



Branch Signals

May 2012

SPECIAL FOXHUNTING EDITION

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Branch Signals is published monthly by the Branch County Amateur Radio Club. This publication is posted to our website, www.branchcountyarc.com, but can be conveniently emailed to you as well. To subscribe, email the editor, Justin Lopshire, at skywave21@hotmail.com.

It's Time To Go Hunting!

Well, gang, it's that time of the year again! Many of us are starting to pull out our hunting gear, getting it all dusted off and tuned up, and are heading out to the stores to buy some additional supplies to get our equipment in shape. However, make sure you keep your guns and traps at home for this hunting excursion, unless you want to maim your trustworthy president! Yes, it's time for the annual Branch County Amateur Radio Club Competitive Foxhunt!

As in years past, all foxhunters will meet on Tuesday, May 15th, at 6:45PM, in the front parking lot of the Branch County 911 Building, at 141 East Chicago Road. Once they are briefed with the general rules

for the evening, then it's time to listen to the pre-designated frequency for the automated fox box. For those who are new to BCARC's foxhunting techniques, there's really not much to it. However, having an HT, a directional antenna, and fair knowledge of the lay of the land will give you an edge over your competition. If you're not that familiar with this area, do NOT let this affect your decision to come to this very fun event. We'll have several fox hunters who will certainly have spots available in their vehicles for you to ride along and learn how to foxhunt in Branch County.

If you read between the lines in the first paragraph, then you probably figured out who the lucky person responsible for hiding the fox box will be. This will be my first time assisting on the



hidden transmitter in its secret location. Don't worry, though, its location will only be a secret for ninety minutes. I'm confident that it will stay a secret for that long as well, as our contest will run exactly that length. Okay, maybe that last comment was uncalled for, but we make this contest tough for the competitiveness of the event, right?

Club Calendar

May

5, 12, 19, & 26 -Club Breakfast, 8:30-10AM, Stoagies Family Room Café, 91 East Chicago St., Coldwater

5-Monthly Siren Test, 1PM, throughout Coldwater

1, 8, 22 & 29-BCARC Emergency Net, 7PM, 147.300+, 100Hz PL, & 443.300+, 123Hz PL

8-BCARC Board Meeting, 7PM, Coldwater Bob Evans Restaurant

15-BCARC COMPETITIVE FOXHUNT, 6:45PM, front parking lot of the Branch County 911 Building, 141 East Chicago Rd., Coldwater

FOXHUNTING TIPS

Many of you have heard bits and pieces of this rather humiliating (or humorous) story, but I figured it was time for me to tell it to you, the readers of this fine publication, and to also permanently record this story into the club's history.

In the Spring of 2010, the Club held their Competitive Foxhunt. However, instead of the automated fox box technique we have been employing lately, we had fellow ham, Brett Smith, KC8ZDA, acting as the Fox. I was hunting with my friend, Julie Biggs, KD8NSL, in the Rotary Park area. Seeing several other hams in the vicinity, I knew we weren't that far off the mark. However, I think they knew better than to go directly back to their vehicles after find-

ing the fox, so I witnessed them walking across a field, I'm assuming to throw us off.

So Julie and I got to the Linear Park walking path that parallels the Sauk River, and spotted a guy wearing a baseball cap that resembled a duck's head, standing with some buckets by the river's edge. I just assumed he was fishing, since I've seen people with buckets and fishing rods in that exact spot previously. After passing him several times, he finally called out to us, and asked what if we were looking for something. I replied that we were with the Branch County Amateur Radio Club, searching for a hidden transmitter. To me, he sure didn't look like the fox. He wasn't familiar to me at all!

So, we then started to search the land to the south of the river, where Julie wisely stayed put on

terra firma, whilst I started to tip toe along the line between land and sea. I temporarily lost my shoe to mud and muck, covering my right leg, not to mention my shoe and sock. It was at that moment that I stopped my hunt, found Julie, and headed for the car. I was later reunited with Brett in the Branch County 911 parking lot, and hilarity (and humility) ensued.

In closing, expect the unexpected when foxhunting, and follow that ever-so-famous Boy Scout motto...

BE PREPARED!



