The Mt. Vernon Amateur Radio Club

April, 2011 Newsletter

Meetings are held the 2nd Monday of each Month at 7:00 P.M. at the Knox County Chapter of the American Red Cross, 300 N. Mulberry Street, Mt. Vernon, Ohio

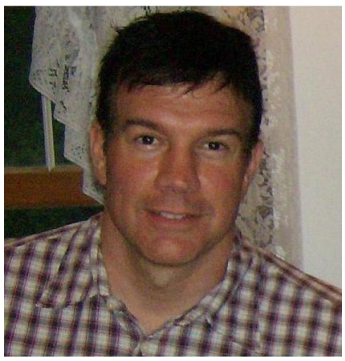
Local Ham Community

K8EEN Repeater: 146.790 Mhz (-600 Khz With PL of 71.9 Hz)
KD8EVR Repeater: 442.100 Mhz (+5Mhz With PL of 71.9 Hz)

Sunday Night ARES Net at 9:00 P.M. on The K8EEN Repeater
Wednesday Night Social Net at 9:00 P.M. on the KD8EVR Repeater

Ham Radio Rocks!

Free Money For Your Club!



By Mark Bisenius, AC8FV

How would you like to be a philanthropist like Bill Gates, and donate money to your club?

No, this isn't some April Fools' joke!

When you join the ARRL through the Club, our Treasurer, Barry, N8PPF, gets to keep $15.00 for our Club. You can even hand him the cash right in fro11nt of Ohio Section Manager, Frank Piper, because Tony, KC8UR, invited him to our April Meeting.

Now, I could go into all the many reasons why you should join the ARRL, but I'm sure Frank will cover that much better than I can, so I'm going to try some reverse psychology instead.

Let's take a look at my top 10 reasons for NOT joining the ARRL:

The next meeting of the Mt. Vernon Amateur Radio Club will be Monday, April 11, 2011 at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, Mt. Vernon, Ohio. The program for the April Meeting is our own electrical engineer Ralph Hoffman, W8LFR's Photo History of the Glory Days of WLW 500,000 Watt Broadcasting, from his perspective as a broadcast engineer. Tony, KC8UR, has invited Ohio Section Manager Frank Piper, KI8GW to the meeting. Frank is expected to say a few words about the ARRL.

Please remember to check into the long running Sunday Night ARES net at 9:00 P.M. on the K8EEN 2-meter Repeater.

Also check out the UHF net on the KD8EVR Repeater. This net runs each Wednesday at 9:00 P.M. and is a social net. Please join us for the fun of it.

Every Wednesday at 5:00 PM, MVARC club members meet at Wendy's, 522 South Main Street, Mt. Vernon, Ohio. Dinner Coordinator Dick Huggins, N8RDH, reports good turnouts for this event. Come share dinner with friends, or make new friends, by attending one or all of these events.

Join MVARC club members every second Saturday of the month for breakfast. Breakfast Coordinator Arlin Bradford, KD8EVR, reports good turnouts for this event.

****The next Breakfast will be April 9, 2011 at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road, Mt. Vernon, Ohio****

10.) Are you kidding? I could buy a spare HT battery for that.

9.) I just spent all my money at a Hamfest.

8.) If it was $25, I would join in a heartbeat.

7.) I don't like what they did back in '06.

6.) I wrote them about it in '06, and I never heard back.

5.) I'll join as soon as I finish buying stuff for my Ham Shack.

4.) I don't care about losing our 440 privileges, I spend most of my time on 2-meters anyway.

3.) The glossy pages of QST aren't very good for lining bird cages and kitty litter boxes.

2.) Radio Relay? What's that?

And the number one reason, I haven't joined yet:

1.) I haven't gotten around to it, because I've been too busy procrastinating!

So, if you haven't gotten around to it either, join me at our April 11th Meeting, and hand Barry some cash. Or you can put it on a credit card. You can download and print the form here: http://www.w7yrc.org/pdf-files/ARRL Mbrshp app.pdf. Better yet, get an application from Barry at the Meeting, and fill it out there.

