County Hunter News

December 2019
Volume 15 Issue 12

Welcome to the On-Line County Hunter News, a monthly publication for those interested in ham radio county hunting, with an orientation toward CW operation**.**

Contributions of articles, stories, letters, and pictures to the editor are welcomed, and may be included in future issues at the editor's discretion.

The County Hunter News will provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

We hope you will enjoy the County Hunter News. Feel free to forward, or provide links. Permission is given for copying or quoting in part or all provided credit is given to the CHNews and to the author of article.

CW County Hunter Nets run on 14.0565, 10.124.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, there is SSB activity now is on 'friendly net' 7188 KHz. The CW folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB . (21.336 and 28.336)

You can see live spots of county hunter activity at ch.W6RK.com

For information on county hunting, check out the following resources:

The USACA award is sponsored by CQ Magazine. Rules and information are here:

http://countyhunter.com/cq.htm

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

MARAC sponsors an award program for many other county hunting awards. You can

find information on these awards and the rules at:

http://marac.org/awards.pdf

There is a lot more information at www.countyhunter.com . Please check it out.

Back issues of the County Hunter News are available at www.CHNewsonline.com

De N4CD, Bob Voss, Editor (email: telegraphy@verizon.net)

Notes from the Editor

N4CD Rumblings

1) Sunspots – what sunspots – very, very few of them! However, the solar flux seems to have bottomed out at 64 and has been up to 70 some days and sits in the high 60s. Not high enough for good 20m propagation, though, most days. Toward the end of the month, the SFI was bouncing up around 68-70 so 20M worked a bit better (at least for CW) and mid day, some contacts could be squeezed out on 17M.

Every now and then, a sunspot from Cycle 25 (the next one) shows up for a day or two then vanishes. The sun is trying to start the next cycle but seems to be in no rush to get there. Lots of solar activity with coronal holes, and an occasional glancing blow sending the A and K up a bit.

On the Trail of Regens

An interesting 'goodie' showed up on Ebay at the end of October. From 1926, it's a

Radio Engineering Labs Model 130 Short Wave Radio (Kit) from the way back days. Let's see....that's 93 years ago! Wow. This is the very beginning of short wave (more than 2 MHz, or below 150 meters as much of the world talked in wavelengths, not frequencies, with just a few stations on the air.

This radio, using plug in coils, covered 10-200 meters (1.5 to 30 MHz) although there wasn't much above 10 MHz at the time. It was advertised first in the October 1926 issue of QST on p87 for a price of $36 – quite a bit of money back then! Folks made 25-35 bucks a week – so more than a week's pay for a simple receiver kit. Now you can buy a multi-band solid state transistor radio for $20-25 new – a few hours of work – that works 10x better, too.

This kit uses a pair of '99 tubes – one regen detector, one audio stage. This is one of the very first 'shortwave radios'. The UV-199 triode tube was made for “portable radios” and takes 3v at 60 ma. It had a unique base not used by any other tube! Most of the home radios used the UV-201 tube that took 5-6v at 250 ma. However, with a smaller filament, life was usually much shorter due to vibration killing the tube. It was fairly fragile. It fell out of use after 1926.

Never heard of Radio Engineering Labs on Long Island, NY? It participated for six decades in the radio industry and participated in many of the 'firsts' of the industry. From the Broadcast Archives:

“REL was founded by Charles M. Srebroff in his mother's kitchen in 1921. A Columbia University student, his first products - variable capacitors and RF coils - led to radio kits. Naturally, Srebroff built a radio station, so his customers could receive programs on their radios. WFAG was licensed in Waterford, NY. It was granted DOC license #467, and ran for a little over a year, from June 9, 1922 to July 1923.

REL manufactured many custom products for amateur as well as commercial purposes. Customers included the bootleggers of the time, providing quite a large income to the business in the late 1920s and early 1930s. (Prohibition!)

In time, Henry Dietz came to be the plant manager, and led the way to expanding the company. Frank Gunther was the salesman. A major force in REL came to be Major Edwin Armstrong. Armstrong was the driving force for many projects including FM transmitters and the first two-way radios for police cars. These radios - installed in the Bayonne, NJ police cars - raised the ire of RCA, which then instigated a patent lawsuit by Lee De Forest. The animosity between Armstrong and RCA led to his backing REL in the legal actions. Additional legal aid came from C.R. Runyon, Armstrong's neighbor. (Ironically, the radios were first designed for a client in South America ... rum runners ... who lost their equipment to the Coast Guard.)

REL projects included a number of military radios, as well as the LORAN (LOng RANge navigation system), just recently replaced by GPS. With Armstrong's FM transmitters came FAX capabilities.

Frank Gunther (who joined Radio Engineering Laboratories in 1925) became president in 1960. REL ran for a while, but eventually withered, ceasing operations in 1972, after being sold to American Dynamics."

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There are one or two other radios that N4CD is hunting for – the model REL 234 regen set of the late 20s. Always things to hunt for!

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The Bayonne police two way radio system was the first to be on the air. REL was the first to install two way radios on airplanes in 1931. REL constructed some of the first shortwave broadcast stations as well! These started out as licensed APEX stations by the FCC – AM stations on HF with regular programming – but were replaced when the FM broadcast band was created from about 42-50 Mhz. REL promoted and built FM broadcast transmitters and station equipment, and designed the first 'tropo scatter' systems for the military. They were at the forefront in many emerging radio technologies.

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Dateline CW – by Ed, KN4Y

While the MARAC RoadRunner is in temporary suspension, Ed's monthly column is presented here (from the County Hunter Forum) – Nov 1 2019

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All the Counties and Parishes of the United States have been worked on Sideband. Now accomplish the ultimate challenge and work all the Counties and Parishes on CW!

I cannot sleep so I get dressed and head for the radio shack to check for any damage caused by tropical storm Nestor. I walk around the area and do not see any obvious damage, not even fallen limbs. The weather is a lot cooler and I go into the radio shack and for a change do not turn on the air conditioner. I turn on the computer and glance at the calendar and cannot believe it is the next to the last month of the year. I also notice this is the month for elections, also Veterans Day and the last Thursday of the month is Thanksgiving and I have two bowling tournaments. I change the page on the calendar.

I hear Gator's 4X4 downshift as he slides to a stop at the recycled railroad tie. Gator slides out of the truck and heads for the radio shack, carrying a white cardboard container. I start to salivate. Gator enters the shack. "Good morning, Dude. I could not sleep so I stopped at the plant put my paper work to rest and decided to bug you." He starts laughing as he takes a super-sized latte out of the white cardboard container and hands it to me. I think to myself, how did Gator know I was here early? I close my eyes and sip the latte. Gator sits at the computer.

Gator starts laughing. "Dude, I see you operated in the California QSO party. Did you have to get a California State permit to allow your radio signal to cross the California State Line?" I laugh. "No, I saw no such requirement in the California QSO party rules, but do not give the Governor any ideas. What are my final totals?" Gator is looking at the California QSO party log. "Not bad Dude. You logged 145 QSOs but only worked 49 counties. Why did you not get all the counties?" I sip my latte. "I did not operate Sunday and that is when I might have logged the other counties. Full time operating is the secret for logging a high scoring QSO party."

