



Volume 2 Issue 3

June, 2013

### Dayton 2013 and SKCC!

**It is official! We have been awarded a booth for SKCC at the Dayton Hamvention 2013! We will have the same booth as last year, which is NH254,(North Hall).**

**de Scott N3JJT**

Contact Scott if you would like to “work” (actually, rag chew) for a hour at the SKCC booth at: [n3jjtrp@gmail.com](mailto:n3jjtrp@gmail.com)

### K8NS's First Key and an Adventure in “Morse Code”

My first key was home made from a strip of 14 ga gal. sheet metal strip, 3 sheetmetal screws, a tinkler toy knob and a piece of pine board. I found that by changing the width of the strip, it would change the tension and improve my sending. I got the idea from The Boys Book of Electricity (circa 1918) my father gave me when I was a wee ladd.

Also made clappers by winding wire around a nail and using a piece of sheet metal for the armature. Strung wire between my bedroom and my brother's and then forced my him to learn the code. Powered the set-up with a dry cell battery. The problem was the "Boys Book of Electricity" had the Morse code printed and not the Continental (government) cw code. So, when I found out about ham radio I had to relearn cw. I used the "Tinker" toy key to make my first novice contacts till I procured my J-38. My brother never became a ham but could copy code. We used to tap code on the dinner table to each other well into our 60's. A hint when you make one of these keys; find screws you can file to a sharper point at the contacts. 73 de K8NS

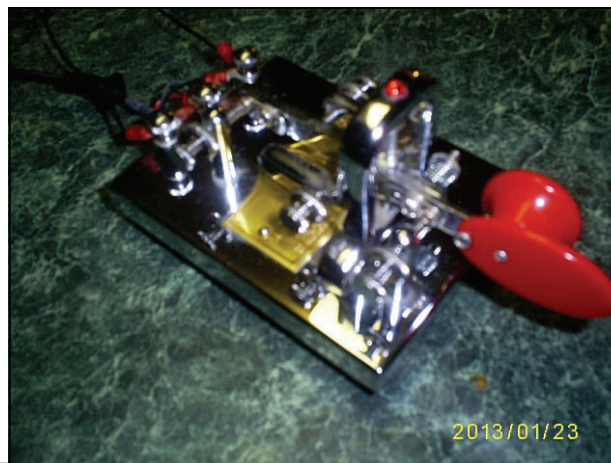
### Jim, VQ9JC / ND9M de V31JP

I'm on from Diego Garcia until sometime in July, QRV in my usual local evening hours in the 1200-1600Z time frame but getting an early start on most Fridays at 0830Z. The island's ham shack was shut down permanently, so my operating is strictly Field Day style. I set up at a park where there's a covered picnic table with AC power and, being a tropical island, plenty of trees for supporting my antenna. I have to carry my gear (FT-857D, power supply, several mono-band dipoles, coax, laptop, etc.) to the park in my backpack each time I want to operate, then set everything up and finally break it all down each evening to return to the ship. Early on, I had left up antenna support lines, but three sets were removed by locals who used the lines for fishing! I'm checking out the jungle alongside the park to see if I can thread an antenna or two through the dense foliage so that I can leave something up; it's a major pain having to be limited to only one antenna at a time! By the way, on an SKCC note, I don't have internet where I operate on the island. When I log in to the K3UK Sked Page from here, I frequently get asked to give a try on the band of the caller's choice, and every time, I have to explain the lack of internet access by saying that if you see me logged in to the Sked Page, I'm not QRV. I've worked a number of SKCCers who actually spin that big round thing on the front of the rig's panel, but a lot of SKCCers miss out on a new SPC 'cuz they watch the Sked Page only. I'm frequently calling CQ SKCC on or near 14050 and have had decent openings to the Left Coast. Unfortunately there haven't been

