

The NEWSLETTER

OCTOBER 2014 VOLUME 14, No. 9

Mercury Amateur Radio Association - MARA

North America - North East



OCTOBER

DON'T FORGET!



ANNUAL MEETING - OCTOBER 11 at 9 AM EASTERN on SKYPE

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

E-mail your comments, ideas, or submissions to marane@mara.net or to ve1vq@eastlink.ca

2014 ANNUAL MEETING

If and when you sign into the annual meeting on SKYPE, *turn OFF your video*. Under certain (unknown and seemingly random) conditions, if the connected parties are running both audio and video the whole thing can freeze up. The video hogs the bandwidth.

PROPOSED AGENDA

- OPENING REMARKS BY PRESIDING OFFICER
- OPENING PRAYER
- READING OF MINUTES FROM PREVIOUS MEETING
- TREASURER'S REPORT
- APPROVAL OF MEMBERS
- ELECTION OF BOARD OF DIRECTORS
 - FOR SIX YEAR TERMS
 - DIRECTOR 1
 - DIRECTOR 2
 - FOR A SINGLE YEAR TERM TO FILL POSITION LEFT VACANT BY THE DEATH OF K3DEY
 - DIRECTOR 3
 - CALL FOR NOMINATIONS
- ELECTION OF OFFICERS
 1. PRESIDENT - TERM OF THREE YEARS.
 2. VICE PRESIDENT - TERM OF TWO YEARS.
 3. SECRETARY - TERM OF TWO YEARS
 4. *TREASURER - TERM OF TWO YEARS*
 - CALL FOR NOMINATIONS

- BUSINESS:

Item 1 - proposed that we instruct the Treasurer (N3HS) to issue a check to The Church of Jesus Christ of Latter-Day Saints' Perpetual Education Fund in the name of the Mercury Amateur Radio Association - Northeast, for the full amount in the bank account.

Item 2 - proposed that with the action in item 1, that we officially close said bank account.

Item 3 - proposed that because N3HS has repeatedly asked, for health reasons, to be released from the office of Treasurer, that we do so immediately, and that we issue a vote of thanks to Stan for his service as Treasurer,

and further that we leave the office vacant until such time as we require a Treasurer.

- OTHER BUSINESS:
- OPEN THE MEETING FOR QUESTIONS OR COMMENTS
- CLOSING PRAYER

Dave
VE1VQ
SECRETARY, MARA Northeast

IF IT COMES DOWN TO A VOTE

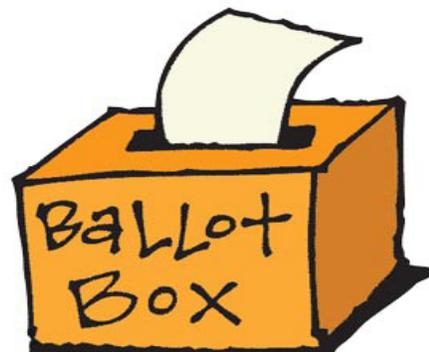
While I don't expect a stampede of last minute candidates for the open positions of MARA NE, if it should happen that more than one person is vying for a single spot, I suggest we conduct our voting by e-mailing Charlie, WB4FLM, during the meeting with our choice or choices.

Let's say we have four individuals wanting to fill the three open director's positions. Each of the current membership wishing to vote would send Charlie an e-mail with three names. The person having the most votes takes the Director 1 spot, the person having the second most votes becomes Director 2, while the person with the third largest total becomes Director 3.

If we have two trying for the office of President, and VP's spot is open with no one after it, the person having the most votes becomes President and the runner up takes the VP's spot.

Charlie's e-mail address is chuck@b2xonline.com

Dave
VE1VQ
SECRETARY, MARA Northeast



Grandma Mara's RAMBLINGS

TECH AND OTHER STUFF

by VE1VQ

When you read this month's column, I will (hopefully) have just recently arrived home and be recuperating from my first experience with **union surgery**. The doctor tells me that I will be going home the same day. No more week in the hospital (or even overnight!) to recover. While individual people in the medical system may have sympathy, the "system" sure doesn't. At least, not without a big fat bill at the end. The sawbones says the first week following "is not going to be pleasant" and that I won't feel like doing much except whining and complaining. Already I have the prescription filled for the pain killer pills.



