



NEWSLETTER

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Mercury Amateur Radio Association - MARA - North America - North East

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E-mail your comments, ideas, or submissions to marane@mara.net

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VIEW FROM THE TOWER

Here in the Philadelphia region, we are preparing for a regional emergency communications drill comprising the Cherry Hill, Philadelphia, Reading, Valley Forge, and Wilmington Stakes. This will be our second drill involving Church leadership, and an attempt to staff all facilities in the Philadelphia Stake. While we now have 10 units in the stake, we only have 5 buildings, though we have one in construction and of course one announced at General Conference. This is a planned effort with some scripted messaging as we, I believe, are past crawling, and starting to walk, but are still far from the “run and not be weary” we need to eventually be.

As stated in our MARA-NE Constitution **“It shall be our purpose to further the exchange of information and cooperation between members; to promote radio knowledge, fraternalism and individual operating efficiency; to conduct programs and activities to advance use of Amateur Radio for emergency communications for units of the LDS Church...”**. I have observed that there are varying levels of interest and commitment among those who have expressed interest in becoming ham operators in our stake; very much the same as in anything in life. We bring the instruction, the knowledge to the learned, and are therefore obliged to use whatever teaching techniques are required by the eager learned to inculcate the necessary concepts. But there comes a time where we have done all we can and the learner must accept the responsibility of obtaining and retaining the information. As we obtain knowledge, and in the future try to pass that knowledge on to someone else, we usually say “I learned”, and less likely “so-and-so taught me.” This shows the necessary step of internalizing what was learned.

... there are varying levels of interest and commitment among those who have expressed interest in becoming ham operators ...

We may be charged with a general area of preparedness, but it is the individual’s own preparedness which accomplishes the goal. It is unlikely, not to mention imprudent, that any of us will have the resources to single-handedly provide emergency communications for our stake or even our ward. This is a cooperative effort based on a com-

mitment of several people to personal preparedness that the wide need might be served. Each prospective operator will have their own strengths and weaknesses. Some will become full blown Amateur Extra operators with an extensive station of high quality gear, while others will become licensed and act as operators supporting those with gear being deployed to a service area. It is certainly not necessary to have twelve operators with radios all deploy to the same location. The goal is in the balance, having sufficient equipment in the field that someone can get radios to the support location and set up communications, and in the proper training of the unequipped and providing for their skills to be exercised so that they will be effective operators when needed.

We also have the opportunity to engage other Hams outside our Church circles, and participate at the community level, and as Hams in community service, interact with others even outside the Ham community. This is an opportunity to put a positive light on amateur radio and the Church, so long as we maintain the high standards required to generate positive light. So, go forth and Ham it up. Have fun and participate.

I look forward the hearing you all on the Saturday morning net.

73
Bruce, N3IA

ADVENTURES OF A NEW HAM by N3IA

PART 2 - REIGNING IN THE PARADE

I have intentionally NOT gone into detail on the plethora of antennas, lines, masts, etc., I have acquired in the last two years, which I am certain would bring terror to any of our spouses who might come across this writing. The point is, I am now trying to draw back in, to center on what it is I am going to concentrate on. I had gone in so many directions, and there are so many different facets to explore, that I was in danger of becoming a Ham of all trades, and master of none.

I have come to the conclusion that scenario based planning is the best limiter of scope.

Scenario #1 -- I imagine, for example, an ice storm.

Characteristics: Wide scale power outages, and limited travel.

Likely situations: no heat (electricity runs the oil burning forced air furnace and thermostat. No cooking on electric stove.

Mitigation: I have resources (developed through this process) of Kerosene heater and Coleman stove. I think we'll be ok for a day or two at least. No need to evacuate yet. I have a fully charged battery for radio and a no-electricity-required phone on copper wire line (should work).

First Actions: Check on my home teaching families. Monitor 444.2 MHz (BEARS) for LDS EmComm activation.