If you want to renew your membership through the Club, you can tack on another year right now, and our Club gets to keep $2.00. Hey, it all adds up, year after year. Then after the Meeting, Barry will send in all the applications in one envelope, and be done for the year.

No, you won't be interrogated about your ARRL status, as you enter the Meeting. You can even shake hands with Frank, and tell him you voted for him, whether you're an ARRL member or not!

Then grab a cup of coffee, and sit back and enjoy electrical engineer Ralph, W8LFR's Photo History of the Glory Days of WLW 500,000 Watt Broadcasting, from his perspective as a broadcast engineer.

A half-million watts out of Cinci? That's a misprint, right?

This is going to be a fun night. See you at the Meeting!

The Mt. Vernon Amateur Radio Club

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Members are encouraged to send articles pertaining to Amateur Radio, with an emphasis on local activity, equipment reviews, and personal experiences to the Newsletter Editor. Articles are due on the Sunday before the first Monday of the month.

Newsletter Editor: **Don Russell, W8PEN**
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BSA Spring Camporee "It's a Disaster"

Thank you for all those that have signed up to help with the Boy Scout Disaster event. Anyone interested in helping can still do so by contacting me at the information below. If you can show a young person how to use a ham radio to call for help during the simulations your help is needed.

Just a few details for The Saturday April 16th event.

When: Be at MVSR (Muskingum Valley Scout Reservation) by 7:30 to 8:00. At 8:15 there is a staff meeting to give last minute instructions. Events start at 9:00am and run to 5:30pm. Lunch is provided. If you can not be there for the whole day please come for part of the day. I can rotate operators to various locations to give them a break.

What to Bring: Bring your go boxes, water and maybe some snacks. Dress for the weather. Most of the locations are remote and will require your hiking boots. There are shelters at each simulation site either tents or a roof shelter. You can also bring an FM radio tuned to 88.5. My HT does not receive 88.5 with the rubber duck antenna unless I am within 50 ft of the transmitter.

Information card for HAM operators:

Thank you for volunteering your time for the Muskingum Valley BSA Spring Camporee "It's a Disaster". Throughout the day there will be various disasters. We ask that you will provide communications from the field to the command center so that resources for the disaster and requirements of the session staff can be met.

Date: Saturday, April 15, **16** - time for Saturday 16th: 7:30am to 5:30pm)

Lunch provided by the Red Cross 12:30-1:55pm

Ham frequency VHF: 146.460 simplex
Ham Frequency UHF: Listen: 442.100
Transmit: 447.100 pl 100

Radio frequency: 88.5 Mhz

The boys have been instructed to bring an FM radio to listen to the broadcasts as needed.

Phone numbers: Jon Penko – (740)501-4383
Matt Murphy - 1(740)704-8836

Instructions for ham operators – Whenever there is a disaster to report we will need you to help the boy making the call to the command center using proper protocol. Let the boys do the talking and coach them. This is to be a learning experience and a promotion of ham radio. For some disasters the cell towers have been taken out. We will also need you to be a judge and keep track of the boys scoring. Simply observe how the boys conduct themselves and fill this in on the score card included on the clipboard.

We have had a great turnout from the Mount Vernon Ham community. Thank you for your support in training our future leaders.

Directions to MVSR (Muskingum Valley Scout Reservation) Camp:

From Mount Vernon:

- Take Rt 36 (East) until it ends in Coshocton. Roscoe Village will be on the right. (about 32 miles)
- Turn RIGHT on route 16 (South) to the fist traffic light (about 1.1 miles)
- Turn LEFT on Rt 83 and cross the bridge over the Muskingum River.
- After the bridge turn RIGHT on CR 271.
- Follow CR 271 over the rail road tracks and up the hill (about 2 miles)
- Turn RIGHT into M.V.S.R. Follow the black cinder road past the lake to the parking lot. There will be a sign for M.V.S.R. on the left.

Travel time from Mount Vernon is about 50 minutes.

Jon Penko (KD8LFI) 740-501-4382,
jpenko@columbus.rr.com

See Flyer at the end of the Newsletter (W8PEN - Ed.)