I have a dozen or so books downloaded to my tablet that I've been meaning to read for some time. I'll certainly have the free time. Walter also brought a temporary coax line from the ham shack into the bedroom and will be connecting his qrp rig up for me to listen around the bands, and perhaps make a few CW contacts if the fancy strikes me.

We've stocked up stuff in the freezer for meals ready to pop in the oven or microwave. Not that Walter can't cook! He is actually quite a good cook, having lived on his own for several years after his wife died. However, since I do most of the cooking for us, it just seemed normal to have stuff ready in advance.

You all know how it is - if the wife is incapacitated, the Relief Society gals all rush to the house with hamburger **casseroles**, **funeral potatoes**, and **Jell-o** salads. If it's the husband who is out sick - does the same thing happen? - not on your life! Anyway, Walter is not all that keen on Jell-o.

And yes, I have my bell all ready to summon Walter to my bedside, should I need assistance, and fresh batteries in my two meter handheld, in case he's out of bell range.



AR

The audio frequency peak of a received signal in the **TenTec 506's** receiver is nothing fantastic. While the medium and narrow filter settings do cut out a lot of nearby CW signals and overlapping QRN, it never seemed that I could get it quite right for my ears. In the few times I've operated used the narrowest setting, it was like it wasn't peaking at a low enough frequency. Used to be, in the old days, (listen up all you youngsters out there) a 1000 Hz tone was what you tried to copy.

Nowadays, the trend is lower, typically between 500-800 Hz, making it easier on the ears. Recently, I posted this problem on the TT Rebel 506 e-mail reflector, and had my suspicions confirmed.

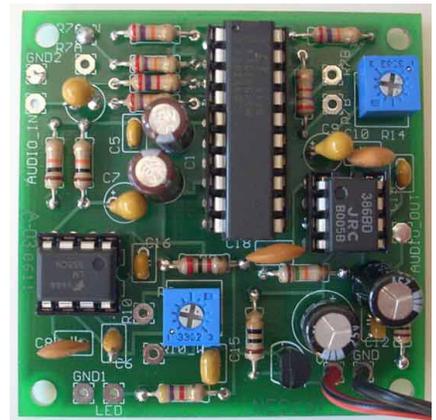
Seems the filter is a four-pole and 700 Hz is in the tail of the filter.

If they lowered the filter frequency to better fit the 700 Hz, they had a problem with opposite side signal rejection. For the price of the rig and the physical size of it, I'm not about to complain. After all, we're looking at \$199 for this neat little rig, not \$1999.

What to do?

Right around the same time, there was a thread on the 506 reflector about SCAFs (Switched Capacitive Audio Filter) and their use with the Rebel. There are several designs around, but the one I chose was the NESCAF from the **New England QRP Club**. A kit with printed circuit board, and all the parts is \$31. An additional \$4 gets you the necessary connectors. So for \$35

(shipping included) the nice mail person brings the SCAF kit and connectors to a mailbox near you. In my case, the trip from New Hampshire to Nova Scotia took seven



The populated circuit board of the New England QRP Club's Switched Capacitive Audio Filter. Photo from NewEnglandQRP.org

The kit is entirely through-hole construction - not a surface mount part to be seen.

days.

The quality of the kit as a whole and the printed circuit board in particular is first class. The kit is entirely through-hole construction - not a surface mount part to be seen. IC sockets are not provided but for ease in future trouble-shooting you should use them. You have to supply your own case - for \$31, what do you expect! The manual can be downloaded from the NE QRP web site at http://newenglandqrp.org/files/NEScaf_201107.pdf. Assembly of the board took about four hours. My eyes not being as young as they used to be, I have to use a magnifying glass to read the color codes on the resistors, or the printing on the capacitors. I find I also need a lot more light than I used to. Case preparation and component mounting took another couple of hours.

