

Howard's Message...

DE WB2UZE, I hope you will enjoy and appreciate our inaugural LICW Newsletter. This is something I always wanted but had not time to arrange. We should all be thankful that Mike VE3MKX volunteered on his own to produce this newsletter which I trust you all can appreciate takes a lot of time and effort. It would be very nice in the future if members would submit articles and here are some suggested topics:

1) Instructors and moderators: Stories and experiences in teaching and moderating

- 2) First QSO stories. These are always crowd pleasers
- 3) CW journey experiences, experiences on the CW band
- 4) Articles that relate to any aspect of Amateur Radio that interest you
- 5) Your ham radio bio
- 6) Contest accomplishments
- 7) POTA and SOTA activations and outings
- 8) Photos you would like to share
- 9) Anything different you have done, ex. CW over satellites or over 2m
- 10) Technical writings or makers projects
- 11) Your favorite antennas, Keys and Radios
- 12) Your station gear and or Vintage gear

So anything that is of interest to you, even not on this list, that you want to share will be more than welcome. In future newsletters we will use this space for a wrap up on club happenings and updates.



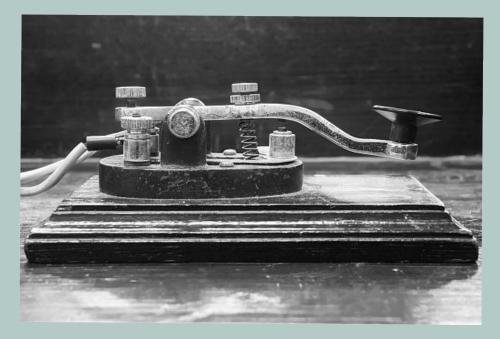
#### My short journey from learning to teaching by Ed W4EMB

Where it began.

My Dad, KD8EEJ (sk) sent me the Gordon West CD's and book for the technician license. I studied and studied and took my test in December 2008. I upgraded to General in Spring of 2009. I followed what seemed to be the normal path of progression and interest. SSB HF contacts, looking for that next DX station. I made my own HF antennas, so my DX contacts were even more exciting to me. I got involved in the local club which was active on the local 2-meter repeater. I enjoyed many years of field days, Club monthly meetings and a few activities with ARES. I also enjoyed getting with friends in the garage and tinkering on the next homebrew antenna.

Fast forward to July of 2022. At a local club meeting, Stuart AK4EX mentioned he was in the LICW and challenged me to join also. So, in August of 2022 I joined the LICW. I immediately knew I finally found the path to learn CW. I had tried all the apps, the websites, the You Tube videos to no avail. Right when I joined LICW they were moving from one style of Beginner class to the current Carousel method. What a treat to be exposed to both and see the benefit of the latter method. So I attended as many BC1 classes I could find each week. I started going to every class on the calendar that was not an "Advanced" class. I even went to one of my favorite ones called "NV1U Memorial Review" it is 5 days a week also. (On Wednesdays I go to London Calling, but don't tell Quentin)

I volunteered to help with admin duties from a request for help listed on the Groups.io page. So, I did some admin work for the club. Also, I offered to volunteer to pick up a BC1 teaching position... Keep in mind, I still didn't know F, L ,X, P, Y or Z at this point. Everyone was so kind at humoring my offer but advised I should wait until I learn CW before I try to teach it. Crazy concept, but Mike seemed pretty sure I wasn't ready to teach CW after 3 weeks. Jokes aside, of course he was correct. I was just so fired up and excited that the LICW method was sticking, and I was able to finally retain what I was learning so far.



So, five months later I have gone around the BC1 carousel probably 3 times, while also going to the GOTA classes and attending the On Air Assistance classes. Also the BPT Classes. I went to some BC2 Carousel but not as consistently as I went to the BC1 classes. I didn't think of it until it came up in conversation. I was actually getting on the air and making POTA contacts and now and then finding a slower fist and doing a QSO with someone. It was a blast! But I find myself hitting plateaus. In all honesty, I'd have to admit that It is because I fell off my routine of learning and practicing because I was getting on the radio and looking for QSOs.

So, back to some practice.

