The MERCURY MicroVolt

OCTEMBER 2018 VOLUME 18, No. 9

Mercury Amateur Radio Association - MARA
North America - North East

October

When the nights get longer
and the temperatures get colder.
Time to warm up the rig!

CONTENTS

OTHER STUFF

Links that will take you to web locations referenced in this newsletter are shown in italicized blue text.

Past issues of the MARA North East NEWSLETTER may be viewed at http://ne.mara.net/newsletters.pdf

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E-mail your comments, ideas, or submissions to MARAne@mara.net or to VE1VQ@eastlink.ca

FROM THE DESK OF THE PRESIDENT

from the keyboard of WD4HXG

Because of work and personal obligations, our President didn't have time to put pen to paper, or in his case, fingers to keyboard. He hopes to have something for next month.

Grandma Mara's RAMBLINGS...

Grandma has a love/hate relationship about this later season of the year. On the one hand, I love the smells of the fall, and I love the fact that temperatures are cooling off making it more enjoyable to be out of doors. I love that the sun hasn't given in to winter yet. On the other hand, hurricane season is upon us, and as I write this, Hurricane Florence is relentlessly making its way toward the coast.

I was in WalMart the day before the storm was due to make landfall, and some shoppers were in panic mode scooping up things. The lady ahead of me at the checkout had dozens of packages of socks and multiple containers of deodorant! She was telling the register lady (I'm sorry - Sales Associate Person) that her family members were well prepared for whatever came, with all these clean socks and antiperspirant! I saw the Sales Associate Person roll her eyes when the customer wasn't looking.

Another shopper had her cart full of coffee creamer and jugs of vinegar - to the top full!. I didn't overhear her reasoning, nor did I want to.

"There were the usual line-ups at the gas stations, surprisingly thought, people were pretty good about it all.

Most people were more sensible about it, buying bottled water or water storage containers, or canned food.

There were the usual line-ups at the gas stations; surprisingly though, people were pretty good about it all. Walter had already filled up the vehicle and extra cans before the hurricane was even close.

I heard on the news how Home Depot and Lowes were sending in truck load after truck load of generators and other emergency related equipment. They sort of made it sound like they were being public spirited about it. Although to my way of thinking, they were taking full advantage of a good thing for their sales targets! I wonder how the price was compared to a few weeks ago.

"Walter and I will be fine as we are on higher ground well above surrounding water level, with the land sloping away from the house.

Walter and I should be fine as we are on higher ground well above any nearby water level, with the land sloping away from the house. He has the antennas lowered and secured, and we are hoping and praying for the best.

One of the many things I like about this time of the year is the maintenance we do together on the antennas. After we finish, it gives me a good feeling to know that, as far as communications go, we are ready for ol' man winter. Walter says the cord of seasoned hard wood he has stacked in the garage for emergency heat from the fireplace, feels like "money in the bank", especially in the middle of one of our winter blizzards.

Our children and grandchildren are doing reasonably OK. No one is hurting for work, or for food on the table. Money might be a little tight for some of them, but it could be a lot worse!

We might make another road trip somewhere later this fall, once hurricane season goes by and before the snow sets in. Haven't thought about where, but most likely it will be to the south. Walter has a couple of buddies from his days in the military, who are also hams, that he hasn't seen in a few years.

At our age, you can't put these visits off for too long. You never know!

FEATURE ARTICLE

A Suggestion for the Ham Shack

by Chuck - WD4HXG

Are you experiencing more forgetful moments? Does your rig seem to be losing power? Have you ever been participating on the Saturday morning net and your signal reports from other ops seem lower to prior nets? It can be maddening trying to determine if your station is transmitting as well as it did last week, last month, or last year.

Well, here is a suggestion for a low cost sanity check. Grab your Field Strength Meter (FSM) and check a couple of points around your QTH for the RF signal level.

- Find a clear frequency at a time when the band is dead.
- Prep the FSM with the portable antenna.
- Announce you are testing - i.e. "This is WQ1YZ testing".
- Place the rig in AM mode and hit the tune button.
- Leave the rig transmitting, take the FSM and walk outside to a preselected test site.
- Measure the Field Strength at your test site.
- Go back in the shack and announce, "WQ1YZ testing complete", then shut down the transmitter.
- Record your measurement.
- Repeat the measurement three more times spaced at ten minute intervals.