A New Ham in Branch County

On Thursday, April 26th, Gary Smith (shown on the right), of Coldwater, passed his Technician Exam in Battle Creek. Pictured with Smith is John Davidson, W8JRD, one of the VEs from the test session. Smith was assigned the callsign of **KD8SHD** by the Federal Communications Commission on Friday, May 4th. Be sure to congratulate Gary on this achieve-

Volunteers Still Needed for 101 Lakes Bike Run

The annual Steuben County 101 Lakes Bike Run is coming up on Saturday, May 12th! The BCARC is once again assisting in communications for the Michigan section of this bicycle run. Like years past, the bicyclists will enter Branch County on Rierson Road, then turn east on Southern Road, and continue on Southern to South Ray-Quincy Road, where they will turn south and re-enter Steuben County. The club is still looking for volunteers who can spare a few hours of their time to monitor the overall progress of the participants along the route. If you are interested, email Larry Camp, at lcamp@cbpu.com.



Library Materials Available for Club Members

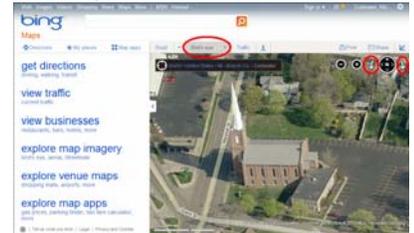
The next time you attend a regularly scheduled meeting of the Branch County Amateur Radio Club in the basement of the 911 Building, be sure to check out the club's library, located in the small rolling wooden cart. On this cart, you will find a selection of books, tapes and CDs, all related to the Amateur Radio hobby. To check out items,



just fill out what it is you're desiring to borrow. That's all there is to it! All we ask is that you are a member of the club. If, by some chance, you aren't, we can take care of that at the next meeting as well! Just see Club Treasurer, Bill Kubiak, and he'll be sure to add you to the Club roster!

New Aerial Images of Branch County Released to Website

Recently, maps.bing.com has released updated aerial imagery of the Branch County area. These images, provided to the website by Pictometry, are different from the Google Maps and Google Earth products you may be used to by now. The major difference in the images is that the Bing Maps images originated from a high-definition camera mounted on an airplane that flew at relatively low altitudes around the county. Also, there are ways to rotate the images to each of the directions on the compass rose.



ABOVE: A screen shot of maps.bing.com, showing the low aerial image of the Coldwater Presbyterian Church on Marshall Street. At the top of the image is the "Bird's Eye" feature, which can be clicked to show aerial images. However, if zoomed in all the way, the user is treated to images that are better than some on Google Earth. Unique to this website, one can also rotate the POV (point of view) by clicking the arrows on the top right of the screen to show alternate low-altitude

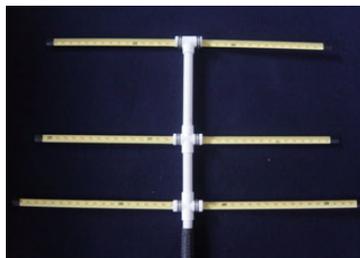
Project of the Month: Tape Measure Antenna for Foxhunting

from Chris, of KCOTKS.org

There are many uses for a handheld direction finding antenna. Locating hidden transmitters during a fox hunt, tracking down harmful interference, figuring out which tower a repeater is on, finding the source of power line noise and the list goes on.

Presented here are plans for building a nice, simple, nearly unbreakable 2 meter DF yagi that you can build in an afternoon for just a few dollars. Most people will have at least part of it laying around the workshop but even if you have to buy all of the parts, it's still in the neighborhood of \$15!

The elements are made from pieces of 1" wide steel tape measure blades which makes it almost indestructible. You can



run through the woods with it, or use it indoors without the fear of bending or breaking the elements. They are attached to the PVC fittings using hose clamps.

The 'hairpin' match gives a 1.5:1 or less SWR across the band so the antenna can be used for transmitting as well as receive.

I modeled this antenna on two different programs, one showed around 7 dbi gain and a 50db front/back ratio. The other showed a little over 8 dbi with around 30db f/b. The elements being flat instead of tubular

make antenna modeling programs go bonkers sometimes! Either way, it works great for me.

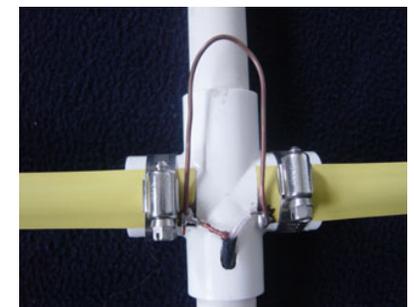
You will need:

- A 1" wide tape measure at least 10 feet long
- 2 feet of 3/4" PVC pipe
- 2—3/4" PVC crosses
- 1—3/4" PVC T
- 6—1 1/4" hose clamps
- A 6" long piece of #12 copper wire
- A bicycle handlebar grip
- A scrap of RG-58 coax
- Your favorite connector

As you can see in the picture above, there are three elements. Starting with the one closest to the hand-grip, you have the reflector, the driven element and the director.