73 Ed W4EMB

#### Richard Dervan, N1RBD, LICW #230, Becomes the 170th SOTA Mountain Goat in North America

On December 2, 2022, I did a combination SOTA/POTA activation of Mount Mitchell and the associated state park in North Carolina to attain SOTA Mountain Goat (MG) Status. Successfully completing the activation, I became the 170th MG in North America and the 9th in the W4G (Georgia) SOTA Association.

Attaining MG status means that I was able to acquire 1000 SOTA activator points. It took 137 Activations of 59 unique summits with 2285 QSOs to achieve this, each summit averaging 7.3 points.

The final push to MG started on November 29 with activations of Cowee Bald and Black Balsam Knob on the way from Atlanta to Asheville. Allen Mountain and Peach Bald near Asheville were activated the next day. On December 1, the SOTA Winter Bonus season started, meaning certain summits had an extra three points added to their normal points value. On this day, Jumpoff Mountain and The Pinnacle, both eligible for bonus points, were activated which brought my points total to 987.



My wife, June, arrived Thursday evening and preparations were in place to activate Mount Mitchell, the highest summit East of the Mississippi Rive at 6684 feet and worth 13 SOTA points, on Friday. Friday dawned as a cloudy day with temperatures in the low 40s. The drive to the park wound up being 90 minutes instead of the original planned 45 due to closures along the Blue Ridge Parkway on the west side of the park. Upon arriving, the clouds had begun to dissipate, and the sun was shining with temperatures in the mid-50s and very light winds.

Upon reaching the summit and setting up for HF, CQ was called on 2m with the first contact being Dean Blair (K2JB), a local SOTA Goat. After two more 2m contacts, a Sked with my, Doug McAlexander (N4HNH, of YouTube FTDX10 fame and a SOTA Goat) was completed on 40m CW which marked a successful activation and official Mountain Goat status.

The Station set-up...



Some additional 2m contacts were garnered, followed by another Sked on 40m SSB to work friends Mark (AE1MS) and Jean (AE1JS) Swann in Young Harris, GA. Another friend, Eddie James (WD3D) was also able to get in on the SSB action. Additional contacts were made on 40m CW before going QRT on HF and tearing down the station. Just before leaving the summit, two Summit-to-Summit contacts were made on 2m with Richard (KN4LRI) and Tom (W1PTS) who were doing a SOTA activation on Rough Butt Bald, 50 miles away as the crow flies.

The journey to Mountain Goat was definitely helped by learning Morse Code and switching to CW-Only HF operation. My entire SOTA HF setup dropped from about 7 to just above 2 pounds, a definite improvement for some longer hikes required for SOTA.

#### 73 Richard Dervan, N1RBD, LICW #230,



My take on radio telegraphy - morse code - CW by Michael Hill VA7MN

I was approached and asked if I would be interested in writing something on this subject.



Radio telegraphy, usually called CW, has been an interest of mine for the last 40 years. Like many old timers, my initial interest in radio was sparked as a kid listening to shortwave broadcasts in the early 60s. There was plenty of CW on the bands at that time, and lots of it was still done by commercial interests such as merchant shipping, military and government transmissions. Then at Christmas (probably 1962 but I'm not sure) I got an electronics kit, and one of the projects was a simple CW transmitter which broadcast in the LF band with a few milliwatts.

Fast forward to the mid 1960s which finds me in a scout group in Toronto. Our scout leader, Tony, VE3GNT, was a fountain of knowledge and we were introduced to CW on 80 meters using a modified 19 set. It was here I began studying the code and radio theory. It wasn't until 1984 I started in earnest to study to get my ticket and got a study manual and other books, and, with the aid of a morse code chart clipped from a magazine I started to learn the code I heard on the venerable old CR-88 receiver. I can tell you now this is the wrong way to learn the code! Some years later after struggling to get past 15 WPM I basically started again from the beginning, learning the characters by sound, and nothing else.

I passed the exams in August 1984 but failed the code receiving test by a couple of points, so in February 1985 travelled to the DOC (Department of Communications) office in Toronto and passed the code receiving at 10 WPM and received my certificate and call sign. The first contact on 80 meters on an old Yaesu FT-101B was near Atlanta Georgia. I still have the QSL card. Every contact got easier, and after a little while I settled into my groove and found it a lot of fun and relaxing after working a week of long hard shifts driving fuel tankers for Texaco. The first few years I used a simple and cheap straight key, and then treated myself to a Nye Master key. The difference was like night and day. If you're going to pound bass, get yourself a good key. You don't have to spend a lot. A couple of years later I ventured into electronic iambic keying with the excellent British Kent dual paddle key. Only 2 years ago I sold this key which served me for over 30 years. I regretted selling it the minute I dropped it at the post office. Anyway, I think for years I used both a straight key and paddles about 50/50. A straight key is a lot of fun on things like Straight Key Night, and the many sponsored events and contests by SKCC.

