

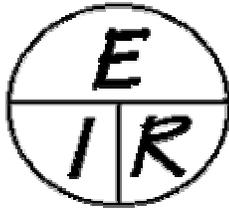


# Squelch Tales



*Newsletter from the Merrymeeting Amateur Radio Assoc. for September 2006*

## Teckie Talk



Oak Hill, Brunswick: After the bike ride event on August 12<sup>th</sup> John, KC6TVF, John K1JJS and Jim, N1IPA decide it was a nice day to do some well needed reprogramming of the 147.21 and 444.4 MHz repeater controllers. They proceeded to the repeater site and contacted Bill Messier, K1MNW who opened up the block-house for them. They found the manuals for two controllers and started in. To comply with Jim's (N1IPS) request, the voice ID on the 2-meter repeater was re-recorded with John K1JJS doing the honors. Now you will hear his golden tones doing the repeater ID. Other ID announcements were recorded too.

After some searching they located the sys-op command codes to reprogram the controller on the 444.4 box. Some old announcements were deleted and new ones added.

As time goes by, new announcements will be recorded into the two repeater controllers.

The old members of Tech Committee wants to thank it's three new members for stepping in and taking care of those nagging items on the to-do list.

**1.2 GHz Repeater:** Earlier that month, Donnie, WD1F downed the climbing belt and headed up Bill Messier's big tower and

relocated the 1.284 GHz transmit antenna 45-feet higher to see if it improved the transmit coverage. With a larger size heliax run and added heights the signal improved to a point where W1ZE could now hear the repeater from his QTH in his hole on Fiddlers Reach along the Kennebec River. We are in hopes that a duplexer can be located or built so only the top antenna will be needed and improve transmit coverage even more. Also, that would free-up a long run of 1-5/8 inch hard line for future UHF (microwave) projects.

While Donnie was up on the tower, Bill and Bruce went over to the repeater building and turned on the KS1R-1 BRUNS packed node. Tests a few days later by Bruce, W1ZE and Steve, N1OXH showed that the output seemed to be down from previous signal strengths. In the near future Bruce will check transceiver/antenna performance. We still need to install the packet node antenna higher up the tower and that should improve signal strength and coverage. Steve said he would be willing to help get the BRUNS node back up as a full service node and offered to provide a spare TNC with a new memory chip with "The Net" programmed into it. That would be a real improvement to BRUNS performance and enhance its ability to serve the needs of the southern and mid coast Maine packeteers, plus make it available for ARES/RACES support.



# If bikes rides are your thing, August was your month

A good group of dedicated mid coast hams did their part in waving the MARA flag at three bike ride events.

The first was the Tour de Merrymeeting Bay on August 12<sup>th</sup>. Forty five bikers were assisted by seven MARA communicators. This 50-mile ride wound its way around Merrymeeting bay starting and ending in Topsham. A nice lunch was provided to all the participants and volunteers at the Highlands at the end of the ride.



The second was the Tour Des Farms on Sunday August 20<sup>th</sup>. This was 100 (or 50) mile ride through Lincoln County in the rain. The ride wound its way through the pretty but damp countryside with

Pemiquid Light as a stop on the route. Along the trek the rest stops were at the various organic farms. Forty-seven riders took part with eight MARA ham volunteer communicators. As in past years, there was a very nice BBQ at the Morris farm in Wiscasset for the riders and volunteers at the end of this ride.

The Granddaddy of the bike rides was the Dan Michaud Memorial Ride (DMMR) on August 26<sup>th</sup>. This too was a 100 and 50 mile event started from the gazebo on the Brunswick mall with a route through Topsham, Bowdoin, Bowdoinham, Richmond, Lisbon, Durham, and Freeport ending up back at the Brunswick mall. Approximately 48 riders took part with 7 ham radio volunteers patrolling the course.

The MARA has been supporting the DMMR charity event for almost 14 years and we are pleased to do it.

Feedback from the all the event organizers has been extremely positive. They all want to thank each and every one of you for your communications expertise and help.

To N1IPA, N1HOC, K1IJS, KC7LIF, KC6TVF, KB1MRZ, WD1F N1VVF, N1XBN KC7UNK, KB1UNV and W1ZE - **MANY THANKS!**

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## QRP CORNER

By W1ZE

If you read the propagation bulletins put out by the ARRL you would think that working DX during this part of the sunspot cycle would be marginal at best. In general that is true but for us QRPers if we work Arizona with 5-watts, that's DX.



As you know, in addition to my QRP fun I like to work PSK31 at the QRP level (5 watts). As they say in the PSK world, "if you can see'em on your waterfall you can work'em."

