

The

Modulator

Newsletter of the Newport County Radio Club, winter 2020

Christmas 2020

The NCRC Christmas party is always a relaxed and convivial time for all and this year was no exception. With the Main Stay Inn under renovation, we gathered at the Wyndham Newport Hotel for cocktails and an excellent buffet.

Dick Bianco presented club awards and announced the officers for 2020:

President	Dick Bianco
Vice	Paul Fredette
Secretary	Bob Beatty
Treasurer	Ted Wrobel
Director	Willy MacLean
Director	Mary Nebiolo
Director	Jim Sammons
Director	Paul Wynn

This was followed by the usual tomfoolery of the Yankee Swap hosted by Franny Sammons. The present that gets the most attention is always a mystery.



Rob, Ryan, Willy, and Bob.

If you have not joined our gang at year's end before, consider it for next year, it's always a good time.

Winter Field Day

In The Beginning

Four years ago, Paul Silverzweig, N1PJS, decided to give the-then new Winter Field Day a try. Like summer Field Day, Winter Field Day is an exercise in emergency communications, but with the added burden of potentially difficult weather conditions.



Paul Silverzweig, N1PJS

Paul organized an NCRC crew and took them to The Glen, where we run summer Field Day, and set up on the last full weekend of January, 2016. (Jan. 25-26, 2020)

No one had any grand expectations, the weather was unseasonably mild, no snow, and so our ops had a fine time. The fun thing is that Paul's team came in 2nd Place Nationally!

Like a Well-Oiled Machine

Dispelling any thoughts that we get lucky from time to time, our record in both Field Days speaks for itself. This year NCRC finished second nationally in summer Field Day in the most contested 2A category!

Like Field Day, Winter Field Day emphasizes communications in a simulated emergency situation. However the set-up is much simpler with a few wire antennas instead of towers. Simpler, but not easier with the burden of winter conditions. Generators that ran well warm stumble, and drinking water freezes in its containers.

This year our winter Field Day again will be at The Glen in Portsmouth. We will be operating from two tents equipped with electric heaters.



Winter Field Day at The Glen

Volunteers for setup, on-air operating, logging, and tear down are very welcome. So too are visitors. Come see and learn; more than a few of our best operators began as curious visitors.

Visit the WFD 2020 tab on the club web site for more information, driving directions, and the form to sign up as a volunteer.

www.w1sy.org

Tape Measure Yagi Antenna Build Night

Radio Direction Finding

Locating the source of a radio frequency emission has multiple values. It might be an arcing power line connection, a faulty light fixture, or an emergency beacon among other possible sources.

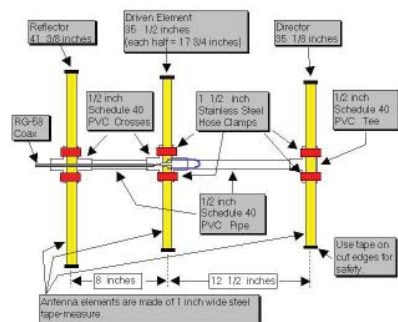
One of our many ham radio variants is practicing this skill by searching for and locating an intentionally placed RF source, often called a "Fox." Hence the name, Fox Hunting.



Not him This one

This spring NCRC will hold a Fox Hunt with multiple foxes hidden at a public location. Why not give this a try?

The equipment needed is simple—your 2-meter HT and a directional antenna. But know that the required directionality of that antenna is crucial to success! We have experimented with several designs and have come to the conclusion that a simple Yagi antenna made with lengths of metal tape measure is ideal.



WB4HOL Tape Measure Yagi

Build Night

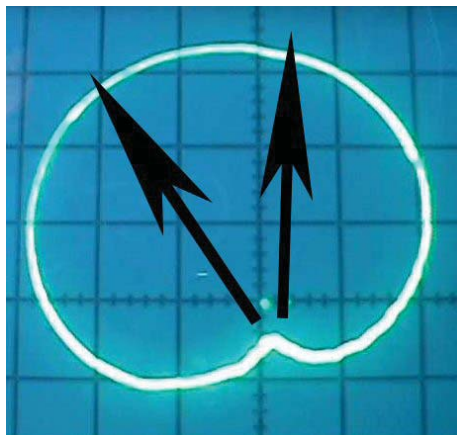
We'll have another of the popular Build Nights at All Saints STEAM Academy on Wednesday, January 15th. Participants will leave with a tape measure Yagi antenna that is highly directional and having a deep null toward the rear.

Construction is simple, mostly gluing PVC pipe together. However, you will have to solder the feed coax to the tape arms, so bring a medium to heavy soldering iron if you have one. This task is short, so you can borrow one if you do not.



Parts for the WB4HOL Yagi

Our experience confirms the calculated pattern of the antenna. As you can see from the arrows, sensitivity forward is unchanging through a broad range, yet there is a deep null off the back of the antenna!



Measured Antenna Pattern

Backward Yagis

Typically Yagis are mounted with the short director element pointed toward the receiving station. Every illustration I've seen shows the tape measure Yagi held the same way—director forward. But why not hold it the other way around with the longer reflector out in front? Then you could locate the fox using the very much sharper null in the pattern.

The only unknown with this approach is the effect of your body in front of the director. The simple solution is to hold the antenna over your head.



The Backward Yagi

What You Need to Know

Yagi Build Night will start at 6:00 PM and end at 7:45 PM at All Saints STEAM Academy, 915 West Main Road, Middletown, RI. Follow the winding road behind St. Lucy's Church, also on West Main Road. Call on the club repeater if you get lost.

- All materials supplied, but you must register.
- Register by emailing Jim Sammons at jimsa@cox.net.
- Cost is \$10.00, cash, at the door.