New Hams To Watch For

I am happy to report that thanks to the club sponsored Technician Course, the local area has seven new hams on the air:

Matt Ware	KD8PSK	Mt. Gilead
Ed Stage	KD8PSL	Mt. Vernon
Pat Valentino	KD8PSM	Mt. Vernon
Marie Ball	KD8PSN	Mt. Vernon
Brien Artus	KD8PSO	Mt. Vernon

Brien, KD8PSO, was not able to attend the class because of his work schedule, but studied on his own to pass the test. Good job Brien!

In addition to these five, two class members took their exam April 2nd in Zainesville and passed their technician

class license. They are waiting on call assignments:
Donna Stage Mt. Vernon
Austin Stage Mt. Vernon

Congratulations to these seven new hams and hope to hear from them often. Please be sure to answer their call if you hear them on and show them how friendly Knox County hams are.

Locals Learn Weather Spotting Techniques

On Monday March 28, 2011 Brian Mitchel presented the National Weather Service weather spotting class. The class was sponsored jointly by the Knox County Emergency Management Agency and the Mt. Vernon Amateur Radio Club.

There was a very good crowd of fifty plus people attending this class, which is held annually in Knox County.

Some of the items discussed by Brian during this class:

- Outlook: This is a 3 - 7 Day predicted weather pattern.
- Watch: Conditions warrant a watch for severe weather (thunder storm, tornado, flooding, etc)
- Warning: Severe weather has been spotted and is an actual event in progress
- Thunderstorms consists of rising and sinking air called updraft and downdraft.
- The four basic thunder storm types are: Single Cell, Multicell Cluster, Multicell Line, and Supercell.
- Squall Lines, Shelf Clouds, Roll Clouds
- Wind Shear vs. Rotation

Those that attended this class have become certified weather spotters for the National Weather Service.

You do not have to be a certified weather spotter to participate in the ARES weather nets during severe weather. Please feel free to check into out nets on the Mt. Vernon Repeater, K8EEN (146.790 MHz, PL of 71.9hz) and report what you see. The net control operator can then send the reports on to the National Weather Service if he decides the report warrants it.

If the 2 meter repeater is down, a net will be formed on the KD8EVR Repeater (442.100 Mhz, PL of 71.9hz.). Those with no 440 Mhz equipment should monitor 146,790 Mhz simplex. There will be a station relaying information to the net.

If you missed the class and wish to learn about severe weather spotting, visit this site:

http://ww2010.atmos.uiuc.edu/%28Gh%29/guides/mtr/svr/home.rxml

This is a really good online guide to what was discussed during Sky Warn training.

Home page for the National Weather Service can be found here:

http://www.nws.noaa.gov/

The Lost Art of Cable Lacing

By Dan Romanchik, KB6NU

The Make: magazine blog is a wealth of information for amateur radio operators. Recently, they ran a post on what they consider to be on the "lost technology" of cable lacing <http://blog.makezine.com/archive/2009/07/lost-knowledge-cable-lacing.html>.

The blog post does a great job of explaining the technique and includes several illustrations. One of them <http://cdn.makezine.com/make/blogs/blog.makezine.com/upload/2009/10/lost_knowledge_cable_lacing/cableLacing6b.gif> is a drawing from an old ARRL handbook. There are also a link to the Wikipedia page on cable lacing <http://en.wikipedia.org/wiki/Cable_lacing>.

Nowadays, we mostly use zip ties to bundle cables, but there are disadvantages to using them. For one thing, to apply them properly, you should have a tool that controls how tightly the zip tie holds the wires. This is to prevent crushing the insulation.

Also, I've found that zip ties don't do so well when the cable has only two or three wires. They're just not designed to hold so few wires. I think that cable lacing would do a much better job of keeping a small bundle of wires together, say wires that connect front panel components to a PC board.

Cable lacing certainly looks much cooler than zip ties. This is the perfect technique for those homebrewers that want to make their projects look great as well as work great.