## KU4GW and W4CUX...More Than Friends

I think everyone on the Yahoo Group is aware that W4CUX Bill Worley SKCC #5497T became a silent key on December 29th, 2012. I want to share that Bill talked with W4CJV, Wayne SKCC#5872 before he passed away and told Wayne he had a few items he wanted me to have after his death. Bill and I had worked a CW schedule on 3.543 Mhz (3.563 alternate if QRL) for 3 years and 3 months, after he had contacted me because he saw my name on the SKCC Elmer List. We became great friends over all the QSOs we had. Wayne contacted me via email and told me that Bill had told him that he wanted me to have these items. They include a Vibroplex Chrome Deluxe Vibrokeyer Sideswiper/ Cootie Key and a Hendricks PFR-3A 3 Band QRP rig with attached BBW (Baby Black Widow) paddles and also a 10 watt 50 ohm SMT resistive dummy load. The PFR-3A has 20, 30, and 40 meter bands and a built in manual antenna tuner as well. The abbreviation PFR in the model number stands for Personal Field Radio. I have wanted one of these radios for quiet a while, but could never afford the kit to build one. Bill willed me one he had already assembled and I will treasure these items for as long as I live! Every time I use them I will always think of Bill and how much fun I had with him on the air working CW. Seems like everyone I Elmer wants to continue our skeds and that's fine business with me because that's how W4CUX and I became such good friends!

73, Cliff KU4GW SKCC #652





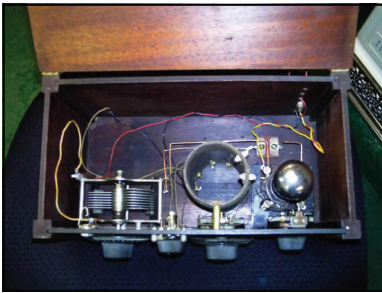
## K8TEZ Restorations

Larry K8TEZ (SKCC # 8426T) enjoys restoring old radios. Last issue saw some of his restoration work on an old Atwater-Kent radio. Larry sent me a couple pictures of some of his other work. According to Larry:

***"This little radio is a one tube super-het that uses a single 201 A Tube & I beleive it was a high school shop project for some student many many years ago. I found this in "as is" condition at an antique shop in Blissfield***



***around 30-35 years ago & inside was a 1939 Whites Radio Log & the original hand drawn schematic for this radio. It looks like a kid hand drew it as part of his project.***



The photos on the right are cathedral radios in his shop. Larry says they come in in very poor condition and leave as radios shown in the lower picture. Larry also restores antique lamps and furniture.

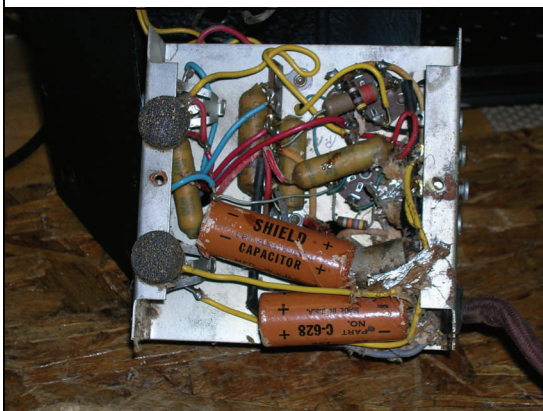
I sure hope Larry wasn't trying to use any of these radios in the SKS, WES or K3Y celebration!



## Why You Need to Use a Variac on Old Equipment!

I enjoy "restoring" old equipment, I recently acquired a code practice oscillator that needed a cabinet re-paint and a general cleaning. A common issue with older equipment are "dried-out electrolytics". Normally I ALWAYS run this old equipment on a variac and slowly build the voltage up in 48 hours which usually restores the electrolytic capacitors. I must have fallen asleep or something because after painting and cleaning this code practice oscillator I just plugged it in and turned it on.