Gator is staring at the computer and gets a sad expression. "Dude, did you know

Alex K9FZ, Guy WB8RJW, Bunny N1FJR, and Bob N1HHW?" I think for a few minutes. "Yes Gator, I worked Alex a few times in 2011. I do not think he was a MARAC member. I did not work Guy and he was a MARAC member who operated mostly Sideband. The same applies to Bunny and Bob. Both are MARAC members who worked Sideband." We turn the volume down on the radio, dim the lights and bow our heads as Gator recites The Shepherd's Psalm.

I hear the mail babe stop at the mailbox. "Gator, I am going to get the mail. Please check out my Pennsylvania QSO party log." I go out and retrieve the mail and return to the radio shack. "Gator, I got two certificates. Here, zip them open." I hand Gator the envelopes. He reaches into his pocket and pulls out his Redneck Ivory handled switch blade and zips both envelopes open. He looks at the first one and starts laughing. "Dude, you got 40th place, out of State, in the Maryland-DC QSO party." Tears are running down Gator's eyes. I must also chuckle a little and wonder how close I was to 39th. "Gator, what is the other certificate?" Gator extracts the certificate. "Dude, this is a Certificate of Participation in the Kentucky QSO party in case you forgot." I wave Gator off. "Gator, check out my Arizona QSO party." Gator faces towards the computer and brings up the Arizona QSO party module.

"Dude, you made 15 QSOs and worked 10 counties. What is your excuse for the low QSO rate?" I sip my latte. "Gator, as I said before I went up and down the bands working stations as I heard them. I did not hear many Arizona stations. For instance, if you check the Nevada QSO party log, I made only two QSOs and only one QSO in the South Dakota QSO party, and no, I did not fall asleep.

"Dude, I remember you saying you were erecting a 10 meter vertical for the 10-10 International Fall CW QSO party. How did it function?" "Well Gator, I really do not know. The 10 meter band never opened or if it did no stations were operating." Gator interrupts, "Dude, I just checked your 10-10 log and you only have two contacts, both from Terry over in the next county. How long did you operate on 10 meters?" I finish my latte. "What happened Gator was it got very boring calling to dead air, so I went to 20 and 40 meters every once in a while, and worked the New York QSO party on Saturday and the Illinois QSO party on Sunday. Check them out."

Gator brings up the two logs, "Not bad Dude. You made 36 contacts and worked 21 counties in the New York QSO party. Gator pauses. "You worked 61 QSOs and 32 counties in the Illinois QSO party. You know what they say: You do one QSO party to the hilt or three QSO parties half asserted. By the way you worked 8 mobiles in the Illinois QSP party. Bill, NUØQ was the only MARAC member. You worked 2

mobiles in the New York QSO party, and none are MARAC members." Gator is laughing hilariously.

"Dude, I am going to ask you one more time. What is your involvement with the two dames at the senior center…" Gator's cell phone goes CQ, CQ, CQ. He answers and says, "Dude, I have to get to the back forty. Someone dumped a load of dog and cat carcasses in the north corner of the back forty. The Health Center guy is there." He is gone faster than the distribution of Marana cigarettes. I hear him yell, "Farewell, Rip Taylor!"

The printer starts and then stops. I extract the printout listing the mobile county hunters that checked into the county hunters' CW calling frequencies during the month of October. I read:

AG6V, AI5P, KØDEQ, KØFG, KØMAF, K3IMC, K4YT, K7WP, K8ZZ, KA2LHO, KA2QLF, KB6UF, N4CD, N9AC, N9JF, NFØN, NUØQ, W2GD and W8OP.

It is another sad month for the State QSO party participants with none scheduled for November, but the contest operators will have fun starting with the ARRL CW Sweepstakes Contest (sort of like radio message handling), the OK/OM DX CW Contest, the LZ DX Contest and the CQ Worldwide DX CW Contest. There are more radio activities in November, but it is time for a nap.

Amelia Earhart's Radio

One of the enduring mysteries of all times is Amelia Earhart's last flight in 1937. Ever since then, folks have been speculating where the plane landed (and how) and whether she survived the landing, and what happened next. Millions and millions have been spent hunting for any sign of the airplane or her.

Recently, there was an interesting program both on PBS and the Discovery Channel about Ballard's three month expedition to the Pacific to try and find the wreck of the plane. He was the one who found the Titanic – and the Bismark, and other historically important 'finds'. He was quite optimistic about knowing where to search from the clues

and proceeded. Unfortunately, the results came back negative although there is some evidence that she landed on a small island several hundred miles south of the intended airport on a teeny uninhabited island in the Pacific. Her original target was also a teeny island that had a runway built just for her attempt at the world wide flight.

What is equally a mystery is exactly what the radio equipment on her plane at the time of the crash, and how it was configured. She was notorious for changing things, and also having prototype things made for her – special order – for perhaps the radio and definitely the plane. The Electra she flew was custom designed with six extra fuel tanks to start with, and she was a fanatic about reducing the weight of everything in the plane.

So to start out, she had a 3 channel Modified Western Electric radio system. It could transmit on 500 KHz, 3105 and 6210 KHz and receive from 480 KHz to 12,000 Khz in 4 bands. It came with a microphone for voice, and a key for CW and MCW operation.

Her first navigator, Fred Noonan, had worked with Pan Am plotting routes, setting up radio stations, for the Pan Am TransPacific airline service. Pan Am flew the 'Clippers' which were what most people would recognize as PBY's – amphibious planes designed for water landings near ports across the ocean.

The Western Electric 13C was a 50 watt output AM transmitter (modified for CW/MCW operation). Hers was factory modified for CW/MCW on 500 KHz – and later radios in the series would have it standard. Changing frequencies was done by a rotary switch than changed crystals and coils for the various tuned circuits. A remote head was in the cockpit with a multi-turn arrangement (Like a coffee grinder) to shift frequencies. All tuning adjustments were done by a technician before flight.

The standard setup included antennas on top of the plane – for HF – and a 250 foot long trailing wire that had to be hand cranked out the back of the plane while in flight for 500 KHz operation. Most marine shipboard equipment could Direction Find (DF) on a key-down continuous CW transmission so ships could help locate her at low frequencies (500 KHz). Not true at HF. That was the thought. A T-R relay assembly was used and there were extra switches to throw to go between HF and 500 KHz operation. However, both Amelia and Fred Noonan – the 'first navigator' did not know CW or practiced using it or the 500 KHz equipment. In the US and Europe and around the world, HF was sufficient when folks alerted ahead of time to listen for her on her two HF frequencies.

You'll recall that Amelia was a brave, courageous woman out to break all the aviation records she could. She had little interest in the radio, radio theory, or use of the radio.

To her, throw a switch and talk and listen. Nothing more and little practice using the 3 channel radio, radio direction finder, and everything else. Noonan understood a bit more but wasn't competent with the ever changing modifications that were happening. He was an excellent navigator.

