



SQUELCH TALES

Newsletter from the Merrymeeting Amateur Radio Assoc. for March 2000

Big Crowd at Bath Exam

The afternoon of February, Friday the 18th brought us one of the heaviest snowstorms of the season. E-mail was flying between the VEs and the Salvation Army folks to see if the Ham exam session would be called off the next morning. Robin, N1NFK said she passed out the word "rain or shine," so I guess that meant snow too.

Saturday morning arrived and the snow was still coming down but had slowed up enough to get all the VEs there just before 10 AM. At 10 the conference room had 6 VEs and 18 test takers. The testing took off with a fervor. Two folks were there to take a CW test, one for 20 wpm and one for 5 wpm. All the rest were there to take written elements only.

A little after the noon hour the session ended. Four folks upgraded and sixteen elements were passed. Kudos' go to MARA member Andy Cote, KB1CGJ who passed his 5-WPM code exam on the first try and received his Tech Plus upgrade. In addition he also passed his General Class written element, so come April 15 he can start looking for another VE testing session to get his upgrade to General.

With restructuring, all of you with General and Advanced class licensed should take a try at the Extra class. After April 15 (Tax Due Day) all you need to do is pass the Extra class written element and you will get an Extra class ticket. With the Extra comes ALL amateur privileges and the chance to go after one of those funny 1X2 or 2X1 call signs if you are a mind.

A good place to find the new question pool (after April 15th questions) and practice exams, checkout: www.clicktron.com/ham/index.html it is part of the QRZ Callbook service.

MARA HAS NEW WEB PAGE

Thanks to the efforts of MARA's Web Site Guru, Mark Rideout, N1JIM the club web site is being rebuilt and updated. It looks pretty spiffy and is now point and click friendly. Check it out at www.gwi.net/mara

N1NUO on the Mend

E-mail from: Robin Walls (rdrijw@gwi.net)

Received Tuesday, February 22nd

Hi to All:

Mr. R came home last week and is doing well. He gets up for a short time each day and that is getting longer. It is just a matter of time now as he gets his strength back. I will let you know how things go.

Since I stayed in Portland while he was in the hospital, some of you may not have received a good update in quite a while. They went after the kidney stones but had to take the kidney as it was too far gone by times they got to it. This was not unanticipated by us, as we have know for a long time his kidney was not in good shape. We are hoping he will be in much better health now.

Robin, N1NFK

HAR-E-COM NET NEEDS YOUR SUPPORT

Take the time to check into the HAR-E-COM Cumberland, Sagadahoc and Lincoln County ARES net that meets every Monday evening at 7:30 on our 147.21 MHz repeater. They net need your support and participation. **W1ZE**

A \$9 PL TONE ENCODER

By Paul Towne, N1ZYB

With many of the 2-meter FM repeaters in the state going to the same PL tone (100.0 Hz), there may be some older transceivers that could be given a new life with the addition of an inexpensive PL tone generator. Figure-1 illustrates an easy circuit that can be constructed with mostly Radio Shack parts for less than \$10.

The heart of the circuit is the NE567 tone and frequency decoder chip that provides a highly stable precision oscillator. The output on pin 6 is an exponential triangle of 1 volt peak-to-peak. The only rigid requirement is that capacitor C1 be stable over a wide temperature range. Use only Mylar, polyester or metal film for capacitor C1. The frequency is determined by the following formula:

$$F=1/R1C1$$

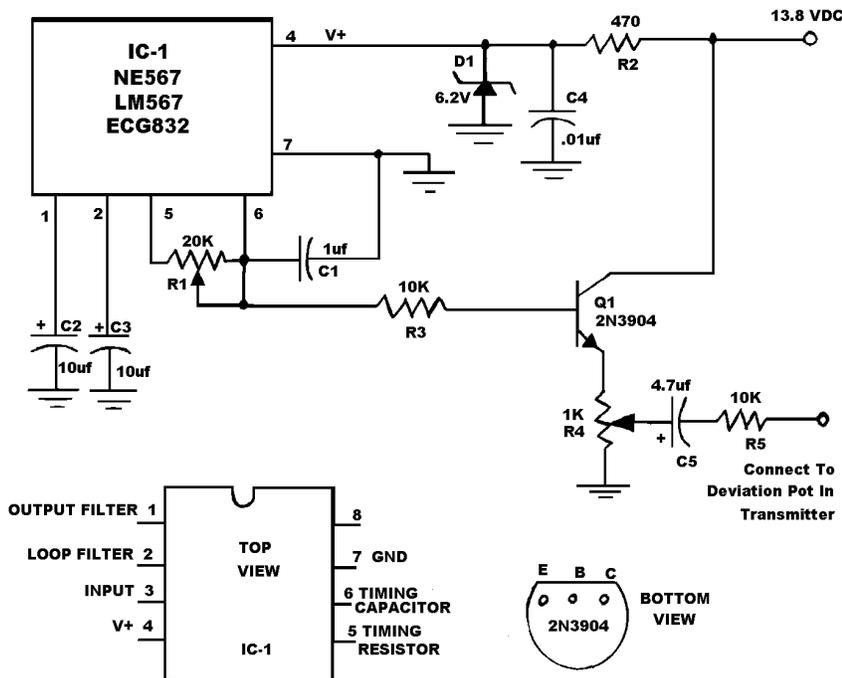
The specified values should allow any tone between 50 to 300 Hz.