If there's one thing I would emphasize in this article, it would be to recommend to those wishing to learn the code to learn it by the sound of the characters, and do not use any visual materials at all! There are some excellent means of learning the right way, for example Chuck Adam's (K7QO) excellent system of sound and text files. I will delve into some of the educational media out there



in a future article, as well as my experience with different keys and keyers, good sending technique vs. bad sending technique, and more.

So for now, if you, the reader are considering learning the code and exploring the very interesting and fun world of radio telegraphy where the KISS rule is number 1, go for it!

Cheers and 73, Michael VA7MN / VE7DMH, ex-VA3MH/VE3OYM

#### The meaning and use of RST

#### by Howard WB2UZE

I thought it would be important to give some background information on the use and history of RST as it is something exchanged every day. Back in the 60s it stood for Readability, Strength and Tone. Let me explain how this has evolved. The higher the R number the better the reception. 5 is the best. Today if there is QRN or QSB I will give out a R3 or 4 but never lower than that. I rarely hear a 2 given out and if you get a 3 you will



know the station copying you is struggling so be prepared to repeat your information as needed. Giving out a 3 is enough to let your contact know copy conditions are not ideal. A 2 might give a new op enough discouragement to give up on the QSO.

The S can match your S meter but I must admit, many times I will give say a 7 if the copy is good and I appreciate the other ops skill for one reason or another, even if they are lower than that on the S meter. It's like being polite in a way to the other op and making him feel good about his signal.

Back in the day it was important for telling a station if their tone had chirp. Especially with stations from poorer countries like Cuba or the old Iron Curtain countries, tone was an issue. Sometimes USA stations had chirp and the FCC, who always was listening back then, issued summons for poor tone. So giving a ham a heads up with a low Tone number was the gentlemanly thing to do. Still today if someone is using a vintage rig or there are problems with a more modern rig's power supply, we can hear tone problems. However nobody ever gives Tone lower than 9 regardless and most ops even if they got a 7 would not understand the significance. Today RST has evolved to 599 no matter how you are being received, especially with DX. Exchanging signal reports makes a QSO official so in essence a meaningless number is given many times. I will only give a '599' in rare pileups yet in other piles I give a real report.



In our QSO classes we do give 599 for expediency of training. 599 is also abbreviated in contests or by DX as 5NN where the N is a shortened 9. Some contest ops will even shorten the 5 to one dot. The only other number that is abbreviated is the Zero as T. So 100 watts can be sent as 1TT W. At high speeds I dislike hearing the dot for a five and Inever would use that or recommend it as it can be confusing.

I hope this helps some of our newer ops

Regards Howard WB2UZE

#### HOW IT STARTED, HOW IT'S GOING David Weingart, K2FI

My first brush with CW came in 1977 at age 15 when I was first licensed as a Novice with the call sign KA2ESK. In those days, there was still a CW requirement for US licensees, and for Novice, you needed tobe able to copy 5WPM. I never did have a QSO under my own call, as I had no home station, but the Syosset High School club had a very nice Drake setup that I was able to operate as WA2JAS. Some years passed after I graduated. As I had no radio, I let my license laps, reactivating it the late 1990s when I used a TS-520SE. I

wasn't very active, but I still managed to remember CW.



Things got started for me again in 2015 after I moved back to the US from a year living in London. I re-sat my Technician exam and became licensed as KD2FKM, although I eventually decided to get KA2ESK as a vanity call. From the beginning, I wasn't much interested in VHF/UHF (and I'm still not). For me, HFwas where the magic was. A lot of hams forget that Technicians can use slices of HF, so long as they use CW. I still remembered it after all those years, so I set up my radio (Yaesu FT-817nd) and antenna (homebrew inverted vee cut for 40m with a kit-build balun in the center) and sent a CQ out at a blazing 3WPM. A local-to-me ham responded. I was absolutely terrified but I got through it. The next QSO wasn't any easier, still creeping along. I had some very good people encouraging me in my CW journey, including LICW's own Rich K2UPS and Mike N2PPI, two of my elmers when I first got back into the hobby. And it would be remiss of me to not mention Jess W6LEN, who really encouraged many of us to do as many NPOTA activations as possible using CW and is in my log many times over the years.