Her receiver was a Western Electric 20B with factory mods to cover 500 KHz plus the two HF channels. A bandswitch would have to be thrown to go from one range to another – in her case, 3 different receive bands for the 3 frequencies. The receiver was not crystal controlled but had to be tuned using a small knob/crank until the frequency was seen on the dial.

On top of the cockpit was a Bendix MN-5 Loop Antenna for DF. It could be used with the WE20B receiver – but only over the range of 200-1500 KHz. This really gets interesting when later in the flight, when lost, Amelia is requesting that ships broadcast on 7500 KHz key down so she could 'direction find'. She totally misunderstood what the Loop could do. It normally was used with a separate Bendix receiver but could be used with the WE20B by throwing the right switch – at the navigator position – not up front! Also the Bendix 'coupler' would have to be tuned to the lower frequency. There was no Bendix receiver on board to save weight. For a tired navigator a pilot, having never practiced this, it was a recipe for communications disaster.

What was she thinking when she wanted 'key down' on 7500 KHz? The signal would not change much unless you were close by and came within a few miles of the ship – otherwise, at 50 and 100 miles away, you could fly for miles with little change in signal strength. The plane wasn't all that directional at those frequencies and she had never practiced using it for DF reasons, either.

The Western Electric receiver started life as a VLF receiver – down below 1200 KHz but HF had been added. It was a poor performer by 1937 standards but was the norm for aircraft flying at the time.

The original and standard antenna on the Electra was 46 feet long, doubled back upon itself. This was roughly an eighth wavelength at 3105 and quarter wave at 6210 KHz with the feed in line. Now, here the mystery deepens even more. Some suggest that the top antennas were for transmit only, with antennas on the belly used for receive (with appropriate switching). Others suggest that the belly antennas were used for the DF 'sense' antenna. No one knows for sure. Yet others suggest that when AE took off from a rough field at Lee Island in New Guinea, the bottom antennas were destroyed, rendering her unable to receive transmissions from the ships calling her. No one is likely to ever know, but we do know that for some reason, either switches in the wrong

positions, or destroyed receive antennas, that Amelia was heard many times and ships responded to many times, but did not seem receive a single transmission from the calling parties! Then again, it could be the top antennas were doing double duty in a standard configuration. More mystery and nothing documented accurately. Too many 'last minute' modifications of one sort or another.

Amelia set out with Fred Noonan headed west on her first attempt at the around the world flight starting in California. It didn't last long – just one hop. When she took off from HI on the second hop, she ground looped the plane and did some significant damage. The plane had to go back for months of rebuilding. The masts which would deploy the cranked out 500 KHz antenna were destroyed and not rebuilt.

It appears that the HF antenna was lengthened slightly to 54 feet – not good for the HF frequencies used – to try to accommodate the 500KHz transmit frequency without using the trailing wire antenna. That would save Amelia 50 lbs for the antenna and crank out mechanism, and she was a fanatic about weight. She also left the key behind on the second trip – not that she or the new navigator knew code or how to send it, or even 'key down' condition. The new antenna for 500 KHz was terribly inefficient there but 'could' be used. The increased length to a non-resonant HF one plus adding 500 KHz and loading coils, complicated the loading of the transmitter and likely resulted in major harmonic radiation on HF – perhaps more on the harmonics than on the desired frequencies. Amelia left the trailing wire antenna behind before leaving the states on the second attempt – this time having to go east as the prevailing winds had shifted. A more complicated tuning network and switching arrangement had to be devised to handle transmitting into such an antenna arrangement.

Worse, all the ships at sea were listening to 500 KHz – the international distress frequency, but only for CW transmissions. Most would have totally ignored a voice transmission, dismissed it as static or QRM, meaning that even if she managed to transmit there, no one would be listening for voice! Only a few had HF, and only a few knew 'her frequencies' beside the few US ships near Howland Island, her destination she never reached.

Worse, for Amelia, she now had a new navigator who understood less about the radio and propagation and direction finding than Noonan. So two very inexperienced radio people on board the plane – very tired after 20 hours of flying in a noisy prop driven plane – and probably unable to figure out what was going on at the end.

Nearly all the ships in the navy communicated by CW (and only CW) on 500 KHz or other military frequencies in the 200-500 Khz area.. The lack of CW ability meant that

only one ship, the Itasca, with HF transmit capabilities could communicate with her – and did hear her many times. But she never heard the Itasca respond due to switches in the wrong place – or destroyed receive antennas – nor had CW ability to operate on 500 KHz, the main ship frequency monitored by all. So it didn't end well.

So....did radio do her in? Ballard seems to think she was flying 'north south' on the right longitude line for Howland Island, but was too far south. It's easy to determine longitude – east or west direction. It's very hard to determine 'latitude' – north or south. She continued south and saw a tiny island as she was running out of gas. All her communications for well over a few hours was 'heard' but she didn't know how to DF or on what frequencies (the plane was slightly directional with antennas, if they were not destroyed) so she wandered back and forth going north/south, likely ending up 300 miles too far 'south' as she ran out of gas.

Another mystery is also why did Noonan, who had worked with Pan Am on routes and radio network, not arrange to have an additional transmit frequency for the Pan Am network installed in the transmitter. This would have given her additional DF information as Pan Am was well equipped for trans-Pacific communications – including DF'ing there. We'll never know.

Fully Automatic Bugs

The first 'bug' or mechanical device that would allow telegraph operators to send and receive code without the normal up/down movement of a straight key go back to the 1910 era. Those first bugs are pretty rare should you come across one. The patents wound up with Vibroplex, which is still making bugs to this day! Others still produce bugs, but over the years, hundreds of thousands were made by various manufacturers.

One of the problems that telegraph operators faced – starting back in the 1860s, was the repetitive motion of 'up/down' of the wrist/arm that could be required to send millions of dits and dashes a year. What we now call carpal tunnel syndrome was called then 'glass arm' and often ended the career of experienced operators who simply 'wore out'.

The first step was the side swiper key – where you would manually send dits and dahs by moving a lever left to right.

Enter devices to automatically send 'dits' by a mechanical vibrating arm. Most hams

who got licensed back in the 1950s-1980s probably ran across bugs. During the 1950s they were quite popular and allowed folks to easily send 20-50 wpm with minimal effort. You had to make the dashes manually.

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Some 'bug' history

The key concept behind the Vibroplex key is the vibrating mechanical arm that enabled multiple dots to be created. This concept needed to be applied to Morse keys before the Vibroplex could be made.

The main issue for many telegraph operators was that of the wrist and hand movements required to make the dots. Tens of thousands a day for a busy telegrapher, millions a month! A number of people came up with the idea of using a vibrating arm to generate the dots automatically.

The early attempts were not particularly successful because of the lack of damping that meant that sending was erratic and dots were often split. You had poor contact closure resulting in short dits. Although not a success, the first attempts at making what is now termed a bug key were crucial for later developments.