Boy, what a mistake! If you never have been around a blown electrolytic it's a sound, smell



and sight to behold! WHAM! BLAM! SMOKE! I had a shack filled with smoke, the insides of the electrolytic was all over my desk, coffee cup and tools! I had to open the shack and turn on the fan to clear the smoke/stink out! And this was just one of two electrolytics in the unit. You can see the "guts" of the capacitor/foil in the picture. It was lucky the chassis was "face down" when the explosion took place and inside the case!

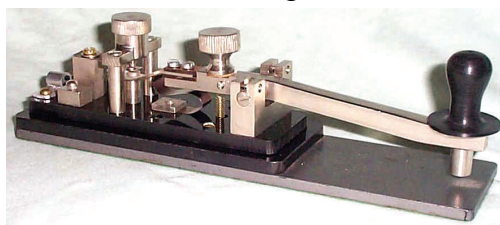
So now to bring this unit back is going to take a lot more work; two new capacitors soldered in place, clean-up the under chassis and clean-up my work bench! Lesson is: ALWAYS use a variac on old gear

before running it a full voltage! .....de K8AQM

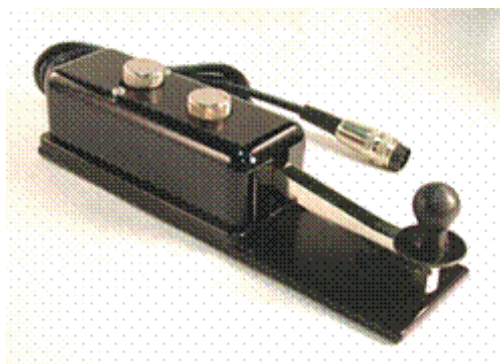
## 10,000 US \$ in Ashdod City Garbage Site! by 4X1FC

On the year 1963 I was attending, a two years course, preparing for the examination, to issue Maritime Mobile Radio Officers license (P.M.G). We were a group of 24 young men, just shortly, dismissed from the army service. All of us were experienced CW operators, from different army units, and had operated in harsh conditions, like on rolling torpedo boats, galloping command cars, tanks, pounding sand hills, or in a self dug pit in a muddy terrain. None of us was a Radio Amateur, and a Morse code key, was simply a working tool, with no emotional or artistically referenced. We were all imprinted by the army communication training- base logo: "The message must pass". That meant that nothing else is important, so naturally the quality of the key was not an issue in our talks.

The CW training room was all equipped with the Danish G.N.T. (Great Northern Telegraph) items. Start with the student's personal pump handles, to the machine monitoring the lengths of dashes and dots on a paper ribbon. Toward the end of the course, we all developed an appreciation to the quality of the keys, especially with the devotion of one of the instructors, who was a radio amateur, 4x4kl, that dedicated few hours to teach us the special qualities of the keys, how to adjust it and how to keep a good maintenance of it. Even so, except me, no one of the licensed R/O became a radio amateur. Even with me it was a long term, gradual evolution. I believe it started with the fact that on any new assignment I would find a different key that I had to get used to. So I bought a "coffin bug" and built the Heathkit HD-10 electronic keyer, to carry with me, but both were almost useless on the ships, and a professional pump handle was much easier to master or to interface with multi-wires keying lines. Even that I never thought, that a mentally and physically healthy individual will go, on his

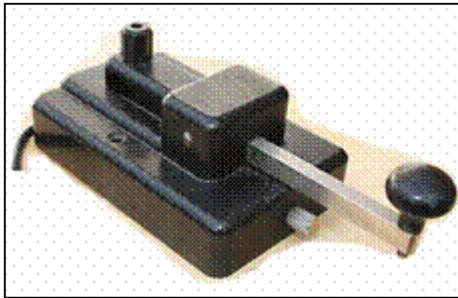


free time, to have his job as his hobby, I went 'down to the street' and became an amateur. On the other hand, I could not foresee how much recreation and cure to the dismay of life events, the Ham radio activities brought, and even not on the air, just restoring a good key.