Ham Operating Needs: Radio, Backup power source, Charging method if the outage is prolonged. If communication from ward meeting house is needed: all the above plus - Emergency Antenna, Emergency food.

From this you can draw an equipment list: Dual band radio, Battery (specify capacity), Solar Charger, Dual band J-pole antenna or better, mast, low loss coax, emergency communication plan documents, 72 hour kit.

Scenario #2 – Widespread Hurricane Damage (It's an east coast thing)

Characteristics: Some mortality, substantial displacement of individuals and families, damaged infrastructure and no commercial or public services.

Likely situations: No fuel, no food, no water, limited usable shelter. Mandatory evacuation from my mobile home, wide scale power outages, flooding, road closures, etc.

First Actions: Assure my family's safety. Coordinate with the Bishop on communication needs. Check on my home teaching families. Monitor 444.2 MHz (Bears) for LDS EmComm activation. Be prepared for simplex VHF and/or UHF, and HF operation if repeater systems are out of service.

Ham Operating Needs: Radio, Grounding kit, Backup power source, Charging method for prolonged outage, followed by periods of intermittent service. Emergency Antennas, Emergency food and water.

Equipment List: (yours to decide)

You can come up with scenarios which are applicable to your area and situation. My exercises have led me to pre-position HF antenna support lines in trees at several

ward buildings. Your situation may allow installation of an antenna in a ward building.

Now these are the emergency communication preparations I have undertaken personally, but suppose you have a broader responsibility.

My next challenge was how to build from the three (me included) Hams in the Stake, to the suggested four per ward. Of course, I started with my best friend Jeff, who got the study guides and I talked ham with, and who I pestered about getting his ticket, until he surprised me at a dinner out, when I asked again when he would get his ticket, and he whipped his CSCE (Certificate of Successful Completion of Examination).

I began to visit the wards and develop interest among the members. I was able to direct the first group to a Ham Technician class offered by one of the Ham clubs. Of the five who started, four completed the course and got their Technician license. A good start, but the time commitment was more than many can make. The next hurdle is equipment. Only two are on the air, and then not widely.

...more on training next month

CULTURED CORNER

ODE TO A TOOL

*What is it with the tool you have?
It's never the right one to use
It matters not how much you try
Just leaves you making an excuse*

*Your wife does not believe you when
You say job can't be done right now
You have to visit Home Depot
To find the tool the cat's miaow*

*So off you go to seek the thing
That will make for job perfection
Up and down every isle in turn
As you search for satisfaction*

*You leave the store with tool in hand
And head home for the completion
Of your weekend honey-do list
And another tool acquisition*

Anonymous MARA Member

GRANDMA MARA'S CORNER

HAPPY ENDING - HAM BLISS AGAIN

At last Grandma gets some good news about her counselling efforts to help a young xyl and her ham husband.

Dear Grandma Mara,

Good news! I wasn't at all sure of the final outcome but I took your advice, with a lot of trepidation, and bought my husband a QRP kit.

You would think he had won the lottery (not that we buy lottery tickets!) by the look on his face when he opened it last Saturday. He immediately ran to his "shack" (coming back to give me a kiss - blush!) and dug out his soldering iron. Other than to come out for bandages for some minor burns, I didn't see him (not even for food!) all day.

I'm so glad I decided to follow your advice (even though I had my doubts!). Later that evening I heard morse code noises coming from the basement. He is so proud of his accomplishment. Our marriage is back on track again.

Signed,
No longer desperate XYL

P.S. I'm enclosing a picture of him working on his first kit. If you look closely you can see the first aid to his right hand.



P.P.S. I've already ordered him another kit!

Grandma replies...

Dear No Longer Desperate,

I'm so happy for you, dear. That advanced home correspondence course on marriage counselling from Podunk Univeristy (good old P.U.!) that Grandma took many years ago came in handy after all. I always say that nothing you ever learn in life goes to waste. Comes in handy for someone sometime, if not for yourself.