Another inventor named Horace Martin (the actual inventor of the Vibroplex key) was addressing the issue of damping the arm that made the dots. In 1903 Martin was granted Patent 732 648 for a telegraphic transmitter. This was the first real mechanical bug key and was called the 'Autoplex.'

The Autoplex was battery powered and used electro-magnets to keep the vibrator stationary when it was not required. After you'd send a string of dits – from one to six, the vibration of the arm would be 'damped' by the electromagnet.

The patent Martin received included a great variety of ways of making dots. This was a shrewd move as it meant that virtually all the competition could not circumvent the intellectual property that Martin set out in the patent. While the Autoplex keyer was gave a significant improvement over any other automatic keys that were available, it was still large and bulky and required power. Many telegraph operators took their keys with them after work and they needed something that was more compact and reliable.

Martin continued to work on ideas for semi-automatic bug keys and his development started to pay dividends. In 1904, a year after the launch of the Autoplex, he introduced

a new key that he called a Vibroplex.

Martin filed the patent for his idea on 7 May 1904. However another inventor named William Coffe filed a patent on 11 January 1904. Although Coffe's patent was filed earlier, it was very general in its wording encompassing many aspects of keyers. As a result it was granted after that of Martin's but it left the field open for litigation later.

The Vibroplex used the vibrating arm principle but had mechanisms to damp the vibrations when they were no longer required. It was also possible to adjust many of the essential operating settings so that everything from the movement of the paddle to the mark space ratio on the dots could be set. Another development was to use a double lever key that had a separate lever for dots and dashes. This helped overcome the issue they had with split dots.

The first Vibroplex keys were custom manufactured by Martin at his shop in Brooklyn New York. He continued this way until about 1912 when the name Vibroplex was registered and around this time he also linked with the Albright Company to manufacture the keys. The Vibroplex keys became very popular and were used by many telegraph operators and they were also adopted by many large organizations.

Up till 1930, there were a dozen clone manufacturers. Some licensed, most making illegal copies. Many of them are rare and highly collectible.

After the First World War, it took a few years before the next major introduction occurred. In 1923, the Lightning Bug incorporated several improvements and enabled smooth and efficient Morse transmission.

It was this key that was adopted by the US military Signal Corps during World War 2 and known as the J-36. Also the US Navy selected it as their speed key. By this time, patents had expired and half a dozen companies jumped in to make the J-36 bug for the war on contract basis- some totally different in operation principle. One of the famous makers was Lionel – the electric toy train maker – who produced tens of thousands of straight keys (J-38s) and bugs – J-36s.

The very nature of the Vibroplex mechanical bug key meant that it was not suitable for high current applications. With initial wireless transmissions being spark transmitters, which required high voltages and current levels to be switched, the bug was not suitable for these applications. However as valve or vacuum tube based transmitters using a carrier that was interrupted, CW transmissions started to be used, so too the bug key could be used for radio or wireless transmissions.

Horace Martin, the founder of Vibroplex and the inventor of the mechanical semi-automatic bug key, decided to leave his company in the 1930s. He set up another company called the Martin Research and Manufacturing company which made 'Martin Flash Keys.'

In 1940, Martin sold this company along with all the manufacturing jigs to J H Bunnel, manufacturer of straight keys. Bunnell then produced these keys under the name 'Bunnell Martin Flash keys.'

Although originally founded in New York, now over 110 years later, the company is located in Knoxville, Tennessee, USA. It continues to manufacture the original Martin bug key but it also increased the line to make a variety of keys for the current marketplace including mechanical bugs, iambic paddles, single-lever paddles and traditional straight keys.

Sources:

Vibroplex web pages

http://www.telegraph-office.com/pages/photo_gallery.html#pre1920

After WW2, there were vacuum tubes everywhere but it wasn't till the late 50s that folks starting building 'electronic keyers'. The first one probably was the Mon-Key made by the Electric Eye Company in Chicago starting 1948. It was very kludgey with a built in paddle mechanism and could not get over 20 wpm – hardly and improvement over a standard bug. In the 1950s, a half dozen manufacturers made tube based electronic keyers including Eldico and Eico. They were not 'inexpensive'.

It wasn't till the late 1950s that the TO Keyer appeared (designed by W9TO) – and soon was available by the Hallicrafters Radio Company as the HO Keyer which used separate paddle mechanisms. You'll see those Hallicrafter units around at hamfests today. They could key any type of rig as they had a mercury wetted relay that could withstand the voltages normally appearing across a key. Many hams built their own keyers from handbook designs of the late 50s. (N4CD built his first electronic keyer from the handbook design with a pair of 12AU7s in 1964 after using a bug for a year – even had one them new fangled selenium rectifiers in it!).

You had two types of keyers develop – iambic and non-iambic. One allowed dit and

dah insertion – you could send letters with less 'squeezes' of the paddle, thus go faster. Some would have a 'dit memory'. The iambic keyer required a two paddle keying mechanism while a non-iambic only needed a single paddle type keyer mechanism. The first iambic keyer, the NiKey came out in 1962. When ICs and microprocessors came out, you got the first 'memory keyers'.

Ready for a trip of nostalgia back the hand key and bug and paddle era? Visit

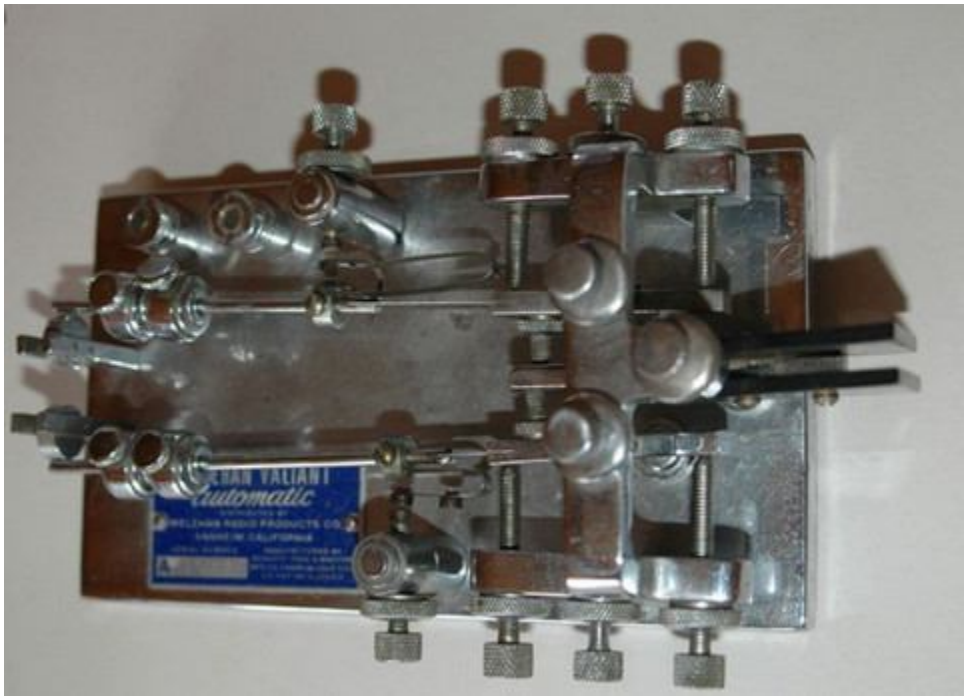
http://telegraphkeys.com/pages/keyerpaddles.html

You'll see some of each type at hamfests these days – both keyers and paddles. Most of the electronic keyers, however, are fairly rare as most hit the trash can decades ago. Solid state keyers didn't show up till the IC era of the late 60s and 70s. Now you can buy a keyer chip for $15 or $20 that does just about everything including memories, various 'modes', and takes a few volts and a few milliamps to operate. Most new rigs have a keyer function built in.