Now, when you are wondering if the transmit power is down or maybe if the antenna is changing into an attenuator, you can grab your FSM and compare apples and apples, while not wondering how the memory is working, as you have a written record and a simple set-up to bring objectivity to your observations.

If you need to buy a Field Strength Meter here are several possible sources:

1. Ham Radio Outlet has an Astatic PDC2 for about $27.
2. MFJ have their model MFJ-801 for around $30. Your favorite dealer may have a better price on it.
3. Amazon.Com list the Astatic PDC2 for under $23. They also list an Astatic PDC7 for $18.47 and an Astatic PDC1 for $16.08. Do a search on Amazon for Astatic PDC1 and all of the others will show up.
4. E-BAY lists various brands, some (or most) of which you have never heard of!

Figure 1 - MFJ-801 Field Strength Meter.

[**Editor's note** - You can make your own. Do a search on-line for articles.

VE1VQ had a series of articles beginning in the October 2007 Newsletter, following in the November issue, and with a correction in June 2008.

If you roll your own, be aware that 1N34A germanium diodes are hard to get these days. Seems a lot of them sold as such on E-BAY are actually floor sweepings of silicon diodes. Substitution of 1N5711 Schottkey diodes should work well, even giving you better sensitivity than a 1N34A.]

[**Another Editor's note** - if you hold the FSM while taking a reading, your hand and body position will affect the meter deflection. It is better to place the FSM somewhere and back away a body length or so. If the pick-up antenna length is adjustable, make a note of the extension height.

The first time you take a reading, make a mark on the case to indicate the adjustment knob setting. Then every time you recheck your transmitter power, set the knob to the same place.]

TECH AND OTHER STUFF

Some years back, I attended a MARA Southern Alberta annual meeting. One of the members had set up a portable HF station using an inverted-Vee with the center support made with fiberglass tent pole sections. I believe he said he had purchased them from Princess Auto (Canada's equivalent to Harbor Freight). Shortly after that meeting, I took a look at those same poles at the nearest P.A. outlet. The ones on the shelf were somewhat well past their prime, in hard shape with split ends and the outward appearance of having ultraviolet damage (faded surface color). So with that finding, my hopes of having that kind of antenna support disappeared.

A couple of months ago, in one of their regular fliers, I noted that those poles were on sale at $3.99 a four foot section, down from $4.99. I couldn't get there before the sale ended as we were headed back to the east coast. Recently, however, as if to reward my patience, they came on sale again at $3.99 per section. I dropped by the nearest store to take a look. The ones on the shelf were not the old faded and cracked ones from before. These appeared to be heavier made with thicker walls and ends. I left the store with ten sections, thanks to a gift card my kids had given me either for Christmas or a birthday..

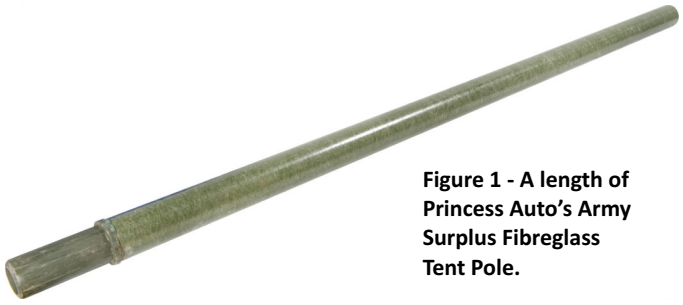


Figure 1 - A length of Princess Auto's Army Surplus Fibreglass Tent Pole.

Its official name is ***4 ft x 1-3/4 in. Army Surplus Fibreglass Tent Pole***. I did find some on-line places selling what looked similar. Do a search for "Army Surplus Fiberglass Tent Pole. ***EBAY*** has them in a kit for $75 US, and that much (or more) again for shipping.

It seems a little odd that there are accessories available on E-BAY for these fiberglass poles but very few sellers of the actual poles. Shipping costs may be prohibitive. Perhaps your local military surplus store might have them.

Figure 2 - A ground mount for the fiberglass poles is available on E-BAY. A spike on the under side of the blue plate holds it in place. Looks well made, and is certainly a great idea. It is priced at $59.99 US. Shipping is free in the USA.