I asked on my blog, "Now, where can I find the 'wax-impregnated cotton or twine'?" and my readers came through. Hamilton said, "Apparently you find wax string here: http://www.kitkraft.biz/product.php?productid=1496. I remember using it for something as a kid, but I can't place it." Ron McKenz wrote, "I notice that a number of telco vendor sell waxed lacing cord. Here are a few URLs: http://www.sourcetelsupply.com/catalog/index.php?cPath=27,http://www.tessco.com/yts/resourcecenter/pdfs/clablelacing-FAQ.pdf, and http://www.oelsales.com/product.cfm/267/.

Ned, WB4KBO, said, "I would suggest a large roll of dental tape and a large-diameter curves sewing needle for fabricating harnesses. I was told that this was the material of choice for lacing harnesses when i worked at Heath Company many years ago. Makes sense to me. Buy it at Meijer for an occasional harness, or a dental wholesale supply house if you are going into production. Also great stuff for kite rigging, vine lacing and many other things."

Mike, WA6ARA wrote, "What you want is Mil-T-43435. It is better than a cord, it is a flat weave tape, nylon, and waxed. It is made for cable lacing but is use now in the parachute industry as "super tack". Item T1050 athttp://www.paragear.com"

So, there you have it. Links to show you how to do it, and a couple more links for where to find the lacing material. I now expect all of our homebrew to look a lot neater.

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When not worrying about how to lace cable instead of using zip ties, Dan, KB6NU, blogs about ham radio at www.kb6nu.com, teaches ham radio classes, and operates CW on the HF bands. Look for him around 7.030 MHz or e-mail him pictures of your beautifully-laced cables at cwgeek@kb6nu.com.

The Random Wire Antenna

By Don Russell, W8PEN

Last month I described a very effective Half Wave doublet antenna. I really like this antenna because it is easy to build and you do not have to trim it to length like one does a dipole antenna.

While the doublet is a simple antenna, there is one antenna out there that is easier to build and while it would be better to use two supporting masts, one can get away with using only one mast. This is a great antenna to take out in the field. The Field Version could be made very cheaply because you simply terminate the antenna at your antenna tuner. A permanent antenna for the home can be a bit expensive because of the use of a balun or an outside antenna tuner.

This months antenna is called a random wire antenna. I was going to go with a Half Wave end fed antenna, but upon doing some research on the web, I found that a half wave end fed antenna is a poor choice if one wants to work multiple bands. The feedline impedance is too high for the antenna tuner to tune to all the bands. Therefore, I have decided that the Random Wire antenna would be the better choice of the two.

The ingredients needed for this antenna project:

1. Lots of wire. In my version, you will need one piece of wire at 84 feet. Four or more pieces at 65 feet each for radials are recommended.
2. A 1 : 1 balun at the feedline entrance to you shack (from outside the house). A better way would be a weather proofed automatic antenna tuner mounted outside the house in place of the balun. More expensive though.
3. Enough coax to reach your operating position, preferable ten feet or less. This needs to be low lose coax of the large RG-8 type.
4. At least one antenna mast, pole, tree, or what have you to connect the far end of the antenna to.

The biggest advantage of using a random wire antenna verses a dipole or doublet antenna is that you feed this antenna on the end. So if the house or shack is on the corner of a lot, or for some reason mother nature did not line up trees correctly so that you could have the center of a doublet hanging over your house (shame on her!), then perhaps a good option would be an end fed random

length wire antenna. Another advantage is that this antenna needs no feed line to speak of. The end of the wire may come directly into the shack and right to the antenna tuner. Of course, one needs to avoid running this antenna wire close to metal objects such as a metal antenna mast/tower, or aluminum siding. In fact, I think I would prefer to keep the radiating part of this antenna on the outside of the shack. Read on for some ideas on how to make that happen.