However, if you were an enterprising ham, and had some spare cash during the post WW2 period, before electronic keyers appeared, you could buy a fully automatic bug – one that made both dits and dahs automatically! It was rather complicated – but good operators using it were clocked at 70 wpm speed records!

Here's the Melehan Valiant Automatic bug- rather rare and it will cost you over a thousand bucks if you find one – made from the l940s for a 20 year run – but not too many made. They were made by Mel E Hansen. First one seems to have been made around 1940-41.

You'll note it has two levers – and two pendulums – one for the dits, one for the dahs.



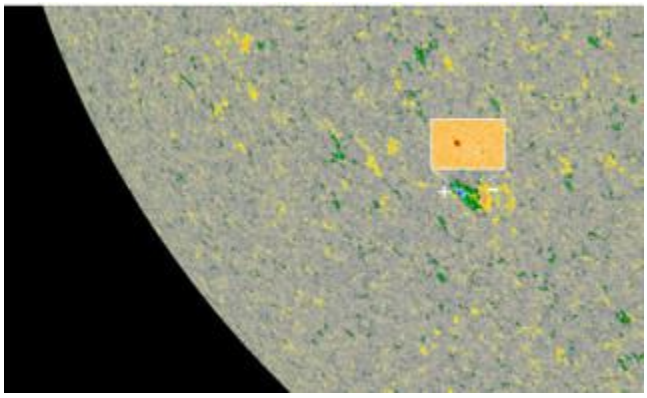
I've seen one up close but never had the chance to put it on the air. You've got a whole lot of adjustments to get it set up right and changing speed once yet is a bit of a challenge coordinating both sides together. Not many were sold so they are 'rare' these days and few wanted to experiment with them.

However, now if you really want one, you can buy a new one – from GHD – a Japanese outlet but sold by an American retailer. Made in limited numbers by JA7GHD. You can also get one with optical sensors – removing the spring delay and interaction in a normal bug. Not cheap.

Several hams on the County Hunter Net – and several park chasers use bugs – do you recognize the sending?

Solar Cycle 25 News

Nov. 1, 2019: Breaking a string of 28 spotless days, a new sunspot (AR2750) is emerging in the sun's southern hemisphere–and it's a member of the next solar cycle. A picture of the sunspot is inset in this magnetic map of the sun's surface from NASA's Solar Dynamics Observatory:



How do we know AR2750 belongs to the next solar cycle? Its magnetic polarity tells us so. Southern sunspots from old Solar Cycle 24 have a -/+ polarity. This sunspot is the opposite: +/-. According to Hale's Law, sunspots switch polarities from one solar cycle to the next. AR2750 is therefore a member of Solar Cycle 25.

Shortlived sunspots belonging to Solar Cycle 25 have already been reported on Dec. 20, 2016; April 8, 2018; Nov. 17, 2018; May 28, 2019; July 1, 2019; and July 8, 2019. The one on July 8, 2019, was significant because it lasted long enough to receive a number: AR2744. Record-keepers will likely mark it as the first official sunspot of Solar Cycle 25. If so, AR2750 would be the second.

The increasing frequency of new cycle sunspots does not mean Solar Minimum is finished. On the contrary, low solar activity will probably continue for at least another year as Solar Cycle 24 decays and Solar Cycle 25 slowly sputters to life. If forecasters are correct, Solar Cycle 25 sunspots will eventually dominate the solar disk, bringing a new Solar Maximum as early as 2023.

Winter Prediction

The 2020 edition of The Old Farmer's Almanac warns Americans to expect a "bone-chilling," super snowy, extra long winter this year.

There will be "no fewer than seven big snowstorms from coast to coast," a press release says.
This winter will be remembered for big chills and strong
storms bringing a steady roof-beat of heavy rain and sleet, not to mention piles of snow," says editor Janice Stillman.

Many parts of the country will enjoy a white Christmas and a white Thanksgiving this year… and the snowstorms won't stop until mid-April, the Almanac forebodes:

https://returntonow.net/2019/11/01/old-farmers-almanac-predicts-an-alarming-number-

of-snowstorms-this-winter/?fbclid=IwAR2_zWL4w5NbmAfANj1rBYHh5kn5U1V1uWOr-Q24bGA8U1mgutkmFIcW1Go

K0BAK's DC Rove

K0BAK Nov 10 Washington DC rove report

The District contains 20 KFF sites in its 68 square miles, most of which are under the National Park Service, and most of which can only be activated with a pedestrian portable station. During NPOTA in 2016, I activated most of the NPS sites in DC, including difficult houses like the Sewall-Belmont House (Women's Equality National Monument) and the Petersen House (Fords Theater National Historic Site). Two other difficult houses farther from the National Mall that I hadn't gotten to are the Mary McLeod Bethune Council House National Historic Site and the Carter G. Woodson Home National Historic Site.

In August 2018 and April 2019, I activated DC park sites that were added since NPOTA, plus the White House and Pennsylvania Avenue, so I only had those two houses left to cover all DC sites. My general plan was to find a weekend day long after peak tourist season, when the site was closed so I don't interfere with normal visitors, and with dry and not-too-cold weather. The first day this season that met all those requirements when I wasn't otherwise busy was Sunday Nov. 10, and since weather here in the Northeast was getting colder quickly, I felt that I either do it then or wait 5 months. My daughter who lives NE of DC generously offered to drive me to the sites since parking even on Sunday in that residential area would be difficult; my default plan was to take a train into DC and then Uber around (which I've done before in DC), but being driven would be much easier and save a lot of time.

I was using my "Stooper Station", the pedestrian portable station I built specifically for tiny urban NPOTA sites like these DC houses. The electronics and peripherals are carried in a backpack, and the antenna is a hamstick dipole on a tripod that extends about 10' high with legs that can be within less than a foot radius circle. The system enables me to have me and all my equipment on a single house stoop (thus the name),

although I've only had one case where I actually had to be that cramped. Because I was really worried about making a big effort to activate these houses but not getting enough contacts on SSB, I added FT8 capability with a laptop computer, which I tested successfully at local park the day before my DC activations. More information on the Stooper Station can be found in this QST article, along with another design used by N2CX (SK):

http://k0bak.com/portable/QST%20article%20May%202017.pdf

I started the three-hour drive early on Sunday.