The **LTC1060 integrated circuit** at the heart of the device has two sections configured as **Butterworth bandpass** filters in cascade. The circuit "has two panel-mounted controls — a single center-detent potentiometer that sets the center frequency of the filter's bandpass (default value settable between ~415Hz and ~1kHz), and a dual-ganged potentiometer that provides a continuously variable bandwidth control (from ~60Hz to ~1500Hz). This ability to smoothly vary the bandwidth is very useful."

There are two adjustable potentiometers on the board. One sets the frequency for the detent position of the case mounted pot. The other adjusts the audio level into the filter's audio output amplifier, letting you set the level for unity or whatever gain you desire.

Years ago, long before **DSP** (digital signal processing) became available, attempts at making filters from discrete components in the low IF and audio paths were common (but not all that great!). Crystal and mechanical filters were something you read (and dreamed) about in Collins advertisements. In an effort to improve things, it became commonplace for amateurs to add an external audio filter, either

active or passive, in an attempt to separate out a single CW or voice signal from the crowded bands. Earlier active methods such as

the **Q-Multiplier** using tubes, were popular. MFJ had its **CWF-2** audio filter in the '70s. On the passive side, tuned transformers and **toriods** were put to use.

Now with an audio filter such as the New England QRP Club's NESCAF, CW operation is as easy turning a single

This ability to smoothly vary the bandwidth is very useful.

Almost makes me wish I was still using my old 40-meter Command receiver.

control to go from listen-to-many down to listen-to-one.

Almost makes me wish I was still using my old 40-meter Command receiver. AR

QUOTE OF THE MONTH

"The wireless telegraph is not difficult to understand. The ordinary telegraph is like a very long cat. You pull the tail in New York and it meows in Los Angeles. The wireless is the same, only without the cat."

Albert Einstein



DI-DAH-DI-DAH ^D_I

So, if MARA, in all its divisions, forms and incarnations, is no longer providing emergency communications for the Church in any way - what exactly are we? What is our reason for being?

From speaking with LDS amateur radio operators, in person, by phone, and by e-mail over the years, I've gotten more questions than real answers. Some are still trying to figure out what happened and why, even though

it has been nearly two decades since the separation of Church and MARA. Some are still hoping that MARA will be “recalled to action”; however that number dwindles as older members with long memories have become **silent keys** over the passing years. Others have come to the realization that it is now nothing more than a social organization of hams who are largely members of the LDS Church. And there are those who have discovered MARA in recent years who wonder what all the fuss is about.

There was a thought tossed around a while ago about being a source of emergency communications trained amateur radio ops feeding into the Church’s emergency communications system. Since the responsibility of having a communications specialist in a Stake (or ward) falls to the Stake President (or Bishop), and since most leaders are unaware of the existence of MARA, that is unlikely to happen. Still, even if your Stake President is ignorant of the fact that you are a member of a MARA group or that MARA even exists, a Higher Power certainly does know!

While we hams may think that amateur radio solves all emergency communications problems, there are other options for Church leaders in times of emergency...

There is no requirement for the branch, ward, or stake emergency communication individual to be an amateur. While we hams may think that amateur radio solves all emergency communications problems, there are other options for Church leaders in times of crisis, depending to whom and where the information has to be sent. It behooves any good communications person to be aware of them, and to use the one best suited to communicate what needs to be communicated to the right individual, in the most intelligent manner, and in the shortest time possible.

So, while some may still pine for the good old days, there is definitely a place for a social group/network of LDS amateur radio operators. And yes, perhaps someday we will fill positions in the Church’s “official” emergency communications network, but even if we never have an EmComm calling, we can still derive a whole lot of pleasure from being both a Latter-Day Saint and a ham, and associating with those of a similar bent.

Until next month,

VE1VQ