I'm mainly a CW operator now. I mean, I have a mic that I use for WWFF and POTA activations, but mostly I'm doing QRP CW. I'm still not very fast (and not having a home shack means I don't really do much during Wyoming's long, cold winters). I'll usually grab my LNR Precision MTR3B, Bioenno 9V battery, a 17 foot crappie pole, and kit-built triband vertical from QRP guys to stick in my pack when I go hiking. The entire station is compact and lightweight and thanks to the magic of CW I've had QSOs of two or three thousand miles with it. If I hadn't fallen fist-first into CW I don't know if I'd have stayed with ham radio as a hobby, but as it is, I'm having a blast and can't wait for it to continue.



73 de K2FI



#### A MONTH OF QRP OPERATIONS – by ED CONWAY N2GSL

#### MARCH 01 2023 GOAL- OPERATE AND DOCUMENT LOW POWER POSSIBILITIES

As February began, I asked myself what can be accomplished using 5 watts and a wire over the course of a month. During February 2023 98% of my operating time was spent using 5 watts. The results are in, and the answer is eye opening for those who are not already die hard QRP enthusiasts. My mode of choice is CW.

#### **RIGS** -

At home I used Two transceivers, Heathkit HW-9 and Icom IC-718. The IC-718 RF power was set to 5 watts.

When in the field activating parks a Venus SW-3B was put to work.



#### **ANTENNAS-**

The antenna "farm" at home includes a Doublet with each leg about 50ft fed with 450-ohm window line. The center is at about 35ft the ends slope down to 20ft and are bent into a "Z" to fit the property, 80-

meter EFHW with the station end up at 23ft sloping away an up to about 40ft and a 29ft long end fed random wire vertical with a 9:1 UNUN.

In the field a 40-meter EFHW was the main antenna along with Wolf River Coil and Hamsticks.



#### PLAN -

Document one QRP contact per day. Collect data from Parks On The Air activations. Summarize the month-long activities. For the daily contacts the Transceiver, band, call , location and the type of contact was recorded. For activations the transceiver, antenna deployed, park, number of unique States/ Provinces / DX entities, band and number of contacts were recorded.

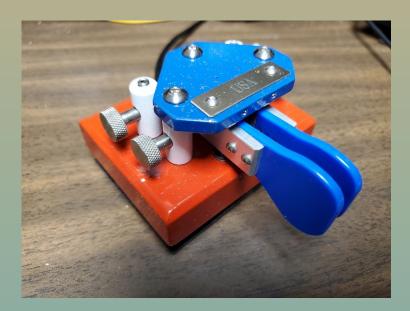
#### **RESULTS** -

Basically, the first contact of the day was recorded. For 20 out of the 28 days the Heathkit Hw-9 was used. Stations were worked on all bands from 40 to 10 meters with the exception of 17 meters. Contacts were made during the month on 17 meters they were just not any of the ones documented. Stations were worked in NY, SC, NC, GA, OH, DE, Washington DC, IL, MI, NM and IN. Ontario was also contacted. DX countries included European Russia, Germany, France, Ukraine, Belgium, Belize, England, Finland, Denmark and Poland.