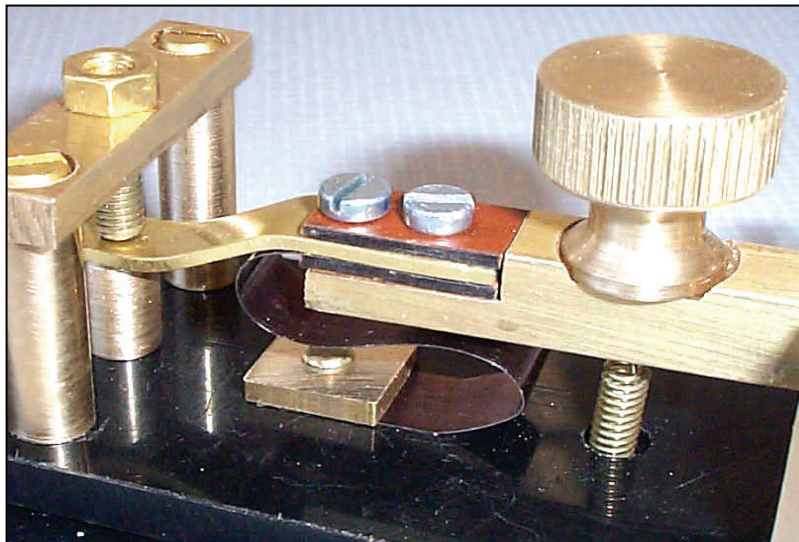
It took me some 20 years, within the hobby and unintentionally, to start a collection. I found myself attracted, to a secondary hobby of chasing and trying to master, any kind of keying method. To do this, called for purchasing the different devices on the market. After I gave up my resistance of being connected to the internet, I found out the endless universe of manufacturers, home brewers, collectors, documentary literatures etc. all about code keying. Immediately it became clear that GNT keys are very rare and that there were few other manufacturers that built, much the same, with different names, among them the Amplidan mk2. Also, it became

obvious, that those keys are highly respected, as every collector or vendor is displaying it even as "sold out" or "not for sale".



Among quite a few distinctive features, that makes those keys unique, the most meaningful are the followings:

1. The lever arm is held in a state of "dynamic equilibrium". There is a spring force slightly acting upward (the S shaped metal strip) and the screw controllable, spring acting downward. This helps the operator, to feel in continuous control both directions. Also it helps to performs round full-bodied strings of dots.
2. The Ohmic track, to create the short circuit, is not passing through screws or pivots, the conductivity of which is not stable, but through the large S shaped metal strip, that is permanently in contact with the moving contact.
3. The two contacts are each mounted on a flexible metal strip, so that during the touchdown period it are slightly skidding one against the other, and thus creating an automatic self cleaning.



Well, I hope that I did not describe something that the manufacturer did not think about...

On the year 1999 CW was about to cease being standard bylaw mode, for international maritime mobile communication. A ship Radio Officer (Sparks or Sparky) would be a vanishing profession. The Global Maritime Distress and Safety System – GMDSS 3 or 4 categories of licenses were about to replace the R/O, by new safety regulation for the on board communication personnel and equipment. On that year the "ORT" nautical school, in the city of Ashdod (A southern Israeli port), closed the R/O qualifying courses, and dismantled all the equipment, from the CW practicing hall, and replaced it by the equipment for highest category of the GMDSS requirements. I joined the first or the second course for the GMDSS category - General Operator Certificate – GOC.