The reflector is 41 1/2" long. It is the longest of the three. All position measurements are taken from the centerline of this element down the boom to the centerline of the next element, not the spacing between the edges of adjacent elements.

The driven element (DE) is 36 1/2" long from tip-to-tip, which includes the 1 inch gap in the center, as shown in the picture below. Therefore, the length of each half is 17 3/4". The DE's position is 8" from



see **ANTENNA**, page 4

Birthday Club

Calling all readers of *Branch Signals!*

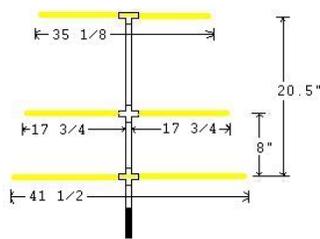
We are currently looking for brave individuals to occupy this portion of the newsletter! Just send your date of birth to editor, Justin Lopshire, at sky-wave21@hotmail.com, and we'll make sure to let the rest of our readers know when you're getting ready to blow out another candle on your birthday cake!

ANTENNA from page 3

the reflector (positions are all center to center).

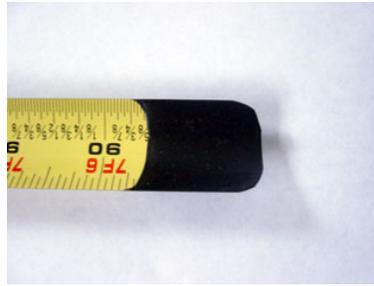
The director is the shortest of the three at 35 1/8" tip-to-tip and is spaced at 20 1/2" from the reflector.

The only element that is broken in the center is the driven element. The others are continuous.



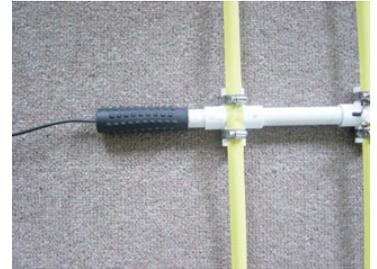
The hairpin match is simply a 6 inch piece of #12 copper wire

bent into the shape shown in the picture in the lower right of page 3, with the sides approximately 1 1/4" apart. It and the coax are soldered directly to the corners of the driven element and that is all there is to the match. Mine tuned <1.5:1 on the first try but you may have to experiment with the length of the wire or the width of the hairpin.



The tape measure elements are very easily cut with scissors. They are very sharp and pointy so be sure to round the corners as shown above. Also, to prevent

cuts, it is helpful to wrap the tips with electrical tape, or, like I did, dip them in Plasti-Dip. Plasti-Dip is a liquid plastic like what the handles of pliers or wire cutters are coated with.



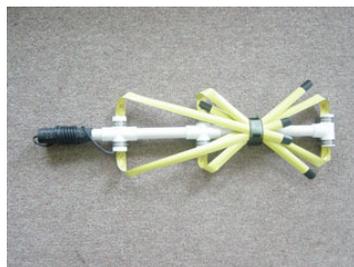
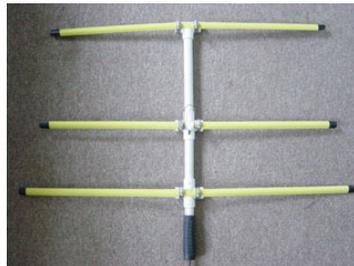
Shown above, I drilled a hole in the PVC cross that the DE is mounted to so I could run the coax through the boom and out through a hole in the handgrip. This isn't mandatory but makes for a nicer looking antenna. Also note in this picture that the reflector is a continuous piece of tape measure, the DE has a 1"

Upcoming Meeting Programs

Just a friendly reminder that due to the Competitive Foxhunt this month, we will not have a meeting for May. However, join us in the cool confines of the basement of the Branch County 911 Building in June for Field Day discussions. We will be meeting again on Tuesday, June 19th, at 7PM, so don't miss it!

gap in the center. The director (not shown) is also continuous.

-Editor's Note: Below is the finished product. I can't wait to see what you come up with for your Foxhunting Antenna!



FOR SALE!



Kenwood TS-530 160-10M HF Rig

Asking \$250

Call Gerald Barnes, KC8QNS, at (269) 2102 for more information.

*Picture shown for comparison



IT'S NOT TOO LATE!

If you haven't already done so, please be sure to renew your Club Membership for 2012! It only costs \$15 to join, which allows you to have club privileges, and opportunities to vote at Club Meetings! For more information, see Bill Kubiak, KBSVWI, at the next Club meeting in June.