Signed,

TECH STUFF by VE1VQ

TOOLS

My theory about buying a tool is simple – buy the best tool you can afford for the job at hand. For some things, a cheap tool will suffice; perhaps you are only going to use it once for the one job. But if it is for use more than once, then refer to my theory above. Getting a better quality tool generally means doing a better quality job. Of course, that all flies out the window if you don't know how to use the tool. The old saying, "it's a poor workman who blames his tools", is very true if you haven't learned how to use the tool in the first place, and then blame it when the job is botched.

For most home or ham tasks you don't need professional grade tools.

You don't necessarily need professional grade tools. Middle level will probably last as long as you will use them around the house and shack. [CRAFTSMAN](#) brand from Sears is an example of this type of quality (they also have a good warranty!). Stay away from the Wal-Mart grade of tools. Be very suspicious of any tool if it says "Made in China"! If you are in the market for higher quality tools and tool kits then a few other sources are [JENSEN TOOLS](#), [KLEIN](#), [PROTO](#), and [SNAP-ON TOOLS](#).

BASIC TOOLS

For any electronics and electrical work around the house or shack you will need a few basic tools. There are always things to take apart or tighten up or put back together.

If you can - wait for sales! It's always easier to justify buying a tool (or a toy!) if you can find it at a lower price. Not only do you have the fun of buying the tool but you also have the joy of saving money on the deal! The ultimate in tool ecstasy is finding the tool you desperately need on sale the day you need it!

To start, a magnetic screwdriver kit is the way to go.



With one of these you get all of the common screwdriver tips that will handle most of the jobs you find yourself doing. After that, buy extra tips as required.

The nice thing about a magnetic screwdriver is the fact that it (hopefully) prevents dropping a removed screw into the innards of a piece of equipment you are working upon.

A personal experience - I had been taught, when working around computers, never to use any magnetic tool, to prevent damage to diskettes and hard drives. One day, I was working on a laser printer, and was putting the last screw back in (with a non-magnetic screwdriver) when it fell down inside. I turned the printer over and managed to shake it loose. The second time the screw fell inside, it did not shake loose, and so I had to strip the printer down to find it. I went out the next day and bought my first magnetic screwdriver. That was some 25-30 years ago and I have never been without at least one since, and I have never had a problem with magnetic tools around computers. I also make it a point not to lay magnetic things on top of hard drives or diskettes!

The next basic tool is a pair of needle nose pliers. These are used to hold and position small parts or hardware, for bending component leads in preparation for soldering, and for pulling splinters out of your fingers and hands.



Channel lock pliers are not intended for the tiny jobs like holding surface mount components, but for the awkward-to-hold things that need restraining or tightening.



Channels or grooves in the handles allow for adjusting the size of the pliers to fit the object. Care must be taken to avoid marring the surface of the item being held.

Buy yourself a good pair of wire cutters and don't abuse them by cutting anything harder than small copper wire. Trying to cut something more substantial will result in a notch in the blades rendering them next to useless. A good pair will cut a human hair anywhere along

the cutting edges with very little force. A good general size is the 5-inch version.



Practice until you can strip insulation from hook-up wire without nicking the copper. Using light hand pressure, score the covering, rotating slightly with each squeeze. Hold the cutters closed enough to almost touch the copper and pull the insulation towards and off the end of the wire.

An adjustable spanner wrench, also called a crescent wrench, is set to size by a thumb wheel. Care must be taken to properly adjust the jaws so that the wrench does not slip and round the corners of the nut being loosened or tightened. A six-inch version will handle a lot of different jobs.



An inexpensive tool, the box cutter, has many uses around the shack - from stripping coaxial cable, trimming cutouts in plastic project boxes, to breaking down cardboard boxes. Get one with a retractable blade with snap off sections.

A 25-30 watt soldering iron will do for most jobs around the shack. The one shown here is a [WELLER SP-23L](#). If you want to spend a bit more money, buy a variable wattage unit such as the 5-40 watt Weller WLC-100.