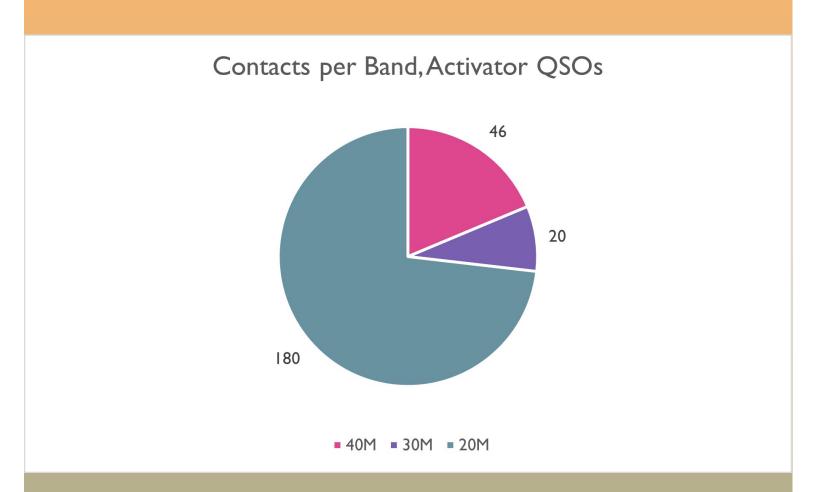
Hunting POTA stations and answering DX station CQ's account for many of the documented contacts. There was one ragchew/ SKCC QSO and a QRP to QRP QSO with Gill, VE3GON a fellow LICW Club member. Another memorable contact was with SN550E from Poland, a special event station commemorating the 550 th anniversary of Nicolaus Copernicus's birth. I casually participated in a few of the Monday Medium Speed Tests as well as the ARRL DX CW contest.

I operated about 4 hours in the SKCC's Weekend Sprinathon. I made 22 contacts worth 674 points. This placed me 13 th out of 27 entries in the QRP class. We have all heard the expression "I can work them if I hear them", well this seemed to true even at 5 watts. There were only few times that I had to move on and not get that park or not work that DX. True, I did not try to work any exotic or rare DX but I did work at least one station split. Ed, N2EC (also a LICW club member) was activating a park in Washington DC. It was first thing in the morning and the POTA hunters did not have much to choose from so he was busy with a small pileup. I tuned a bit off frequency and gave a call. He heard the "N2", sent "N2?" and I filled in the call and we made the exchange.

Nine POTA activations were completed during the month. Three different parks were on Long Island were activated. A total of 246 contacts were logged. 16 "Park to Park" contacts were made. On average, 27 contacts were completed per activation. The Venus SW-3B is capable of operating on 40, 30 and 20-meters.



#### Here is the breakdown of contacts per band.



Germany, Spain, and The Azores were among the DX countries contacted from the parks. It is incredible that I have experienced mini pileups as a POTA activator and it's a thrill to operate a small radio the size of a deck of cards that can fit in your pocket and be able to communicate with folks all over the country and the work.

Overall, the experience was very rewording. Documenting the QRP activities confirmed that QRP works and can be enjoyed with simple equipment. QRP is not a limitation but a challenge that more operators should embrace.

#### 73 de ED CONWAY N2GSL

## Simple Projects !

#### Cheap HF Quarter-Wave Stubs By: Al Duncan VE3RRD

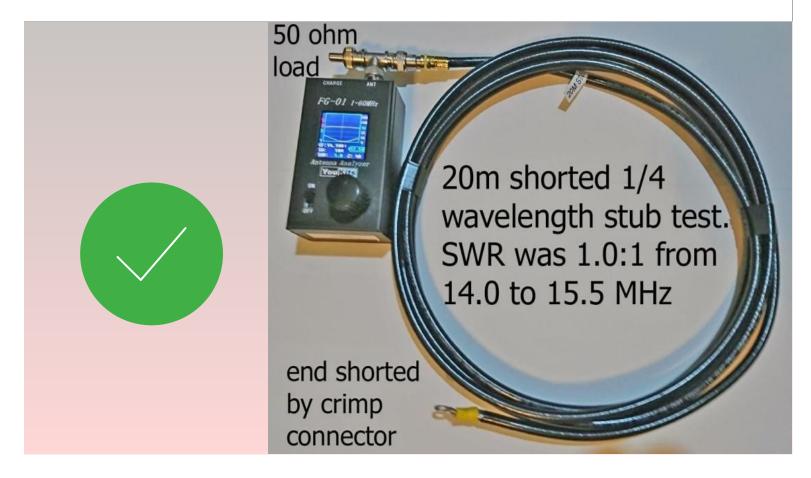
Some may ask "why would I need a quarter-wave stub"? When our club is activating a lighthouse, beach or park, we are often setting up two or even three stations with antennas in fairly close proximity to each other. Although some stations may be QRP, many times we are also including a 100W transceiver for SSB. This can cause major interference between stations, even when everyone is on a different band. For example, a transmitter on 40m (7 MHz) can overload a receiver on the 20m (14 MHz) band, making it almost impossible for the 20m station to copy CW or even voice.