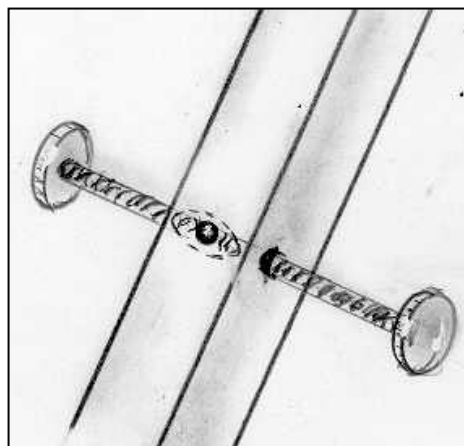
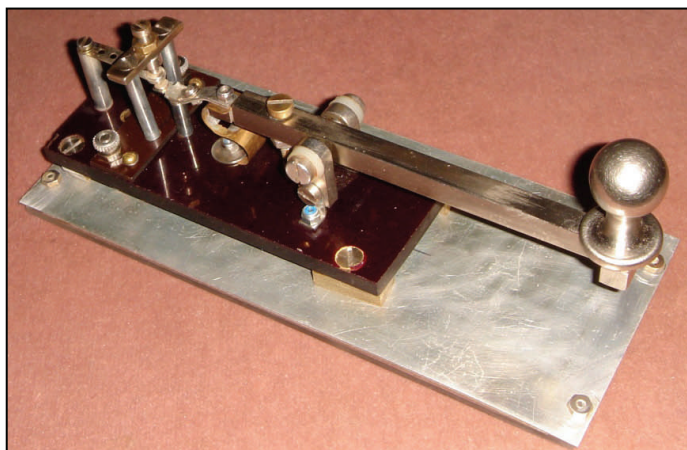


One day, during a break between two sessions, I was talking to one of the instructors, and asked him what kind of keys they had, and what are they going to do with it. His answer was that they had **11 GNT keys**, and just yesterday he had packed it all in one white cloth bag. I went on, not knowing its value on that year, and still not being a collector, I asked if I may have them all or one of it. His answer was that he put it in a room corner that was closed at that moment, but asked me to call him on the phone the next day so he can arrange it for me.

Last June 2010, I was on one of my frequent visits to G3YUH – Ron projects site, where he displays an original Amplidan MK2 and the replica 1:1 that he did. Via the E-Mail, I asked if he has any for sale. His answer was that the original is on auction at e-Bay site and I may try to get it from there. Well, on 8 June 2010 12:38 Pacific Daylight Time, it was sold, not to me, for 937US\$ with only 39 bids. It is still displayed in the site.

OH! Sorry dear readers, I almost forgot to tell you, on the “next day” on 1999 I was told, on the phone, that the sanitary employee, of the Ashdod nautical school, loaded the bag with the keys on the garbage collecting lorry, later to be discharged at the city garbage site. Composing the 1999 event with that of June 2010 tells us that there are about 10.000US\$ in the garbage of Ashdod city. Those who have Morse keys sniffing ability may try to detect the bag among the other scents. As for me, from 1999 and on, I home brew replicas simply from readymade components sold for furniture’s drawers. One example is displayed below.

My innovation is to assemble the pivot by two screws pressed and locked against a metal ball.



### Really? No Way! de Steve ZL2KE

*This was submitted by Steve ZL2KE, could it really be true?....Wow!....*

“That brings up an interesting experience I had back in 1968. When aboard the U.S.S. Richard B. Anderson DD-786, we were anchored in the harbor in Hong Kong. I had a bit of idle time on my hands, and rigged up a couple of tincups with some boatswain's twine connected between them. I started sending some CW by tapping on the side of my can while the other can was hanging in the water off the fantail. For the heck of it, I sent, "I wud like sum shrimp fried rice." I repeated it a couple of times. To my amazement, I started hearing some CW back. I sent, "QRZ, QRZ." and listened again. I then copied, "Do u want an eggroll wit that?" True story! ;-) Dan **w4mnc**  
*PS After checking with Dan it is confirmed as a bit of fabrication...but still funny!...editor*

## “Shack Art”

By N8KZH

If you watch the “Updates in Your Groups” that come into your emails you may have seen the update to the N8KZH (Ron) shack. I was really impressed with Ron’s work and asked him how he did this. Below is the note Ron sent me and what it took to make the SKCC clock and personalized coffee cup.