The morning August 16<sup>th</sup> had me firing up my FT-817 in BPSK31 mode to see what I could receive on 20-meters. There were not many waterfall prints showing on the computer screen, some east coasters working into Dixieland. At the high end of the PSK window I saw a nice semi-strong (5-9-9) waterfall appear. I placed my cursor on the signal clicked on it and on my screen I saw, "CQ DE JA4FHE K" print across the screen. What the heck, I gave him a call with out much anticipation of landing a contact 8000 miles away with 5-watts. But to my surprise "W1ZE/QRP de JA4FHE" came rolling across the screen followed by the following text:

**"TNX FOR CALL. - NICE TO CONNECT TO YOU. UR SIG 579 579 - QTH IWAKUNI IWAKUNI NAME IS AKI AKI - BTU MY FRIEND HW?"** We made the standard DX exchange and Aki commented on how well he was copying my 5-watt signal. He indicated he was only running 30-watts to a SteppIR 3-element yagi up 10 meters (40+ feet).

It is not as if I have never worked Japan before in QRP but it is my first QRP JA QSO from Maine in any mode.

As you may know, Steve, AA4AK and yours truly are the MARA's QRP enthusiasts and have been for some time. If you are on the HF bands or even

6-meters (SSB/CW). try turning your power down to 5-watts or lower and see what you can work. While in the QRP modes I put /QRP behind my call sign to let folks know I am running 5-watts or less. That alone adds 6 DB to your signal report.

**73, Bruce**



## A simple multi-band wire vertical

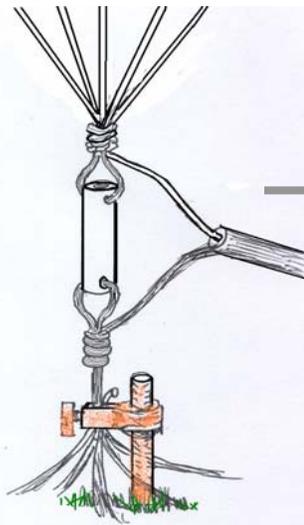
By Bruce Randall, W1ZE

If you are a back-packer, Field Day operator or just want a simple wire antenna to get on HF and even work some DX, the following simple wire vertical may be for you.

I have used the following design several times and the thing works. When I first moved to Maine in 1978 I lived at the in-laws QTH in Winthrop until the family arrived from California. While there I put up a 20-15-10 meter ground mounted vertical made out of hook-up wire purchased at the Radio Shack shop in Augusta and some insulators made out of a 4-foot length of 3/4-inch OD PVC pipe from my father in-law's scrap bin. With that antenna I was able to maintain a 20 meter schedule with WB6PQH, WA6YCG and W6JBO in California every Sunday morning plus chase DX too.

The following design can be built as a single band or as a multi-band antenna. The one described here is for a 20-17-15-12-10 meter. Each vertical element is 1/4-wave long for the desired bands.

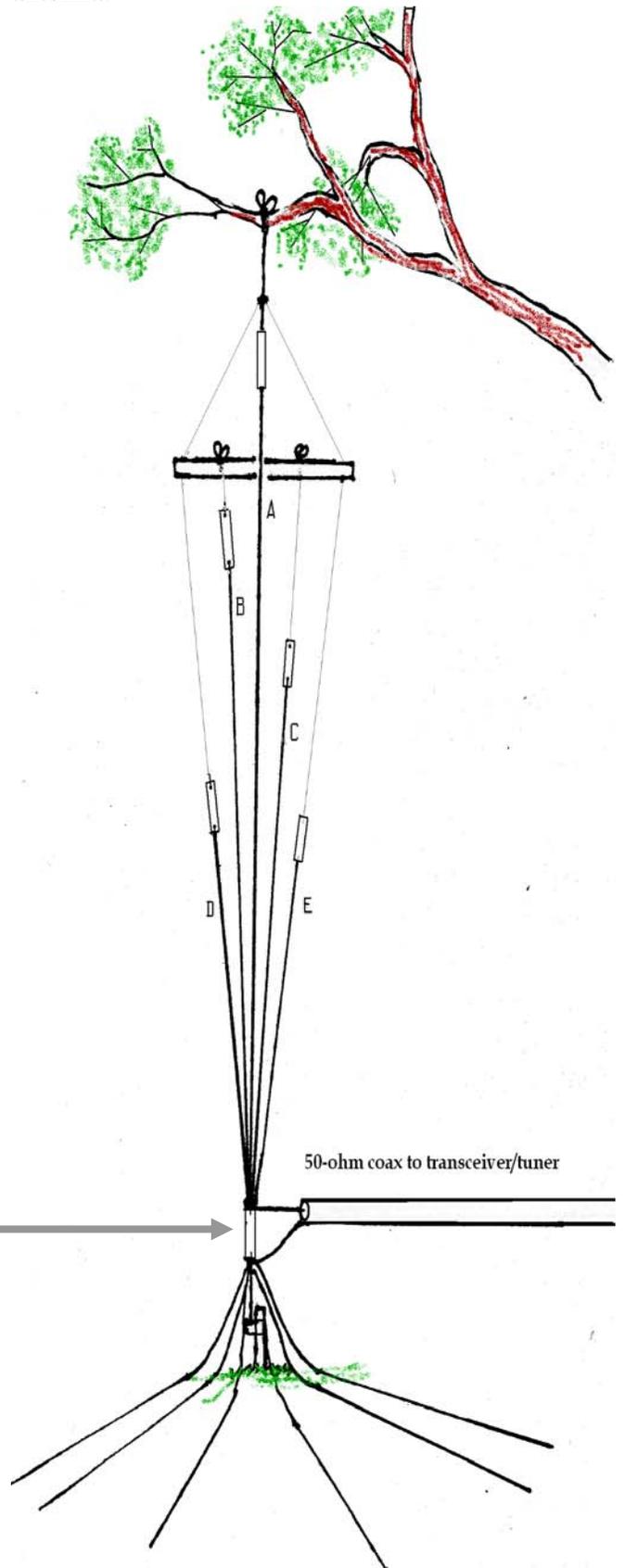
At the base of the antenna is a tent stake to tie down the array, but if your application is a little more periminate, sink a four to eight foot ground rod in lieu of the stake.