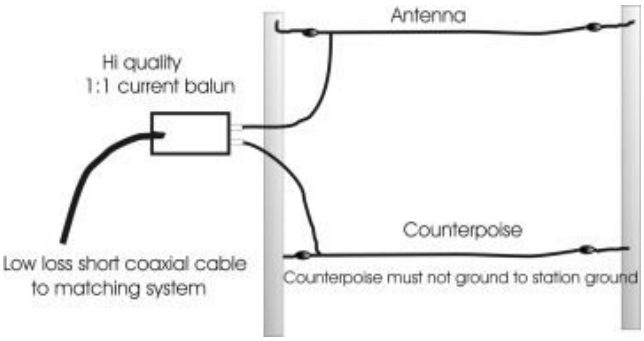
When I first started ham radio back in the 60's, my first antenna was a random wire antenna. There were problems with it. The big one is that there was RF in the shack. While transmitting, I could not touch the chassis of the transmitter, receiver, or antenna tuner without receiving an RF burn. Many times I would be transmitting and start to smell something and find that I had put my hand on a piece of my equipment without realizing it and my skin was smoking! Burnt skin really stinks! It was sort of interesting looking at the hole in my finger that the burn created.

Now that I am a more experienced ham, I know much more about how to prevent RF from entering the shack with this kind of antenna. The research I did before writing this article didn't hurt either.

One of the reasons for RF in the shack is that this is not a balanced antenna like the dipole antenna or the doublet antenna. By balanced, I mean that there is not an equal measurement of wire on both sides of the feedline and therefore the voltages and currents are not equal on each leg of the antenna when transmitting. Being unbalanced it what causes RF in the shack. An unbalanced antenna tends to have RF on the outside of the coaxial feedline.

One way around this is to put in a good ground system. A simple ground rod will not work in this case. One needs to install a radial system of many wires to create a good RF ground. In fact, from what I read, a ground rod, other than the one that is used as the station ground, may make the antenna less effective. The radial system can be done one of two ways: First, cut 1/4 wavelength wires for each band you wish to operate. If one wants to transmit on 80, 40, and 20 meters for example, cut wires measuring 65, 32, and 16 feet long. These wires need to be a foot or two above the ground, which is the real problem with this type of radial system. It gets in the way!.

The second ground system takes a bit more wire and a little more work, but I believe is the better alternative because it is installed below ground and stays out of the way. Cut a minimum of four wires to ¼ wavelength for the lowest band you wish to transmit on. That would be 65 feet long for 80 meters. Bury these wires an inch or so underground. The best way to do this is with a lawn edger during the Spring time when the ground is soft. Just cut a slit and lay the wires in the slits. Then trample over the slits to cover up the wires. Another way to do this would be to simply lay the wires on the ground without burying them. You can roll them up when not transmitting and then roll them back out when you want a little action. Spread them out in as many different directions as possible. Remember. The minimum amount of radials would be four. Many more would be better. My Vertical antenna has 32 buried radials. The wires can be bare or insulated. Makes no difference. Spread the wires out in all directions. These four (or more!) wires act as the missing half of your antenna. Once they are installed, you should not have to worry about them for several years. Join them all at one end and run the wire either straight into your antenna tuner, or at the outside entrance to your shack. Depends on how you are going to run the antenna into the shack. The buried radial system is the one I prefer. No ducking or jumping over wires that are a few feet above ground.



Suggested random wire installation.
Drawing taken from the internet:
http://www.w8ji.com/long_wire_antenna.htm

To get a match that the antenna tuner can handle there are certain lengths of random wire antennas that should be avoided and certain lengths that seem to work rather well. We are talking about the length of the whole antenna system here. From the end right up to the antenna tuner or balun.

Lengths to avoid: 16 19 22 26 32 33 38 44 46 48 52 64 65 66 76 78 80 88 92 95 96 99 104 110 112 114 123 128 130 132 133 138 144 152 154 156 160

Lengths to try: 29 35.5 41 58 71 84 107 119 148

This information is from the internet site at: http://www.hamuniverse.com/randomwireantennalengths.html

I just went out to 160 feet max. To see the complete article, go to the website.