When the phrase "never send a boy to do a man's job"* comes to mind, in reference to a soldering task, this is the tool to use. Large items to be soldered or outdoor soldering on cold days suck the heat away very quickly. Choose a gun with enough reserve for the task.

The WELLER 8200 (shown here) is a 100/140 watt gun

that I have is more than forty years old. I bought it in the mid 1960's complete with storage case, a flux brush, and coil of solder, paying something like \$7.95 for



it. Over the years I've replaced the case sides (several times), trigger, AC cord, lamp, and of course the tips. I've dropped it on concrete, stuck the case pieces back together with electrical tape, and kept on working.

For heavier jobs such as soldering PL259 coaxial connectors, I have a second gun with more power, similar to the WELLER D650 (200/300 watt). If you have to solder antenna wire outside in the winter you may even have to use a propane torch.

With any of these soldering guns, periodically loosen and retighten the nuts or screws holding the tip to overcome any oxidation (increased resistance = less current flow = less heat).

My all-time favorite tool is the [GERBER](#) multipurpose model 400. Sort of like a Swiss Army Knife but with real tools, not the flimsy things you get on a Swiss. Until I used a good one, I always thought these tools were gimmicky. The ones I had tied were poorly constructed and cheaply made; a tool that sort of did almost everything but did nothing very well. The multi-purpose tools made by reputable companies do a lot of things well!



Other companies, such as [LEATHERMAN](#), make similar tools. Pick the one you like best. I'm not real fond of stainless steel knife blades but that seems to be all you can get on these tools. Yes, I know stainless steel blades have come a long way, but I'm a traditionalist and I think you can get a better edge on a carbon steel blade. However, no one asked for my opinion, and so we're stuck with stainless.

OTHER TOOLS

After you have the basic tools consider adding others to your tool box as you need them.

Needle nose pliers are ok for holding nuts while you tighten up the screws but sooner or later they will slip and mar the finished surface. That is when you wish you had



used a nut driver. A nut driver is simply a socket with a shaft and handle. Perhaps a more versatile substitute for nut drivers is a quarter-inch handle and separate sockets in standard and metric. These may be bulkier than dedicated nut drivers. Add a ratchet handle for harder jobs.

For heavier cutting chores, pick up a set of linesmen's pliers in the 8-inch size. These will take care of the larger wire size necessary for wiring the power outlet for your megawatt linear amplifier.



Obviously there are more tools available than you can fit in your toolbox. Like your toolbox we have space in this newsletter for only a few. The ones I have mentioned are the ones that do the most work for me around the house, and the shack. If you have a favorite not mentioned here, drop me a note and let me know. We can have them in a future TECH STUFF column.

* In these days of political correctness, the saying should probably read "never send a young person of unknown gender and of lesser strength, experience and wisdom to do the task, either unknown or understood, of an older person of unknown gender but with greater strength, experience and wisdom". Of course, that may offend other persons of unknown age, gender, strength, experience and/or wisdom. I must say this political correctness is difficult to keep straight, and that it certainly loses something in its "correctness"; sort of like newer versions of the Bible.

- Ed



WINTERIZE YOUR ANTENNAS

On the Saturday morning of October General Conference I was getting in the last of my winter's firewood supply. During one of the trips from the woodpile in the back field to the house, I glanced up at one of the loop antenna support points and noticed what appeared to be stuff hanging from the shock cord! The same sight existed at all of the other points. Time for some pre-winter repairs.

Fortunately I had picked up some 36" shock cords at the hardware store a few weeks before. It was a (relatively) simple matter to lower the loop support ropes, remove the old cords (which had disintegrated, leaving only the backup line) and replace them.

If the support lines are over tree limbs, like mine are, it

doesn't hurt to lower them a bit every once in a while to make sure they are not growing into the wood.

