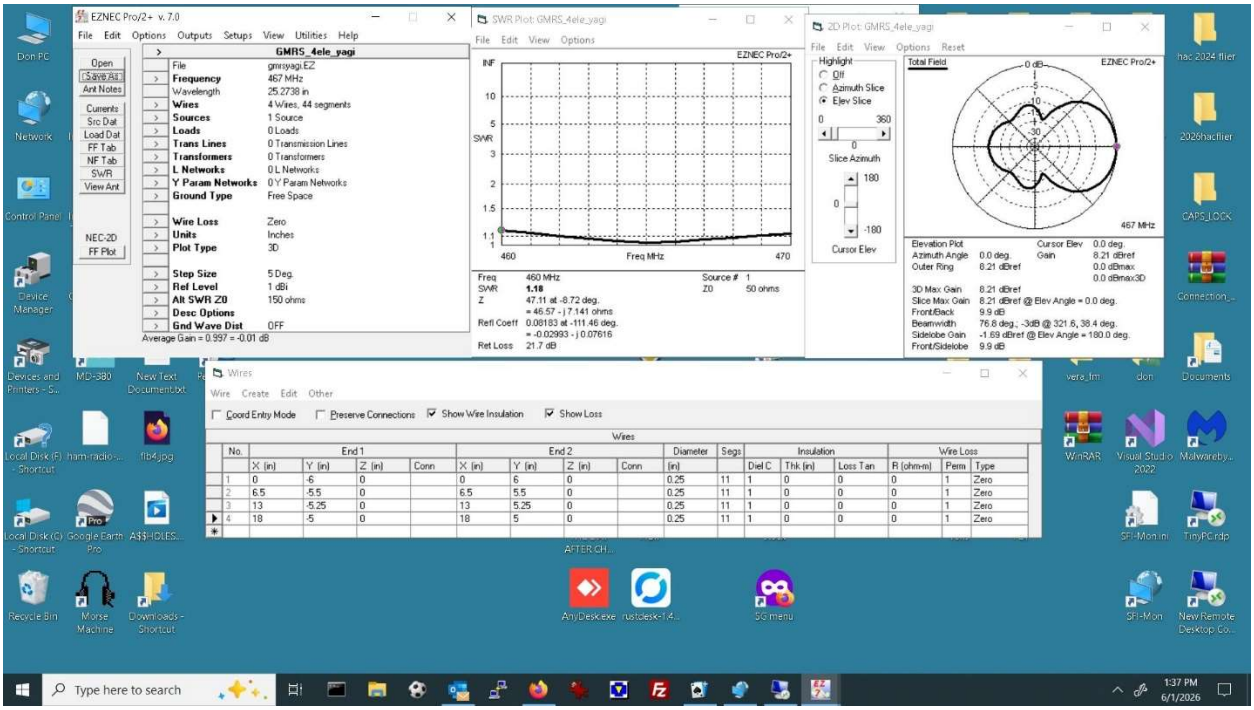
Wire 1 (the reflector) is 12 inches long.

Wire 2 (the driven element, the only one that is actually split) is 11 inches long.

Wires 3 and 4 are the directors, they are 10.5 and 10 inches long.

The element spacing is column “X” and are the totals from the reflector.

6.5 , 13 and 18 inches..



Element saddles

Driven element reflector

The reflector saddle can also be used for the directors.

Now the only thing I have left out is the feed method,

I am looking at a “hairpin match”

More to come later

Don K8ZGW