The first installation method to be looked at would be the one that uses just one antenna mast or end support (tree, high building, etc.). Measure you antenna to the length required. I suggest 84 feet for 80 - 10 meter

operation. Plus or minus a foot or so should be just fine. Personally, I would mount a 1:1 current balun on the house. A current balun will allow you to feed the system into the shack via a short piece of coax. Mount the balun so that the lower end of the wire is above every ones head. That just keeps it safely out of the way. Now run the other end to your end support, 20 to 30 feet high or higher. Connect the ground/radial system onto the other side of the balun and then your coax. Run your short piece of coax right to your antenna tuner. Make it 10 feet or shorter if possible. If your rig has an internal antenna tuner, run your coax to there. If you are looking for a cheap balun, go here:

http://www.hamuniverse.com/balun.html

Basically, this balun is simply an 18 foot length of coax wrapped around a PCV pipe 3 to 6 inches in diameter. Not sure this well this would work with a random wire antenna because that much coax with a high SWR antenna may prove to have a lot of signal lose. It does look promising for beams and dipoles with a low SWR to start with. Try it at your own risk.

One might try eliminating the balun altogether and just connecting the random wire to the coax feed. If doing this, try coiling part of the feedline to form an RF choke. Try 10 turns about six inches in diameter.

A very cheap method of feed that may work is to just run the random wire right into the shack to the antenna tuner. Then attach a ¼ wave radial for each band you wish to operate on (65 ft, 32 ft, and 16 ft.). Run this radial under the carpet, along the walls, or anywhere out of the way. This makes a very cheap antenna installation. You may still have some RF floating around. This is basically what I did back in the 60's, but without the radials. Perhaps things would have worked better if I had put some radials in.

If the installation went well, you should be able to get a good match via the antenna tuner on all bands from 80 - 10 meters without a problem. If you have trouble tuning some bands, then cut a foot or so off the far end of the antenna. You should be in business.

The better way to install this antenna is with two end supports, be they masts, the eve of a house, or a tower. Try for 20 to 30 feet or higher. If using the 84 feet of wire as in the first example, the total length should be 84 feet. That is from support at the far end to the support at the shack end and down to the balun. Other than that, the installation would be the same as the first method.

A great idea for either system would be to mount an automatic antenna tuner right where your choke would be. Then there will be no loss in the coax due to high SWR. It would also help prevent RF from getting into the shack. Even a manual tuner would be acceptable in this service if one doesn't mind running outside the shack to change bands. Tuner settings could be written down and one would merely have to reset the tuner for a band change.

This antenna makes a good "backpack" antenna for those running QRP in the field. A small antenna tuner and QRP rig would do nicely. Just get the end of the antenna up as high as possible and come right down to the tuner. Lay out one ground wire to start and add more if needed. Use small diameter wire of around #20 for both the antenna and the radials and one would not add much weight to their backpack. Small insulators can be made from just about any plastic.

For random wire antenna ideas, simple do a search for "random wire antennas" on the internet. Good luck.

Hints & Kinks : Weatherproofing Your Automatic Antenna Tuner

From the ARRL Letter: March 10, 2011

Geoff Haines, N1GY, of Bradenton, Florida, sent us this idea for waterproofing your automatic antenna tuner. Contact Geoff via e-mailfor more information.

As an avid Amateur Radio operator, I sometimes use an automatic antenna tuner to operate more than one band with the same antenna. My mobile unit uses an LDG RT-11 autotuner to feed a pair of "Hamstick" style antennas on several different bands. One antenna covers the lower bands and another antenna covers the higher ones. An excursion into operating "fixed portable" with a telescopic vertical had me looking for another solution.

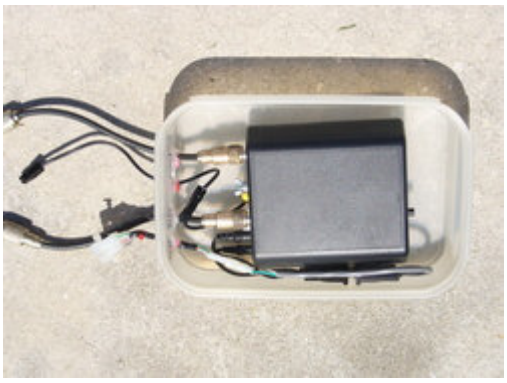


Figure 1

In order to minimize the coax losses when feeding a vertical monopole away from its resonant band it is necessary to reduce the distance between the tuner and the antenna to a minimum. The use of ladder line is not feasible when the antenna is fed almost at ground level. In order to do this, it is necessary to place the tuner almost directly at the base of the antenna and thus

reduce the coax run from the tuner to the antenna to nearly nothing. The coax from the tuner to the transmitter can then be any appropriate length since the mismatch has already been corrected.