*“I got the clock face from SKCC yahoo groups, it’s listed under the Files section. It was posted by Pete WIPNS. I used Windows Paint to add my own call and info. I also changed the 24 hour format to 12 hour as I needed a 12 hour clock. I then printed it out and glued it to an 8 inch clock from Walmart. As for the cup, it’s my own design. The key is a photo I took of my Navy Flame-proof. Again, I used Windows Paint to make the design, and added the SKCC logo.”*



I am a believer in making my shack a comfortable place and was really impressed with Ron’s work. I am really a coffee lover too but definitely not an artist nor really familiar with working with Windows Paint but I “do know” Microsoft Power Point.

Ron was kind enough to send me a clock face personalized with my call and personal information. I wanted to make a cup like his with my favorite key (a TAC bug) so into Power Point went N8KZH’s ideas. The results proved very satisfactory:



The next step was to save the Power Point slide as a jpg file and save it to my camera disc. From there I took it to my local Meijer’s store photo department where I had several other photo mug made in the past and for under \$10.00 I had a mug made.



I was so pleased with the resulting mug that I made one for my good friend N8KR who had received an SKCC pump key for Christmas.

So now I can enjoy a good cw QSO while enjoying a fine cup of coffee in

my very own personalized mug with my favorite key (bug).

Thanks to Ron N8KZH for the inspiration and ideas for a fine shack upgrade. Now to get on that clock project!

# Finding Antique Radio Transceivers and playing with them!

By N8KR

Back in the late 1970's and early 1980's, two Japanese companies were competing for our radio business. Kenwood had their very successful line of 520/530's and 820/830's. Yaesu had their 101 analog series and had introduced their 901DM and 101ZD digital line. Both Kenwood and Yaesu still had the 6146B tube finals in these radios. It was Yaesu who first came out with the 100% solid state 100 watt transceiver. (excluding the American made TenTec or Atlas) This first solid state, non tune HF radio was the FT-107.

I remember back in 1980 when my friend Curt, WB0FAX, purchased one new. He lived in St. Paul, MN. I lived about 75 miles away in Eau Claire, WI. We had daily cw skeds. He had been using his old FT-101B and I had my Tempo One. Within a few days of his new acquisition, I was in his shack playing with his new rig. It was pretty neat not having to tune after changing bands. There was a "width" knob for an IF pass band that was very effective removing interference. There was a memory button for remembering a frequency, useful in split operations. Of course, having a digital display on top of the other wonderful features made this rig a real "dream machine."

This past October I found a Yaesu FT-107M along with a speaker and an external VFO. It was the typical "white faced" model. (Yaesu also manufactured the rig with a grey face.) Here's what it looked like:



This was a later model, the "M" version which had the WARC band addition. Looking at its features, you wouldn't think it was a 30+ year old radio. Playing with this rig was pure delight. The receiver was every bit as sensitive as my 1000mp. I found the noise blanker superior to the "mp". You had the option of switching in the 600hz cw filter from the front of the radio. Its operation was perfect and the accompanying width and notch controls totally eliminated qrm. It had 11 memories which was quite easy to program and split operation with them was as simple as pushing a button. SSB operation was a snap with the Yaesu MD-1 microphone and audio reports were excellent. The external vfo was simple to operate. Even though it had an analog display, it would show a digital display on the radio. It was cool watching the frequency change on split operations between transmit and receive! This radio was so good, I had a difficult time parting with it! The only negative I had was the fact that the radio was big and heavy. This was the era before our nice, switching power supplies. I'm guessing their fading popularity is because of their weight.

I see these radios sell on Ebay for three to four hundred dollars. I think they're a "steal" for that price considering their operation. I guess hams like the newest and greatest . . . but this rig is truly a gem! I'm glad I had the opportunity to play with one again!



## SKCC Call Signs

In the "Special Issue" of the "Rag Chew" I mentioned that I had received a neat gift from Dave N9ZXL. AC2C Ron, also received a call sign engraved and shown below with my engraved call sign. Dave manufactures these and is willing to make them for others at a very reasonable cost.