You may already have checked and prepared your antenna/s for the coming winter season, but if you haven't now might be a good time to take a look, before the snow flies ...



NETS

MARA NE	0730 HRS EASTERN
MARA MW	0800 HRS EASTERN
MARA SE	0830 HRS EASTERN

These nets are on 3.8725 MHz or downwards in frequency, depending on interference.

WASHINGTON STOREHOUSE NET - held on the first Sunday of each month - 2000 hours local on 3.878 MHz +/- QRM

If you know of any other net, pass it along to us.



MARK IT ON YOUR CALENDARS



May 2nd 2009 for the MARA NorthEast Annual Meeting at the Nazareth Ward, Scranton PA Stake

SWAP SHOP

List your items you wish to buy, sell, trade, or give away, at "no charge"!

CHANGES

For those of you who may be interested about such things, last month we changed the fonts used in the newsletter from TIMES NEW ROMAN for text and ARIAL for headings to LIBERATION SERIF and LIBERATION SANS respectively, to provide a more readable and consistent "look". This month we've switched to a different desktop publishing program for better layout and design control. It also lets us make the final PDF file smaller for faster loading. We hope you like the changes.

DI-DAH-DI-DAH-DIT

Just as some people can't pass a yard sale or flea market without applying the brakes, I'm a sucker for a tool store. Doesn't matter what kind of tools; hand, power, automotive, garden, I'll wander the isles even when I'm not in the market for a specific tool. After all, you never know what you might really need until you see it!

I used to do business at a nearby general hardware store owned by an old guy and his son. You generally had to ask for something because it got put where ever there was space at the time it came in. It was always an adventure to walk into that store. I opened a charge account on a handshake. He said he knew my father and my grandfather and that was good enough for him. Sadly the owners have long since died and the business has closed down.

Up here above the 49th parallel, we have a chain of stores called [PRINCESS AUTO](#). Despite the name they are not car or truck dealers but carry general tools, both power and hand, a lot of hydraulic supplies, spray paint and body repair equipment, generators, parts to build wood splitters and trailers - well, you get the picture. In the back of each store they have the surplus stuff that doesn't fit out front. I guess this is stuff they bought thinking someone might want it. Sometime when you can't find what you want anywhere else, you discover it here.

A lot of their product is "Made in China" and because of this, the price is generally low and the quality suspect. I don't buy a lot of tools from them but that doesn't stop me from looking. Their motto is, "No sale is final until you're satisfied". A good company to deal with.

Another place that I like is [LEE VALLEY](#). They specialize in woodworking and gardening hand powered tools and materials. While they supply things for powered tools they don't sell the tools themselves. They will ship to the United States. Their catalogs are high class and written with the occasional sense of humor showing through. I keep a copy in the bathroom for those occasions that call for quality reading time. They carry a better class of merchandise and their prices reflect it. Part of their policy from their web site states, "...most of you will spend as much money with us as you can afford so we want to give you good advice, to give you the best value and thereby guarantee ourselves a low rate of product returns. It is best for both of us if we get it right the first time around".

NEXT MONTH...

PART 3 OF N3IA's SERIES - ADVENTURES OF A NEW HAM

When it comes to tools, find the best quality tool for the best price and the job.

Both of these companies are nationwide, yet somehow they've managed to keep some of the friendly feeling of a locally owned and operated business – unlike some of the “big box” outfits where you can never seem to find a staff person or if you do, it's only their back that you see as they disappear through a door marked “staff only”!

Whether or not you feel about tool stores as I do, and wherever you might purchase your tools, the idea is to find the best quality for the price and the job; and one with a good return policy if it fails. If you can do business with your local hardware store so much the better. Over time, you will be helping out a local business and establishing a friendship with one of your neighbors. If like most places now, the small local store has gone the way of transmitters with tubes, you have no choice but to visit the chain store. Make friends with the staff and you'll get better treatment and service. After all, you can't have too many friends – or too many tools!

Until next month,
VE1VQ

ar