A "shorted" quarter-wavelength (for a particular frequency) piece of coax, will appear as an open at the other end of this shorted stub. For example, if we make a shorted stub for 20m and connect it to the transceiver, it will not affect the SWR on 20m but will appear as a partial short to signals on the 40m band. This is because the 20m quarter-wave stub will appear as an eighth-wavelength shorted stub on 7 MHz and will greatly attenuate these signals. Likewise, also placing a 40m stub on the 7 MHz station can greatly reduce any harmonic RF it is producing on the 14 MHz band.

You can use a regular T-connector (either BNC or UHF as required) attached directly to the transceiver, with the antenna coax connected to one side and the quarter-wavelength shorted stub (for the band you will be operating on) connected to the other side of the T. After searching the internet and reading several articles on the difficulty of making precision quarter-wave stubs out of expensive 50 ohm coax, and placing them in precise locations on the station feed line; I almost gave up on the idea of trying to make my own.

The fact is that a multiband antenna is not always 50 ohms on every band, and a transceiver's internal tuner can compensate for mismatches that may be introduced by the antenna or by attaching a quarter-wave stub. Since I didn't plan on using a KW, any small coax should work for QRP levels. And why should it have to be 50 ohm coax, I had lots of quality 75 ohm RG6 satellite TV coax laying around. I put an Fconnector on the RG6 and then used an F to BNC adapter. I cut the RG6 for each band, using the formula "(468 / MHz) / 2" to find the length in feet. I didn't know the velocity factor for my RG6 so I multiplied the result by 0.9 which made it a bit long.

My little YouKits FG-01 antenna analyzer made it very easy to trim the coax to the proper frequency. It can visually display the center frequency for an open quarter-wave stub in real-time also, so I just kept cutting off an inch or so at a time until it looked good while attached to the T-connector along with a 50 ohm load. Then I shorted the center conductor to the shield braid at the end and used a crimp-on lug, its tab can be cut off and heat shrink used to insulate the end of the stub if desired. After shorting the stub, the exact 1:1 SWR bandwidth can be measured, with a 50 ohm load where the antenna will connect.



Everyone in our club has made a stub for each of the various HF bands they plan on using when we are operating together. I have found that these stubs even work well on the club TS-480SAT at 100W, and have also used them on my KXPA-100 PA when operating my KX3 at 100W. I used a UHF type T-connector on the transceiver/PA output and then used a UHF to BNC adapter to mate to the stubs.

When everyone is on a different bands and all are using their quarter-wave shorted stubs, interference between stations has been greatly reduced (and in many cases, completely eliminated). Also the stub tends to attenuate out-of-band signals from other (non-amateur radio) sources.



Maybe my version isn't as effective as the "real thing"; but it's cheap, easy to make and works well for us. This project proved to me that it's better to try it and see if it works, rather than just accept that the "experts" say it probably won't.

Total cost was very low - half a dozen type F crimp-on connectors, one or two F to BNC adapters, a BNC or UHF "T", and a UHF to BNC adapter if needed; the RG6 coax was free.

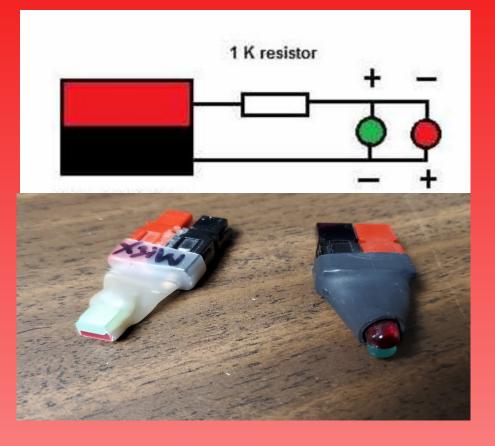
# The finished project



Set of 5 quarter-wave stubs for 10, 15, 17, 20 and 40m bands. I plan on also making one for the 80m band. These are compact and lightweight, and all fit into a small bag (wind some in diameters that can nest inside others). Don't forget to label each stub with the band it is for, as you make them. We will definitely be trying them out during the next Field Day with two 100W club stations; usually one is on SSB and the other on CW or a digital mode.