I have some ideas about guying. One I found in a video about building a ***7 - band semi vertical trap antenna***, by Bob Rice, VE3HKY. The video is over an hour long as he goes into detail on how to build it with more or less common tools. At the one hour and five second mark, he describes how he made the tie points for the guy lines out of copper wire and hose clamps. Using this with fiberglass poles, I think I would use a protective layer under the clamps perhaps made from a band of bicycle inner tube (or something similar). This should keep the clamps from biting into the pole and the wire pressing directly into the fiberglass material.

Figure 3 - Two views of the guy line tie point made from copper wire and a hose clamp. Three of the formed wire pieces would be equally spaced around the clamp.

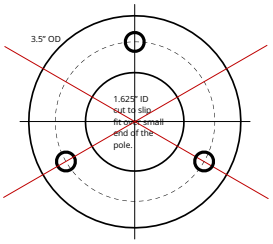
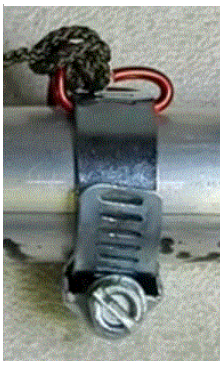


Figure 4 - Drawing of proposed guy line ring

The other idea I have is to make disks out of dollar store cutting boards with the center hole to pass fit the smaller diameter end of the pole. See Figure 4. Besides being inexpensive, these boards are also fairly thin, so they wouldn't take up much of the length of the joint section and reduce junction strength.



For those of you who have been following along over the years with my antenna experiments, you

will remember I've been using a collapsible fiberglass kite pole. One of its properties is of course, that it collapses into a very short length. Sometimes, it collapses all by itself, usually when you don't want it to happen! So when the chance to pick up these improved poles from Princess Auto came along, I took it.

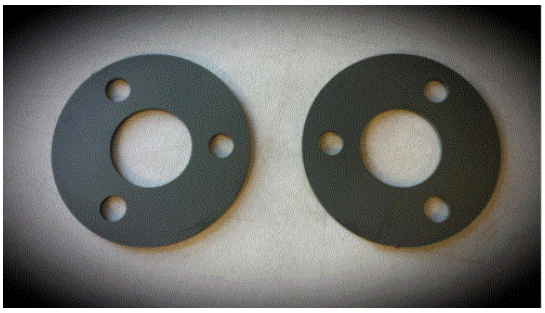


Figure 5 - Steel guy line rings available for the fiber-glass poles on E-BAY

These tent poles will give me a sturdier "platform" upon which to experiment with more and different wire antennas.

There are concerns about using these poles long term. Ultraviolet exposure over time will degrade their strength and make them brittle. Several on-line sites I looked at suggested brushing or spraying them with paint or a clear coat finish to prevent this damage. In my case, they will not be used in a permanent installation, but only for temporary situations of less than forty eight hours at a time - think Field Day.

TRAPPED DIPOLE ANTENNA

I haven't forgotten the nearly completed, trapped dipole from ***Pacific Antenna/QRP Kits***. I just haven't found the time to do the final length adjustments. As soon as I do, I'll report my findings here.

REPORT OF THE

ANNUAL MEETING

The annual meeting of the North East Mercury Amateur Radio Association was held on the 29th of September, 2018 beginning at around 10:25 AM Eastern, after nearly a half hour's worth of technical difficulty with SKYPE.

Present were
Chuck - WD4HXG
Bruce - N3IA
Charlie - WB4FLM
Dave - N3GRH
Harvey - KB8MUP
Pat - KB8TME
Dave - VE1VQ

WD4XHG, as president, presided over the meeting. He determined that there was not a sufficient number of members on hand to constitute a quorum, so that any business discussed could not be voted upon. Discussion followed on the items below:

1. It is proposed that we re-establish the time for the annual meeting, in the spring season of the year. The date suggested was the Saturday following the spring Conference weekend of The Church of Jesus Christ of Latter-Day Saints.

2. It is proposed that we set the date for the 2019 Annual Meeting as the 13th of April, 2019.

3. It is proposed that the wording of Article VI - Amendments be changed from "…all members have been notified by mail of the intent to amend the constitution and/or By-laws at said meeting." to read all members have been notified by e-mail of the intent to amend the constitution and/or By-laws at said meeting."