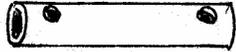
Since the radial system is placed on the ground, there is no need to cut them to resonance. Just lay

down as many as you can, the more the better with lengths from 8 to 17 feet.

In my applications I used nylon string as a halyard line over a tree branch to support the top end of the antenna.



Step one is to make the insulators and spreader bar. The spreader bar is a 3-foot length of 3/4-inch PVC pipe with 5 small holes drilled through the pipe with one hole in the center. Drill outside holes 1-inch from each end. Half way between the center hole and the end holes drill two more holes.



Next step is to cut six lengths of 3-inch long PVC pipe to be used as end insulators. Drill a small hole through the PVC pipe 1/2-inch from each end of each insulator.

Step three is to cut the 5 vertical wire elements. Wire size is not critical. I have used #20 insulated hook-up wire for the Winthrop antenna but later models I used #14 and #12 stranded wire from the hardware store. The following are lengths for the phone portion each band. When cutting each length add 6 to 8-inches to allow for connections and adjustments.

- A. 20M (14.20 MHz) = 16' 6"
- B. 17M (18.12 MHz) = 12' 11"
- C. 15M (21.25 MHz) = 11'
- D. 12M (24.90 MHz) = 9' 5"
- E. 10M (28.40 MHz) = 8' 2"

I found the antenna to broad enough to not exceed 2:1 at the band edges on 20 and 15 meters. I experienced very low SWR across the entire 17 and 12-meter bands. SWR on 10-meters was low from 28 to 29 MHz.

This antenna can be built to cover the 40 and 30- meter bands using the same concept. You may not see a flat 1:1 SWR on 40-meters because the input impedance is much lower (15-20 ohms) than the 50-ohms coax feeding it, but you can get pretty close with a 2:1 bandwidth of 150 KHz more or less. If you build a multi-band wire vertical that includes 40-meters you do not have to install a 15-meter element because the 40-meter element acts as a 3/4-wave vertical on 15-meters.

73, WIZE



# Fall is for CERT Training!



The Community Emergency Response Team (CERT) training in Brunswick will soon be upon us. The training will take approximately 20 hours in two and a half hour segments. The exact dates for the training have not been firmed up yet, but we hope to have that nailed down soon. The class will be given at the new Brunswick fire station on the Bath Road in Brunswick next to Yankee Lanes.

The first CERT training is for **ham radio operators only**, but open to all hams in southern and mid-coast Maine. If you want this training but not yet advised us that you want to attend, let John Goran, K1JJS know you are interested. John can be reached at [k1jjs@arrl.net](mailto:k1jjs@arrl.net) or phone him at **865-0554** (home) or **725-0614** (work).

## HAM WORD FIND

Find the words related to transmitters. They may be found vertically, horizontally, backwards and diagonally

M	E	F	H	F	G	J	K	L
I	O	D	R	I	V	E	R	O
C	U	D	I	N	F	A	M	N
R	T	V	U	A	O	I	Z	M
O	P	U	L	L	R	R	Y	M
P	U	D	X	Z	A	L	C	E
H	T	O	T	C	W	T	X	T
O	O	B	R	Q	B	K	O	E
N	F	A	F	I	L	T	E	R
E	V	I	R	D	G	A	P	Y

**FIND: ALC, DRIVER, DRIVE, FINAL, KEY, MODULATOR, MICROPHONE, METER, OUTPUT. and VFO**