I wanted to do a bit "extra" to mine. First thing was to sand and smooth the original block of pine supplied with the engraved call sign and logo. Using some stain I had on hand I gave the wood



a new coloring and after it dried I applied several coats on antique furniture polish. You can see the transformation of the pine block into a new richly colored block. And now the real fun begins! I wanted to have that sign "light up" when I was on the air. 110 volt lights were out of the question and would create too much heat.

However, friends of mine who restore old radios informed me that you can purchase a string of LEDs very reasonably and in many different colors. They use these strings to replace dial lights in restoration projects and even in rotor control boxes. Idea has struck! My Yaesu FT-1000mp has 12 vdc coming out the back that activates when the rig is turned on. I purchased a string of light for less than \$20 (actually I had to purchase a second string since I "lost" the first string "somewhere" in my shack...I hate when that happens!). I am partial to "green" as my collage colors are green and white (Michigan State University). I was very pleased to learn that these strings of LED lights can be cut every three lights. The strip is even marked where to cut so you can use the lights in segments of three.

It was an easy matter to put the appropriate plug on the end of the wire to tap into the 12 volts from the rig. The strip comes with adhesive already in place so mounting it to the wood is no problem at all. Sorry my picture wasn't taken at the correct angle, the entire sign lights up beautifully and when the sign is placed at or above eye level it really looks cool!

Whether you want to do a bit "extra" to the sign or to keep it simple the sign is a great addition to the shack. I am very pleased with mine and I thank Dave N9ZXL, for sending it along to me. If you would like to know more about the sign and what Dave can do for you just drop him a line to [n9zxl@att.net](mailto:n9zxl@att.net). In case Dave's call sounds familiar, Dave was one of the makers of those wonderful bugs and keys shown in the last issue of the "Rag Chew."



## Magnetic Loops, QRP, and Morse Code Operating!

I have been experimenting with building and using a Magnetic Loop antenna. My good friend Dave, K8WPE purchased the “AlexLoop Walkman” antenna made by Alex, PY1AHD last spring at Dayton. The antenna is very well built, compact, covers 7.0 to 30 MHz, and is easy to set-up and use for QRP portable operating. Dave allowed me to barrow the antenna to learn more about what makes a magnetic loop antenna, and how they could be used for portable HF QRP operating. The whole antenna fits inside a very nice case about the size of a laptop computer.

I thought, I would try and make a copy of the original antenna as I had my notes, measurements, and pictures to use for reference. I used gray electrical PVC pipe for the three piece modular center support. The larger induction loop was made from 3/8” hard line or Heliac, and the smaller feed loop from 10 Ga solid electrical wire. The air variable tuning capacitor is the heart of the antenna. A dual section air variable capacitor is better for tuning than a single section capacitor as there is less hand capacitance while tuning for low SWR. I thought, I had found the exact same capacitor that Alex uses but I was wrong. My copied antenna only tunes 14.0 to 29 MHz and 10 watts input power is the max because of the capacitor plate spacing. Here is what my antenna looks like.

I have been using the antenna clamped to my desk top next to my QRP radio for about three weeks. I have found the antenna very helpful in reducing near field electrical noise from computers, and other electrical noise generators like my wife’s quilting machine. “On the Air” reception reports are what I would have expected. My CW signal reports are 339 to 559 on the magnetic loop and 458 to 589 on my vertical antenna. CW QSOs have been made under excellent propagation conditions to contest type stations in Morocco, Spain, Poland, Germany, and other European countries. I have had QSOs with SKCC members on the east coast, west coast, southern states and Canadian stations.

What I like most about this magloop is that it can go with me to the park, beach, woods, or hill top for portable operating, while my vertical has to stay home, alone! It is a very nice addition to my KX3 for getting out of the house, doing something different, and operating in the fresh air.

To learn more about magnetic loop antennas I would suggest looking on YouTube (Alex has a number of very well done videos), searching the web for

Magnetic Loop Antennas, or even join the MagLoop yahoo group. I will be happy to send my construction notes and suggestions along with more pictures if you are interested in building an antenna like mine.



72/73 Jeff - K9JP