Have fun Building - Al VE3RRD

## Project #2



Easy LED power-pole polarity indicator

A simple and easy way to protect any of your gear prior to connecting to an unknown source.

If the LED is lit RED do not connect. Check polarity.

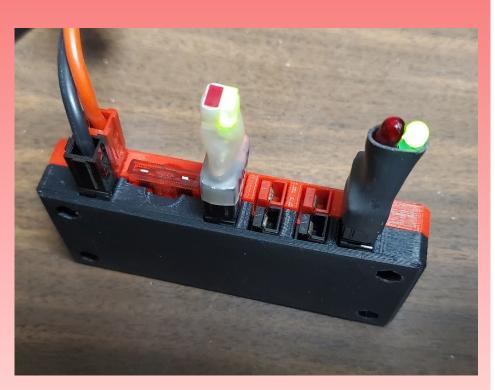
Two examples of the finished indicators

A few minutes of scrounging in the junk box is all it took to find the parts for this project.

- 1- Green LED
- 1 Red LED
- 1 1k Ohm resistor 1/4W

Pair of Anderson Powerpole connectors

2" of heat shrink





An ice fishing tent on a grape farm west of St. Catharines, Ontario, Canada. The Niagara Peninsula Amateur Radio Club set up generators, HF gear, an PAR end-fed for 40, 20, 15, 10, and a homebrew 3 element 2M beam.

It was a recipe for FUN !

Thanks Kevin VE3RRH and Denis VA3ONO



One Outside, Golden Horse



Denis, VA3ONO





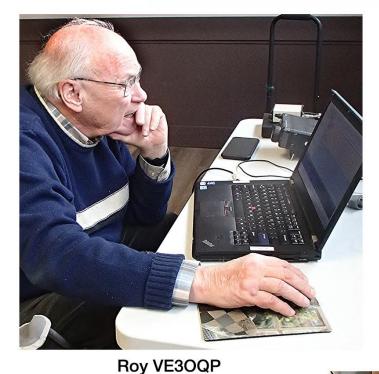
Denis, with Rob, VE3XXR and Brix.

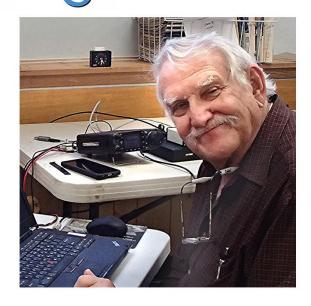






### Winter Field Day





Glenn, VE3NDW



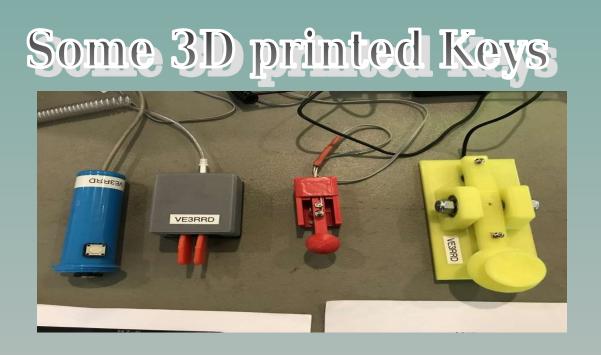
**IC-7000 Digital Station** 





Top - Kevin, VE3RRH, David, VE3RNF, Rob, VE3GGR.

Left - Geddie, VE3CJX, Lise, VE3WLJ, Mike, VA3MPA, Terry, VE3CTX, Paul, VE3WRP.



#### Don't forget !!

.....to check out the LICW home page and event calendar for up in coming classes and interesting presentations !

We are also on Groups.IO and Facebook !





Please Email your submissions to ve3mkxqrp 'at' gmail.com thanks 73 Mike VE3MKX

That's all for this addition of the LICW Newsletter.

It certainly has been a learning curve, I've never created a newsletter before! I welcome all of your comments and submissions. If you have submitted something and haven't seen it yet, it will be in the up in coming newsletters. Oh, yes, you can submit more than one item, I encourage this !! I personally enjoy shack pictures !

Thanks to all contributors, past and future !

See you on the Air, at one of the many LICW classes and at Dayton Hamfest !

73 Mike VE3MKX