4. It is proposed that if a general annual meeting has not been called by the date in item #1 for a given year, that the general membership may initiate a general annual meeting without approval of the Board or the Executive.

The above proposals were agreed to by all present.

Since there was a quorum of the Board of Directors present

5. Charlie, WB4FLM, was reaffirmed as the HF 75 meter net control station.

6. Steve, K2KEL, was declared re-elected as Vice-President and

7. Dave, VE1VQ, was declared re-elected as Secretary.

Charlie, for a period not to exceed infinity, and Steve and Dave for a period of two years.

Chuck will do a mailing (USPS) to all members listed on the membership page at this time, advising them of the April 2019 annual general meeting and inviting them to attend (by SKYPE or other electronic means). It will be suggested in the letter that if they cannot attend, that they allow their vote on the items (to be listed in the letter to them) to be cast by proxy by someone of their choosing, who will be attending.

The meeting adjourned around 11:45 AM.

CQ-CQ-CQ-CQ-CQ-CQ

LATTER-DAY SAINT
AMATEUR RADIO OPERATORS

If you are an amateur radio (ham radio) operator and a member of The Church of Jesus Christ of Latter-Day Saints, we would like to hear from you!

We are the Mercury Amateur Radio Association (or MARA), formerly the emergency communication arm of the Church. With the changes in policy over the years, we are no longer associated with the Church in any capacity. Instead, we are a social group made up of members of the Church and their friends who are amateur radio operators.

If you have an interest in finding out more about MARA or if you are simply interested in learning about amateur radio, please contact us.

By e-mail - ve1vq@eastlink.ca

By HF radio - Saturday mornings - informal round table starts at 0630 Eastern with formal net beginning at 0715 Eastern on 3.8725 MHz SSB. No time shift for Standard or Daylight Savings.

If you choose to join us, there are no dues - and we will never ever send missionaries to your ham shack!

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Here is the MARA notice you can print out and pin to your ward or branch chapel notice board.

Use the one that best suits the space available to you, or you may enlarge or reduce the size to suit.

Unless you are the Bishop, the Branch President, or the building representative, it is always best to ask for permission to post it. Doing this keeps toes from feeling like they have been stepped upon.

The Mercury Microvolt Newsletter is always looking for articles or pictures of interest to LDS Hams.

If you have a radio related project, or simply something you think might be of interest to the readers, please contact Dave at VE1VQ@eastlink.ca

Perhaps it's an antenna you made or a new station you assembled, a two meter mobile installation, a new handheld or an HF rig you bought, a field day operation or a mini DX-pedition to the field behind your house that you could write about. Whatever it is, we would sure like to hear about it.

QUOTE OF THE MONTH

"Perfection is not attainable, but if we chase perfection we can catch excellence."

Vince Lombardi

DI-DAH-DI-DAH DIT

For me, much of the fun of building anything is in the planning and preparation. Take the fiberglass tent poles. Finding out how others use them, or put them up so they don't fall down, is of great interest to me. Designing and making the guy rings out of an old plastic cutting board, or figuring out how to string wire from the top of the pole, or how to fit it all in my back yard. Visiting Harbor Freight and Princess Auto and looking for the parts I need to make a base of some kind. These are a major component of the enjoyment. Another part will be assembling it for the first time, stringing wire from my shack in the basement, running tests to see where it is resonant, and taking pictures of it all. Then, writing about it for the newsletter. Actually using it to operate is sort of an anticlimax.

Fall/winter is upon us here is southern Alberta. We've had a couple of nights of snow already with amounts in the 2-3 inch range. In other parts of the province, there has been more than that. This weeks temperatures ranged plus and minus around the freezing mark. Unless we get some sort of reprieve with more seasonable (milder) pre-winter weather, my "window" for antenna experimenting may be about to close.

I suppose if winter comes early, I'll just have more time for anticipation. The problem there is that I have several projects that will come to a halt until warmer weather in the spring. The main rig has been repaired and is ready to go - or at least ready for on-the-air testing - but still no antenna I can use.

All in all though, life is good. I have things to look forward to doing!

Until next month,
VE1VQ