The first house was Bethune. The good news is that it has a very small front yard that offered a good place to set up. The bad news is that yard is surrounded with a low iron fence and a gate which would probably be locked when the house is closed. I phoned the site on Thursday to ask for informal permission to operate there on Sunday, and was told to write an email to a specific NPS supervisor. I didn't get a reply by Saturday, so I followed up by email, and received an out-of-office auto reply. Sigh. I called the site again on Saturday (when it was open), and someone took down my info, but I had no hope of getting someone in authority to reply. So as we were driving to Bethune, I was pretty anxious. Would the gate be closed and locked? Even if it's unlocked, should I go ahead and set up anyway? If I set up, would I be trespassing since the site is officially closed (I think "yes")? As we first passed by the house I was happy to at least see the gate was open. We parked briefly in front of a private garage so I could unload, then the kids drove off.

The equipment was brought through the yard gate and placed on the walkway. I peered into the house, gently tried the door knob, and knocked on the door since I was so surprised that the gate was not only unlocked but wide open. There were no signs of anyone inside I could ask, so I hurriedly set up in the yard, still paranoid that I was breaking rules and would be caught by a NPS patrol (they're certainly efficient at my local NPS site Valley Forge). I did perform services for the NPS by informing three groups of disappointed visitors that the site was only open Thurs-Sat. :-)

I had a strange computer problem where my laptop or browser could not obtain DNS lookups from my tethered phone for most of the sites I use at an activation, including parksontheair.com. Fortunately I could post on Facebook, but not spot myself on the POTA spotting page. Thanks to W8ZST for spotting me. RF noise was about as bad as I thought it would be in a neighborhood like this. S6-S7 on 40m meant that I could only hear the loudest stations over my noise and through my inefficient hamsticks. From the signal reports received I was getting out decently considering my antenna and location,

but couldn't hear. 10 of the "usual suspect" chasers got through and I was grateful of course for every contact. Undoubtedly there were chasers who could hear me OK but I couldn't hear them; I hope you weren't too disappointed. I switched to 20m, but I had even more noise on that band, not the usual pattern. I was about to give up when one station got through with many repeats, so I continued calling CQ a bit longer, finally giving up with a total of 11 Qs. I packed up and coordinated with my daughter by phone for my pickup across the street.

The Woodson Home would be a brisk 10 minute walk without the burden of a radio station, but it was a bit too far with a heavy backpack and a fragile lower back. It was a nice surprise to find street parking right at the Woodson site. While there was no issue with a fence, there was also much less room in front of the house to setup so the antenna was just a few feet from the building to the west (where most chasers are). I sat on the steps to the house to operate, and found horrific noise – RF noise was S9 at the previous 7.275 frequency, but I found the noise came down to "only" S8 at the lower end of general phone. In addition to RF noise, the street noise was much worse here, including tractor trailers, buses, and most annoying of all, many cars with distorted music blasting through open windows while waiting for a traffic light to change. Not surprisingly, many of the same chasers got through here, although it usually took much longer for many repeated exchanges. After 9 QSOs on 40m, including a solid P2P contact from WV1W, contacts seemed to completely dry up despite pleading from me on Facebook. :-) Later Facebook comments indicated someone I couldn't hear took over my frequency, which explained the sudden stop of contacts.

I hate to change bands before getting my minimum 10, but it wasn't happening on 40m SSB. I changed the hamsticks and found the same noise on 20m, so I decided to try FT8. Even though I had a successful test of the station at home and at local park the day before, I was having issues with the USB connection from the laptop to the radio, and when I was connected there seemed to be an issue with split operation in the radio. After struggling for about 15 minutes, I gave up and went back to try SSB. I desperately called CQ after spotting myself directly on the phone. I could just barely hear KG5CIK, sometimes recognizing Steven Faulkner's voice and cadence more than his callsign. We went back and forth many times, and I finally copied his signal report and replied Roger and QSL about 10 times each. Thanks Steven for my last Q! I was exhausted from the concentration and strained listening, but also absolutely elated that I activated these two houses that I had wanted to do for 3 years.

The kids were waiting at the site, and they drove me downtown to a favorite restaurant for a nice lunch and conversation. They brought me back to Ikea and I drove the three hours home. Thank you Patty and Nick!

== Summary ==

Parks activated: KFF-0848 and KFF-0805

About 410 miles driven

GPS Time Base Mobile

Getting ready for Field Day and thinking about adding some of the new digital modes? You know you need accurate time on your laptop but all laptops drift, some more than others. You could try and sync your laptop clock right before you leave the house and that might get you through the weekend. Why worry about it when you can get the correct time, out in the field, for $14.

This is a simple one and you don't need to write any code, make changes to the Windows Registry or anything. You can buy an inexpensive USB GPS receiver, install a free utility made by another Ham and you are all set.

I picked up this inexpensive USB GPS Receiver on Amazon for $13.49. I have seen the exact same device with different seller names but it is just rebranded. Most of them say U-Blox7 on the case. When I plugged the unit into my Windows 10 laptop it popped up a window saying that it was installing the driver for the GPS device. A minute or two later it said the device was installed. It also noted that the device was installed as COM11 on my computer at 4800 baud. Whatever COM port and baud rate it tells you, make a note of it. You will need it later.

HiLetgo VK172 G-Mouse USB GPS/GLONASS USB GPS Receiver for Windows 10/8/7/VISTA/XP

Now, stop over at the website for VK4ADC, Douglas Hunter from Australia and download a free little app he wrote that takes care of the rest. The app is called GPS2Time. Scroll half way down the page and there is a link to download the program as a small ZIP file. When you open the Zip file, you will notice it has just one EXE, executable file in it. You don't even have to install this program. Just copy the file over to your desktop or any folder where you want to store it.

https://www.vk4adc.com/web/software-projects/55-vk4adc-utils/181-gps2time

Once it is copied, double click on it to run the program. A small window, like the one here, will appear. You need to select the COM port number that you noted earlier, in the top left corner. If you don't have it or don't remember, you can click the little pull down and it will show you a list of COM ports on your machine and you can select one. There is a good chance it will be the highest number in the list.

Now in the bottom left corner, click the pull down and select 4800, which is the baud rate. Now click the Run button under the COM port number you selected. Give it a little time to start finding satellites. If you are indoors, you might have to move next to a window or outside on the porch to get some good readings. Once it gets a good set of signals, you will see your GPS coordinates appear. As a major bonus, you will see your Grid Square appear as well! Really nice job on this Douglas. On the right side of the window, it shows what time Your Computer thinks it is. It will auto update your computers time using the interval listed there or you can press Update Now to do it right then. Please note that if the left side does not have your coordinates yet, it can't update the time. This is a great little app and I am really happy with it.

You should note that once you have synced your time, it is probably a good idea to shut the program down and then remove you GPS device. Leaving it running while you are on the radio my introduce some noise into your signal. Updating your time once-a-day with the GPS should be enough to keep you synced with the rest of the Digital Modes World.

When I was doing this in the Ham Shack it was taking a while to get the satellite information. Being inside and not in front of the window, it was kind of expected. I grabbed a 6′ USB extension cable I had in the drawer, connected the device to that cable and put the GPS on the window sill. It updated quite a bit faster when I did that. USB Extension cables are common. You can get them on Amazon for under $6 for both the 6′ extension and 10′ extension. What ever cable you get, make sure it is USB 2.0 or USB 3.0. Please note that USB is rated for 16.4′ maximum length. There are some devices that don't like those really long cables. I have run into printers on 15′ cables that would not work or just printed garbage. When I moved them to a 10′ cable, they worked. So just be mindful of how long of a cable you really need and the quality.

Douglas indicates on his website that his software supports a baud rate up to 57600. He states that at higher baud rates the accuracy is better. There is a mention in the device

description that it will adapt to any baud rate. I am not sure what that means. If it requires adjusting the baud rate of your COM Port on the computer, that is a little more than I want to get into here. The main point is that it worked, right out of the box and was easy to setup. I will play with the baud rates later to see what it can do.

Hope you found this helpful. I will definitely be using this device on my laptop at Field Day this year.

73, John, WJ0NF

100 Watts and a Wire ID: 1849

Follow Up:

20190512 – I was able to change the speed in the bottom left corner of the GPS2Time window to 57600. The USB GPS unit automatically adjusted to that speed and it worked fine.

20190520 – You need to set GPS2Time to run as an administrator our you might get a looping pop-up window because it doesn't have permission to update your computers time.

Go to the location where you copied the GPS2Time program. Right click on the program and select Properties at the bottom of the list. Then on the window that appears, select the Compatibility tab. (see image) Now check the box that says "Run the program as an administrator". Then click OK to save the changes. That should fix any issue it has with updating the time

Source: https://minesontheair.com/add-gps-to-your-windows-laptop-for-14

Mines on the Air (MOTA)

If you have the time to spare, there's always niche activities to pursue in ham radio. OK...a few – and likely a few, are chasing and activating 'Mines on the Air' (MOTA). For me, well, there are enough other activities with county hunting and Parks on the Air.

But who knows?

So for those stuck at home in freezing cold, icy cold nasty weather, you can check out the web pages at

https://minesontheair.com/

from their web page:

Like SOTA, Summits On The Air, Mines On The Air (MOTA) is an opportunity for Ham Operators to get out, enjoy our hobby and bring others (spotters) along for the ride. It is meant to promote the hobby, enjoy the world around us and bring a bit of history into our lives.

I encourage activators to document their adventure with pictures and videos that they can share with everyone. Either via this site, their own sites or YouTube videos. We will include those links in each activations entry. I would also encourage activators to bring back part of the enjoyment via QSL Cards. If you have the means, spend a few dollars and create one of a kind, limited edition QSL Cards for the spotters that couldn't be there. I plan on doing limited runs of 20 – 30 cards per activation. Each card will be a picture of the mine from an activation with all the normal information on the back. Postcards can be easily obtained via any number of Internet sites as well as local printers and office supply companies like staples. I have seen them for under $1 per card and as low as 65 cents a card. Not a requirement but it does bring something to the hobby.

We are just starting out and I am sure things will change as the project grows. For now I would like to create a form where MOTA Activators can fill out the relevant information and submit it for addition to the database. Once the project grows past a critical point, we will have to move to a more interactive site where you can search through the database and upload information on your own though logins.

Activation Requirements

So, what do you need to Activate a mine and have it added to the database?
I thought a lot about this. I really want this to be as simple as possible for people to participate. So I am just going to ask for the basic information to show people where the site is, photographic proof you were there and hopefully an Internet Web Site link to where people can learn more about the mine and it's history. For extensive details, please refer to my Activation Requirements page.

Safety & Security

Let's talk about our safety for a moment. This project is not meant for people to risk their health or lives by exploring unsafe locations. No more than SOTA or IOTA. In each activity you need to use common sense. Stay out of these old mines and be safe. Also realize that not all mine locations are open to the public. Some mines are active and some are on private land. Make sure you know ahead of time what legal access you have to the location.

On the Road with N4CD

This time each year, the Antique Wireless Association group – the Vintage Radio and Phonograph Society, holds their annual convention in the Dallas Area. It lasts two days starting on Friday at the Comfort Inn in Plano ($69/night rate). This is a decent hotel but with no on-site restaurant or bar. About 150 folks registered for the convention this year.

Friday November 15 2019

The first day consists of two auctions. First up is the 'Tube and Paper' Auction – old tubes by the hundreds, maybe thousands, and books, catalogs, advertising, posters, signs, magazines, wall clocks, etc. You can buy tubes in bulk for just about any radio – or TV – and sometimes loads of transmitting tubes. Folks always need 01A tubes (201A), and WD12 and 199s. Some other rare ones are the 1L6 that goes in a Zenith Transoceanic set – which can sell for $35/tube. Everything from boxes of 'pulls' to tube caddies full of NOS (new old stock) items, handful of rare tubes, and in some cases, just an individual tube like a 1920s 500w power tube. '45' audio output tubes and tubes for the audio power amps went high - $50 each. The '45' was the audio output tube in many radios of the 1930s and 40s – would put out five watts or so of audio to drive the speakers in the console radios. 12AX7s, now sought by hi-fi enthusiasts, can go for $10-$15 per tube! They are run of the mill common tubes 60 years ago but have gone sky high. I didn't buy anything.

Following that after a short break comes the '$10 and up' items. This can be anything from boxes of junker BC sets from the 1950s, wood table radios, plastic table radios,

novelty and transistor sets, test equipment from signal generators, VTVMs, Simpson 260 type meters, Signal Tracers, power supplies. Some test equipment, one or two ham receivers, boxes of parts, cabinets of parts, radios missing parts, knobs, speakers, etc. Several hundred lots were sold from $10 to $150. You never show what will show up, but this year, almost zero ham gear or even surplus military radio stuff.

I bought one $10 box of 'parts' in cigar boxes including what must be about 2 dozen new in plastic type N and BNC connectors plus another box of coax adapters/barrels, etc. Sold one cigar box of chassis mount electrolytic caps to someone else for $5, so I spent all of $5.

Most of the valuable stuff is saved for Saturday.

Saturday Nov 17 2018

The day starts out with a silent auction where 5-10 dollar items are up for bid. A few books, some phono needles, novelty radios, instruction books, and things like that. Didn't find anything to buy. Sold one book for $5.

Most of the morning is spent watching folks check in items for the big Saturday auction that starts at 11am and runs till 5pm with $20 minimum starting bid. Some items have reserves – sometimes hundreds of dollars. Hundreds of wood table radios, cathedral sets, some parts and pieces, some test equipment like scopes, , quack medical devices, Victrolas, Edison wax cylinder players, boxes of 78 RPM platter records(the ¼ inch on sided thick ones) , radio lamps, neon rimmed clocks, and so forth. Most went for $20-$60, but some items went for hundreds and hundreds with the top radio going over $800 for a large restored Atwater Kent early cathedral set. Twenty large floor model consoles were sold – some for $20, some for $500, about half of them restored and working. RCA and Zenith consoles generally went high.

Over $25,000 in sales occurred between Friday and Saturday auctions.

During the day, there's a contest display room where folks enter radios into 18 separate categories from 'battery radios' to pre 1960 TV, military and ham gear, a/c table top radios. I entered my new acquisition – the REL 130 'shortwave kit' in one category and it snagged 'first prize' in that category! (see description above).

In the evening there's the 'awards banquet' where the top display radio in each of the 18 categories is recognized, and the 'best of show' announced.

On Sunday morning there's a small flea market – Jim Sargent brings out his knob collection which must have 5,000 knobs – you can find knobs for just about any radio here. A dozen other folks were selling things – books, parts, etc. Didn't buy anything and headed home by 9am.

Mobile Activity in November

Not a whole lot to write about. The good news- if you were mobile, it was a very short wait to run – usually no other mobile out and about so the list was 'one'. The bad news, of course, not a whole lot of activity. Used to be lots of folks traveling for the holidays – off to visit grandma and grandpa or the kids. Now, I guess the non-radio kids visit the 'senior' county hunters and that's about it. 20M SSB conditions are not very good (miserable) so contacts there are tough to make. 40M seems to work if you are in the east half of the country. I've had decent success running parks on 40M back east.

At the beginning of the month –

N9JF, Jim was busy in IL, MO and IA. Out a few times in IL, too.

K0FG, Fred, was running all over FL putting them out. Then busy in GA running them there. Into KY, TN, IN, on his way back home.

W4SIG, Kerry, busy in AL counties. Then to FL and GA counties.

W8OP, Alan, busy in IN and OH

N0SM, Steve, ran a few in IA

Ron, KB6UF, ran a few in LA before the big trip west to CA. Then ran all over CA putting them out. Some also in NV. Will return in Jan back to LA.

N4CD was on the road to MD. Full report in next issue of CHNews.

KN4Y – CW Doings

While the RoadRunner is in suspension pending a new editor, we are spreading the news and including it here.

DATELINE CW - By: Ed, KN4Y for December, 2019

A county hunter knows that old roads winding is what old roads do.

December, the last month of the year 2019 is here. Another year of hunting counties, operating in State QSO parties and the thrill of operation in contests are in the logs. Attending of local amateur radio clubs throughout the world, the MARAC Conventions and the many Hamfests are recorded in history. I have strung all the Christmas lights around the shack and my Christmas tree is mounted on top of the file cabinet. It is not the size that matters. It is the Spirit of Christmas, the birth of Jesus.

I hear Gator as he downshifts his 4X4 and slides to a stop at the recycled railroad tie. Gator slides out of the cab carrying a container decorated with bright Christmas colors and pictures of Santa Claus and Elves. I feel liquid Christmas Spirit coming. Gator stops at the post box, gets the mail and enters the radio shack. He tosses the mail on the desk. “Merry Christmas, Dude. Glad you got the heater on.” Gator reaches into the colorful container and hands me a supersized latte. “Thanks, Gator. This gives me the Christmas Spirit caffeine lift." Gator laughs. He also gets a latte and turns on the computer.

“Gator, how about checking my ARRL Sweepstakes contest log?” Gator brings up the Sweepstakes module and stares at it. “Dude, I knew you are busy at the church during the coming holiday season, but time for only 100 QSOs in the ARRL Sweepstakes log is not your style. You only logged 54 multipliers.” I interrupt, “Settle down Gator. I did what I could. Keep in mind when all the big scores from the Florida Contest Group are added together and then my score is added the final score will increase.” Gator ignores me.

Gator is looking at the computer screen and gets a sad look, “Dude, do you know Les KØLG, and Paul N4PN? Both are silent keys. I also get a sad look, “Yes Gator. I worked Les many times starting in 1998. Paul was my age, a county hunter and a MARAC

member. We started working each other in 1985. I also worked with him in contests for the Florida Contest Group." We lower the radio volume, dim the shack lights and bow our heads as Gator recites the Shepherd's Psalm.

Gator turns around in the swivel chair. "Dude, fill me in on your bowling tournament at Orange City, Florida. Did you win top prize?" I laugh. "Gator, this was one of those bowling tournaments where staying home would have accomplished the same result. However, I did get to run several Florida counties on the way to Orange City. I tried to operate on 80 meters on the way back home, but the band was very crowded." Gator laughs. "Also you had planned to run the OK/OM DX contest, how did that go?" I give a
thumbs down. "I tried but never heard an OM station. It was a total blow-out for me. My operating time was limited which did not help the situation. Check out my LZ DX Contest."

Gator takes a sip of his latte. "I see you logged 19 QSOs in the LZ DX Contest. I would not call that bragging rights." I laugh. "I got on the air early and made a few contacts. I only listened for and worked LZ stations. It is their contest. I tried to send in a log but their system kept sending it back and did not say how to fix the problem. After a few tries I quit, so no log sent in." Gator giggles, "If at first you don't succeed, quit." We have a laugh and sip our lattes.

I gesture with my hand. "Gator check out my CQ CW WWDX Contest." Gator brings up the module and giggles. I do not know why you even bother operating in the CQ Contest. You only made 50 contacts." I sip my latte, "Relax Gator, this is a long story. I got signed up to bowl at the Peanut Bowling Tournament before I realized it was the weekend of the CQ CW WWDX Contest. I always participate in the Florida Contest Group club total. Friday night was my only operating time before leaving for Alabama. I started working stations and fell asleep, I awoke and just rounded the number of QSOs worked to 50. Now you know."

Gator's cell phone goes CQ, CQ, CQ and Gator answers. "Dude, I must get back to the plant. A group is standing outside yelling, "Take down the Make America Great Again sign"!" A few free samples of the Great America Elixir and they will be happy campers. He is gone like a good dose of salts and I hear him yell, "Farewell Nipsey!"

The printer stops and I extract the printout listing the mobile county hunters who checked into the county hunters' CW call frequencies during the month of November. I read: KØFG, K2UA, K4CD, KA4RRU, KB6UF, KN4Y, NØSM, N7JF, W4SIG, and W8OP.

December is another month with no State QSO parties, the withdrawal must be horrible. But have no fear. December with 33 CW activities is here to lessen the pain. There is the ARRL CW 160-meter Contest, the ARRL 10-meter Contest for CW and SSB operation and the ARRL Rookie CW Roundup. There is also the Croatian CW Contest, the Canadian RAC Winter Contest, and for the topbanders the Stew Perry Challenge.

Damn it is cold! I will move the thermostat up a degree and take a hot nap.

MERRY CHRISTMAS!!

Ed. KN4Y

Awards Issued

Yeah, finally an award issued!

Second Time #443	N9JF, Jim	~Dec 2, 2019

Events for County Hunters

No QSO Parties in December.

10M contest, 160M contest, lots of smaller operating activities. Parks on the Air – lots of parks in counties will be on the air.

That's all. Short one this month. Happy Holidays and New Year to Y'all. De N4CD