The NE567 (ECG832) is available from JDR Micro Devices (1-800-538-5000) or Ocean State Electronics (1-800-866-6626).

The output of this PL tone generator should be connected to the deviation potentiometer in the transmitter circuit and not the microphone input. (Check schematic diagram of transceiver.)

To align the frequency of the tone generator, use another transceiver with CTCSS decode capability for the desired PL tone frequency. Attach a dummy load to the transmitter and key down the transmitter while turning potentiometer R1 slowly. As soon as the correct PL frequency is obtained, the squelch will open on the transceiver with CTCSS decode. Now adjust R4 for a tone level just high enough for the other receiver to decode the tone and not loud enough for others to hear it. R5 is used to prevent the tone generator from reducing the transmitter audio. Use a value in the range of 1K to 10K depending on what yields the best results.

(FIGURE-1)



PARTS LIST

- R1 20K 15 turn trimmer pot (RSU 10524205)
- R2 470 ohm ¼ watt
- R3 10K ohm ¼ watt
- R4 1K ohm trimmer pot (271-280)
- R5 10K ohm ¼ watt
- C1 1uF Mylar, polyester or metal film capacitor (272-1055)

- C2, C3 10uF electrolytic capacitor (272-1025)
- C4 .01uF ceramic capacitor (272-131)
- C5 4.7uF electrolytic capacitor (272-1024)
- D1 1N4735 6.2 volt zener diode (276-561)
- Q1 2N3904 transistor (276-2016)
- BD General purpose IC PC board (276-159B)
- IC-1 LM567 (RSU 11391968)

February Meeting Results

As typical for the past six months or so a small group of MARA members met at the home of Robin and Robin Walls for the February meeting. Only two board members, three general members and the trustee were in attendance.

The first topic of discussion was the lack of participation in club meetings and events. The only successful event was the last half-year was the Christmas dinner at the China Rose because a good group of HAR-E-COM folks were there to bolster attendance. All agreed that the lack of participation was distressing. Bruce (W1ZE) expressed the concern that when community groups ask for our assistance he are starting to consider not committing to those groups because there may not be enough folks willing to help. For the first time ever we had to ask for help from the Blackstrap repeater group to accomplish the Dan Mechoud Cancer bike ride.

The members all agreed that there is not one thing that contributes to the problem. Our membership is getting older, participation in the hobby has dropped off due to the Internet, some of our members are snowbirds and head to warmer climates, and some work meeting nights and some have medical problems that keep them in at night.

It was agreed that a meeting every month is not working and maybe we should do something else less often.

The next topic was the need for a new meeting location and VE exam site. It looks like our welcome at the Salvation Army has run out. The new commander didn't want us to have a key to the building and the associated cipher code. Bruce is looking for new location that can accommodate our small numbers and is wheelchair accessible. If anyone out there knows of one, get in contact with Bruce at 442-9630 or brandall@gwi.net.

The next topic was the search for a new location for the 444.4 MHz club repeater. Bowdoin College now has two local hospital repeater/pager systems on the building and there was a concern that maybe our UHF repeater would interfere with those systems. The UHF repeater is now off the air and in the custody of W1ZE. The original 449.4 MHz receiver is still on Cole's Tower and is used as the control receiver for the 2-meter repeater.

The last topic for discussion was the big RV round up that is scheduled take place at the BNAS this August. Our Association will make the 2-meter repeater available to the attendees who are ham radio operators. We hope to get support from our members and friends to monitor the repeater during this event to provide information, talk-in and other communication services. There was also discussion on having one or more of us monitor the 20-meter RV frequency to lend assistance and guidance to the event starting several days prior.

The meeting closed at 8 PM so the attendees could eat pizza provided by Pam N1KIE.

**ARRL MAINE STATE
CONVENTION AND
ANDY HAMFEST
MARCH 24 & 25 AT
RAMADA
CONFERENCE
CENTER IN
LEWISTON.**

SEE YOU THERE

Merrymeeting Amateur Radio Assoc

KS1R

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