Owning an LDG Z-100 automatic tuner already, I looked for a way to mount it at the base of the antenna and yet protect it from the elements. A phone call to LDG gave me the necessary specifications for a 50 foot extension of the control cable so the only thing left was to find a workable enclosure for the tuner itself. I discussed the requirements for such an enclosure with my spouse, Audrey. Without a word, she rummaged through a kitchen cabinet and produced a semi flexible plastic container that had a snap-on lid and fit my Z-100 and its cables to a T.

I drilled four small holes in one end of the container into which I fitted two short coax jumpers, one for the antenna and one for the radio. I also made up and installed a short 4-conductor cable to connect the stock control harness to the 50 foot extension. The fourth opening was used for a similarly short insulated wire to connect the grounding stud on the Z-100 to the radial system of the antenna. Once these four cables were in place, I sealed the drilled openings with hot glue. Silicone caulk could be used just as easily, provided it will stick to the container. I did not try that because the hot glue was at hand so you are on your own there (see Figure 1).

With the jumpers connected to the tuner, the extension cable and coax were run to the transceiver and the antenna erected. Now, testing was in order. The pressing of the TUNE button on my IC-706MKIIG did exactly what it was supposed to do. The Z-100 ran through its paces and signaled a good match. Now if the afternoon showers come while I am operating "fixed portable," the only thing I have to worry about is keeping me and the radio dry. The tuner is cozy in its own little raincoat (see Figure 2).

Figure 2

Total cost, even if you had to buy the container new at the discount store, would probably not exceed $10. That does not include the extension control cable of course. The container was already here and I had enough UHF connectors, coax, wire and weatherproofing on hand for the project. The only thing I had to buy was the 4-conductor cable and Molex connectors to build the 50 foot extension cable.

This project has enabled me to comfortably operate "fixed portable" from the beach, at Field Day and many other events where a vertical was the only feasible antenna. As long as the container can handle the physical size of the tuner with room for the connecting cables, any automatic tuner could be protected in this way.

Do you have an idea or a simple project that has improved your operating? Maybe you've taken something commonly found around the home and developed a ham radio use for it? Why not share your hints with fellow hams in "Hints and Kinks," a monthly column in QST. If we publish your hint, you will receive $20. Send your hints via e-mail toh&k(at)arrl(dot)org or to ARRL Headquarters, Attn: "Hints and Kinks," 225 Main St, Newington, CT 06111. Please include your name, call sign, complete mailing address, daytime telephone number and e-mail address.

WHAT A DISASTER!

SPRING CAMPOREE
APRIL 15-17, 2011

Grab your gear!

Muskingum Valley Council is experiencing the biggest collection of disasters it could ever imagine at the *Muskingum Valley Scout Reservation.* The Red Cross, Police, SWAT, Fire, Search and Rescue, EMS, Scuba, and others have been dispatched but . . . YOU and your PATROL . . . are needed to help .

Medical . . .

Storms . . .

Flooding . . .

Get your Patrol Event Packet for more Details.

Accidents . . .

CONTACT THE COUNCIL OFFICE OR BONNIE SNYDER 740-627-6716

Registration Starts February 1, 2011
Reserve your Units opportunity online before April 1, 2011:

Membership Form

Club dues run from Jan. 1 until Dec. 31 and are collected during the last quarter of the year. You can mail in the dues to the address below or bring them to a meeting. Dues are prorated for new members at the time of application. Visit our Web Page at www.mvarc.net

Dues Schedule: $12 regular

$10 for second member in the same family, for those over 65 yrs. of age, and for those living outside Knox County

Mt. Vernon Amateur Radio Club
P.O. Box 372
Mt. Vernon, OH 43050

Name_____Call-Sign_____

Street_____

City_____State_____Zip Code_____

Phone Number_____License Class_____

ARRL Member (Y/N)_____E-Mail_____

Members are entitled to a free MVARC E-Mail address. Would you like one?

No_____Yes_____ If yes please enter password_____

Other Comments: