

## McKean County Amateur Radio Club



### FEBRUARY 2019 NEWSLETTER

#### Contests? What's it all about? Why should I get involved?

There are actually hundreds of contest in the world of Amateur Radio. I could not begin to list all of them here. But to try to give you some idea. First there are the big contests on HF. These include ARRL and CQ DX contests. Both CW, phone, and RTTY. These take up 6 weekends each year. Then there are the next level, like CQ WPX (prefix) contest, ARRL Sweepstakes, Top Band (160 meter both CQ and ARRL) and others. Some contests are weekly like the CW Ops on Wednesday's. State QSO parties throughout the year, and ARRL Field Day. Also lots of VHF and UHF contest. So what's it all about? Contacts, lots and lots of contacts, but that's not all. There are multipliers. What's a multiplier? Well let's say you are in the CQ World Wide CW Contest and you have worked 7 QSO's each of these are worth 3 points, so you have 21 points. BUT in these 7 QSO's there are 3 different DXCC entities and 2 different CQ zones.  $3+2 = 5$  times the 21 gives you 105 points. As the contest moves along and you get to 100 QSO's = 300 points, and you have 21 DXCC entities and 8 CQ zones then you score would be  $21+8 = 29$  times 300 = 8700. You then work another 3 point QSO. You gain 87 ( $29 * 3 = 87$ ) more points to 8787. The next QSO is another DXCC entity which is a 3 point multiplier. So now you have 102 QSO's equal to 306 points times 30 gives you 9180. So by just getting another DXCC entity you went up 393 points. The QSO before this multiplier raised your score 87 points but this last one raised you score 383 points. Bottom line, MULTIPLIERS ARE GREAT. **So now comes the strategy.** Do you continue to work more QSO's or look for multipliers???? The answer is both. Setting on one frequency and calling CQ will put the maximum QSO's in the log this is called "running". But you need to offset this looking for multipliers. How do you do that? Well one way is to watch one of the DX clusters like DX Watch.

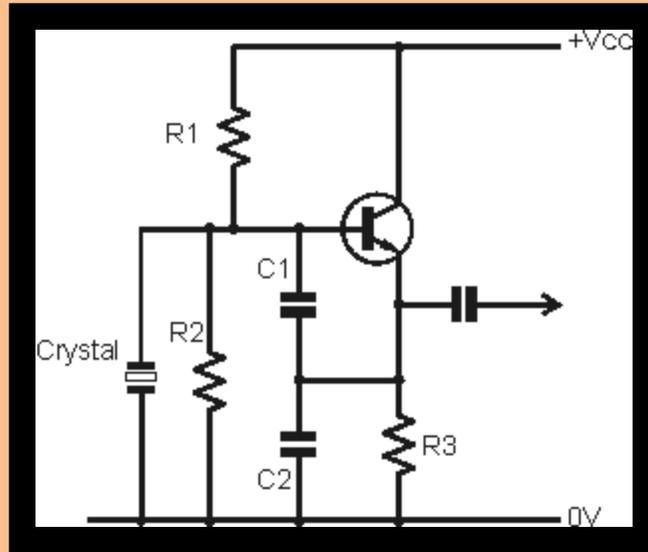
You can keep one eye on this and when you see a multiplier show up you can change frequency and work him. BUT you may lose your run frequency. That sucks. So how do the big guys do this, simple SO2R. Easy Peasy. SO2R means Single Operator 2 Radios. You have your run radio on your run frequency and listening to it on say your right ear with your headset. Your other radio, the multiplier radio is in your left ear. When you see and multiplier pop up on the DX Cluster you change frequencies with the second radio and work him. All the time keeping you run frequency radio still calling CQ and working QSO's. Sound confusing? I can't walk and chew gun at the same time. But seriously this does work. BUT this puts you into separate category ASSISTED. If you are more of a traditionalist, like me, your category is NON-ASSISTED. So to get those much needed multipliers you need to do some S&P work (Search and Pounce). Have I drove you away from contesting yet? Hope not. It really is a lot of fun. Can you win something? Maybe. The big guns win all the trophies and plaques. But you can still win some nice certificates. How? By being in the right class. I am usually low power (100watts) single operator, as opposed to having another operator to switch with. Also non-assisted. Plus you compete geographically. By state, ARRL section and ARRL division. Country, CQ Zone Continent, etc. So you may not get a plaque but you can still win something. Another thing, all the major and seems like more of the smaller contests do log checking. What's that? Well you, and everyone else turns in your log in the Cabrillo format. Some big wiz bang computer then takes all the data and compares it with everyone else. Out comes a report that shows all you mistakes, like a miss copied call sign, or serial number, or CQ zone or ARRL section. Then the score reduction comes. This big computer removes all the mistakes and it PENALIZES you for making those mistakes by removing more points. So it forces you to be more accurate, and careful. The biggest thing this does is get rid of the cheaters. Yes, unfortunately some folks like to cheat so they can brag about how great they are. The log checking has made great strides in eliminating cheating. Okay so now I have your interest in trying a little contesting. To get your feet wet try giving out a few contacts. How? Listen, see how it is done then jump in. You don't have to enter the contest, but it always helps to send in your log. Remember the log checking report, it nice to be able to check all the logs possible. Look on line and check a contest calendar and then check out the rules. Look at the "exchange" what you need to send and what you need to put in your log. There are lots of software out there to help with contest too. I use M1MM+, it really does a lot and I only use a small part of its capabilities. Another way is to visit someone doing a contest. Field Day is one of the best. There is a GOTA (Get On The Air) station made

just for folks needing a little guidance. Also if the club is doing an event, another good time to go for a test drive. Ask questions, if you know someone who is involved in a contest, check to see if you can pay them a visit. I only operate CW so if you have not yet learned CW might be kind of boring. As long as I am discussing CW contesting, one of the best things about it is you do not disturb others in the house. You let your fingers do the talking and others can visit dream land undisturbed.

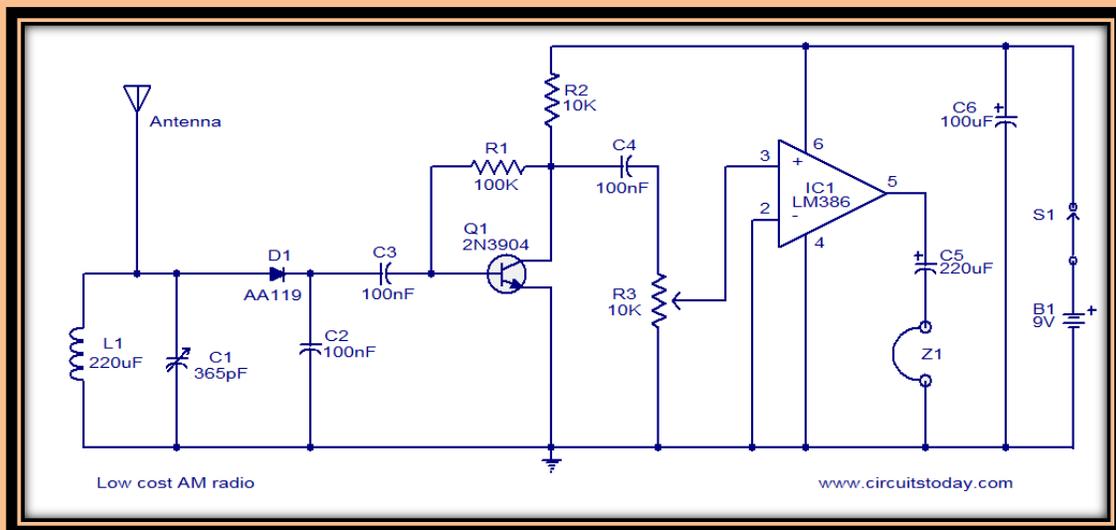
**Contests** are a great way to work on other awards too, like WAS (Worked All States) or DXCC or WAS on more than one band and WAZ (Worked all Zones). State QSO parties are great for getting those hard to find states, like Montana, Idaho, North and South Dakota, Alaska, and Hawaii. It's a great way to improve your operating skills.

Whether CW, phone, or digital it's great to work under some pressure to see if you and your equipment are up to the fast pace of contesting. Or the slower pace of Search and Pounce. Another reason to get involved in contest, you could get lucky and win something. Look at all the different categories, like Single Operator, Single band, Low power, non-assisted. Don't forget the geographical categories too.

**The CQ World Wide 160 meter CW** contest was this last weekend. First it is 160 meters, remember that pesky D layer of the ionosphere, will 160 meters is mostly only good when the sun goes down. The contest started Friday evening at 5pm local and ran until 5pm local on Sunday. 48 hours altogether. As we had a Technician class on Saturday I need to get to bed at a reasonable time Friday night. Usually I stay up to about 0600 in the morning. But I was able to make 508 QSO and 77,610 points, that is until the log checking computer finds all my mistakes. I was able to work 47 of the states missing Nebraska, South Dakota, and Alaska. I heard Alaska but not able work them. I already Worked All States on 160 so not getting these 3 only hurt my multiplier count. I topped last year's 339 QSO's and 57,552 points. Now the long wait till June or July when the results come out.



WHAT KIND OF A CIRCUIT IS THIS?



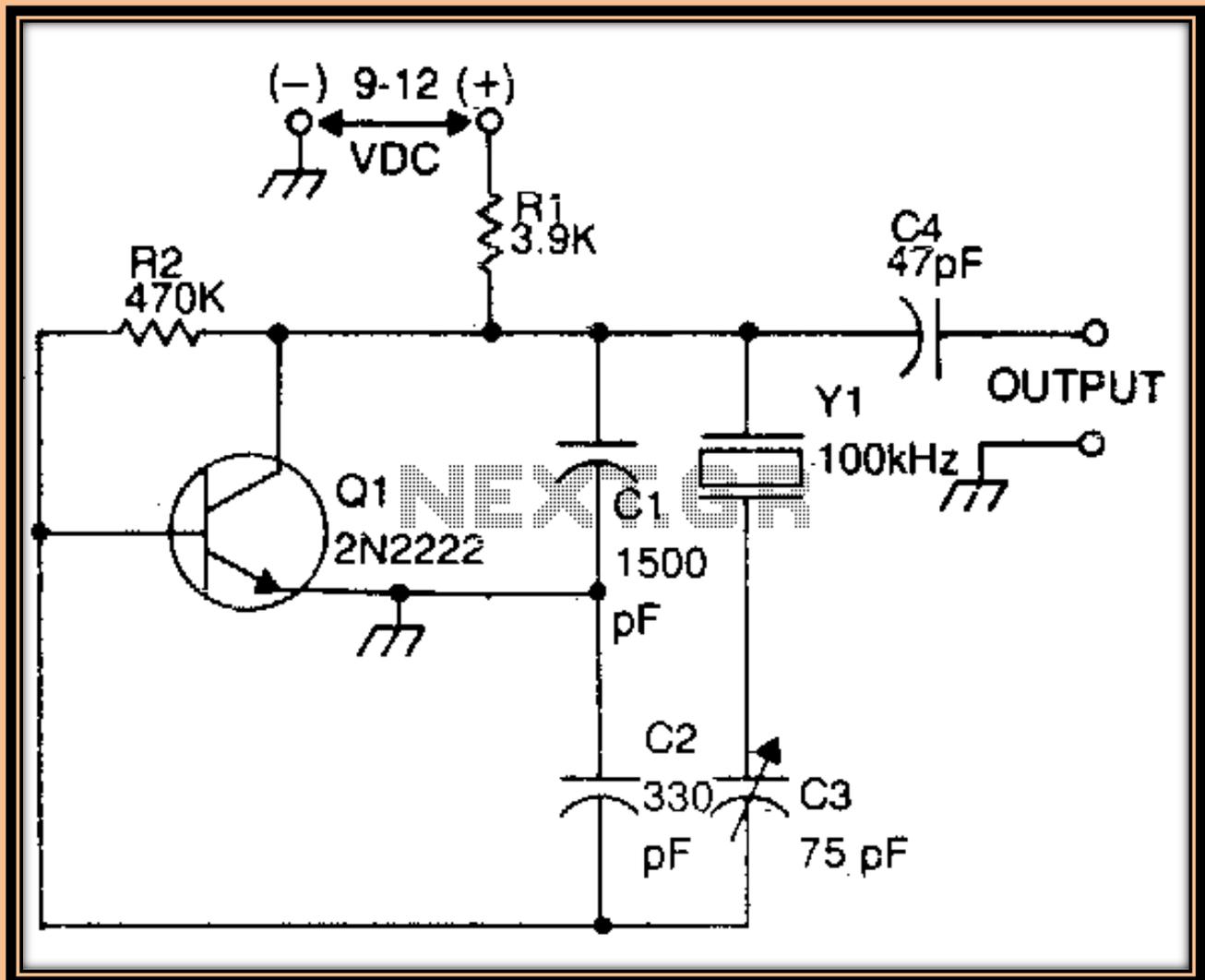
From Last month's newsletter

What does D1, AA119, do?

It is the detector. Anyone get it correct?

Way back in the 70's I purchased a Heathkit HW-8. It was a fun kit to build. It was very educational too. After you put it together you had to do all the alignments to get it to work. I have used it camping and from motel rooms when traveling for work and pleasure. Used it a lot in those days. Today the KX3 gets used most of the time for portable operations, I also have a Wilderness Radio SST for 40 meters. I bought the internal memory keyer and frequency counter for the SST also. The counter sends CW for the last 2 digits of the 40 meter frequency you are

on. Also the SST was designed by Wayne Burdick N6KR one of the two guys that started and own Elecraft. But I wanted make a few modification to HW-8. So over the years I have completed the following; changed the antenna connector to a BNC, put a lamp behind the meter, added an impedance matching transformer for the audio, put in an SWR bridge that uses the meter on the front, added a Curtis Keyer with speed control pot, today I added a 100kc xtal calibrator. After all these years the Hot Water 8 doesn't see much activity but after the xtal calibrator today I hooked an antenna and it still works! I worked a station Florida. 73 de Nj3K



**This is the circuit I used for the xtal calibrator, it's a Colpitts Oscillator.**

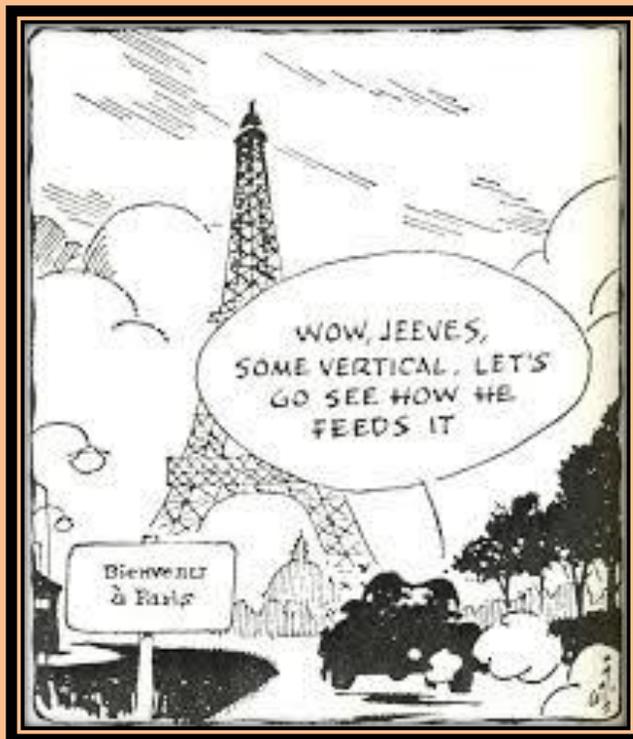
Interesting note about this oscillator, it says it will run on 9 – 12 vdc. Well my power supply for the HW-8 is about 12.6vdc. It would not work at this voltage. So I could have put in a regulator of some sort but instead I figured it always drew

the same current. So I put in a series resistor. Problem solved. 4.7kΩ by the way.

Here is what the Hot Water 8 looks like.



The rubber duck setting on top improves the SNR by 7.23dB at least.....



**Below is a picture of the inside of the HW-8. You can see some of the modification circuit boards on the left and right. Also all the switches and potentiometers on the back.**



If anyone is interested in attending The McKean County Radio Club Meetings are the 3<sup>rd</sup> Tuesday at 1900 at the McKean County Department of Emergency Services building. 17175 Rt. 6, Smethport, Pa 16749.

**Up Coming Events**

**Hamfest:** If you attend a Hamfest, send me a report and some pictures I am sure are readers would be interested.

### **Hamfest/Convention**

**02/24/2019** | [The South Hills Hamfest](#)

**Location:** South Park Township, PA

**Type:** ARRL Hamfest

**Sponsor:** Wireless Association of the South Hills ARC

**Website:** <http://n3sh.org>

[Learn More](#)

### **Hamfest/Convention**

**02/23/2019** | [Winter Hamfest](#)

**Location:** Big Flats, NY

**Type:** ARRL Hamfest

**Sponsor:** LIM Amateur Radio Group

**Website:** <http://www.ka2lim.com/7.html>

[Learn More](#)

### **Hamfest/Convention**

**03/09/2019** | [Warren County Hamfest 2019](#)

**Location:** Youngsville, PA

**Type:** ARRL Hamfest

**Sponsor:** BSA Venturing Crew 73

**Website:** <http://www.kb3bsa.com>

[Learn More](#)

**Winter is here, so this is all there is for now!**

### **Contests:**

The North American CW Sprint, NCCC RTTY

Sprint, QRP 80-Meter Fox Hunt, NCCC Sprint CW Ladder, Vermont QSO

Party, 10-10 International Winter SSB Contest, Mexico RTTY

International Contest, F9AA CW Cup, Black Sea Cup International,

Minnesota QSO Party, FYBO Winter QRP Sprint, AGCW Straight Key CW

Party, British Columbia QSO Party and FISTS Winter Slow Speed CW Sprint will certainly keep testers busy this upcoming weekend.

The RSGB 80-Meter Club SSB Championship is scheduled for February 4. The ARS Spartan CW Sprint is scheduled for February 5. The CWops Mini-CWT Test, UKEICC 80-Meter SSB Contest, Phone Fray and QRP 40-Meter CW Fox Hunt are scheduled for February 6.

**See WB7ANM for more information on contests.**

**Another note:** If you have QSL cards to be checked for DXCC, (including 160 meters) WAS or VUCC I can do this. Contact me at [bmanning@zitomedia.net](mailto:bmanning@zitomedia.net)

**As always if you have something you want me to include in the newsletter please let me know. Send it to [bmanning@zitomedia.net](mailto:bmanning@zitomedia.net)**

73 Bruce NJ3K