SK CC

Straight Key Century Club

KS1KCC

The official newsletter of the Straight Key Century Club

Volume 14 Issue 2 **"The Rag Chew"** **June, 2021**

Editor: K8AQM/VE9AQM

"Bill and Ted's Excellent Adventure…. With Their Sidekick Jeremy!"

Our "shack" at Sheyenne Oaks Campground at Lenard, North Dakota

One of the hardest states to catch in SKCC is North Dakota and with no "S" members it was impossible to complete the WAS-S unless you were lucky to catch John K0FTC on one of his trips to North Dakota. Jeremy K8JAD (13072t) and I K8AQM (1629s) decided to mount and "expedition" to North Dakota to help those needing ND. We asked Bill W0EJ (10440s) from South Dakota to join us. Through a contact with Tim K0CRF and others from the Fargo area we decided that the Sheyenne Oaks Campground near Leonard, ND was the perfect spot for our operation.

This was to be a "serious" operation covering as many bands as possible and would be definitely be QRO. We packed gear for four station with amplifiers, and support gear into K8JAD's Durango and hooked-up our 32 ft tower trailer and other antennas and off we went! Two days later we arrived at our site and began to setup. We setup three station, two for cw and one for FT8. Yes ND is needed by ft8 operators too.

Bill from South Dakota "volunteered" to be our chef and what a job he did! I guess my peanut butter, jam and "Cup of Noodles" just wasn't going to cut it! Bill made sure we consumed more calories than QSOs ……..but what

K8AQM/Ø

NORTH DAKOTA EXPEDITION

SK CC Straight Key Century Club #1629S

Ted Rachwal
1600 Wolf Creek Hwy
Adrian, MI 49221

Ex calls: A35TR 3D2TR T32TR VE9AQM V63TR ZF2TA 5W0TR V47TR JD1BNM

Sheyenne Oaks Campgrounds
6050 CR 23
Leonard, ND 58052
Grid EN61jm

Confirming QSO with	Date Day / Month / Year	UTC	MHz	RST	MODE
	05 2021				

k8aqm1629t@comcast.net ©cheapqsls.com

K8JAD/Ø

NORTH DAKOTA EXPEDITION

SK CC Straight Key Century Club #13072T

QSL to:
Jeremy Downard
511 W Pottawatamie
Tecumseh, MI 49286

Sheyenne Oaks Campgrounds
6050 CR 23
Leonard, ND 58052
Grid EN61jm

Confirming QSO with	Date Day / Month / Year	UTC	MHz	RST	MODE
	05 2021				

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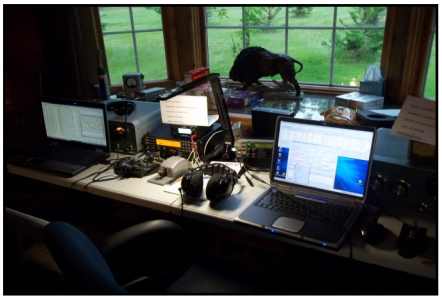
a pleasure it was! We were treated to excellent chili, pork steak, potatoes with onions, eggs...and in huge quantities! We had eggs salad sandwiches for lunch and Bill brought some homemade sausages that caused my eyes and forehead to sweat and to lose my voice! All this skill and a real wizard on the key making the multitudes happy...what a guy!

Bill W0EJ casting his cooking magic!

A typical Bill breakfast of champions; eggs, taters and bacon! What magic!

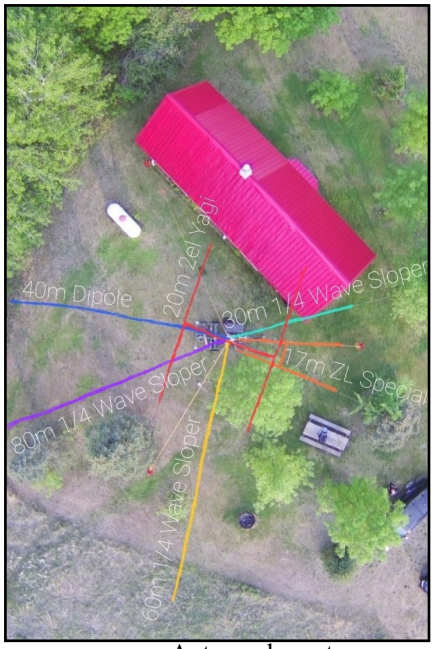


K8AQM CW station

The stations were: a K3 and SB-200 and a K2 and SB-200 running cw with a Kenwood 590 and KPA-500 on FT8. K8JAD ran the FT8...he is the computer guru!

K8JAD FT8 and FT4 station

Our antennas were: a two element 20m monobander, a 40m dipole, a 30m quarter wave sloper, an 80m quarter wave sloper, a 60m quarter wave sloper and a two element 17m ZL special. All the antennas were attached at the tower. We had a quarter wave 160m sloper but the QRN was so bad the first night we never got around to putting it up. The great drone shots are from K8JAD's drone.



Antenna layout

Sheyenne Oaks Campground is a horse/RV campground and is on the edge of the Sheyenne National Grasslands. You can see by the arrow where our shack was and all those other spots are for RVs bringing horses.

There are corals for the horses and we had a large group of camper RVs and horses during our stay. Naturally we saw many riders heading off to the grasslands for long rides and then there was the "curious" horse and rider that came visiting us and wondering why we didn't have a horse!

This is just a small group of "daily" riders heading off into the grasslands. Of course there was the lone horse who wanted to do a bit of cw operation...or maybe she smelled Bill's great cooking!

Another thing this city slicker learned…..horses talk to each other when they're corralled….all night long they talk to each other...ugh!

The Fargo Gang Arrives!

Definitely one of the best parts of the expedition was meeting the gang from the Fargo area and have them operate with us. What a great group! Tim K0CRF (9367) was our go-to guys in getting us established in the area. Pete WC0G (9334t), Jay WS0Y (17776c), Linda N0LG (15552), Kent KA0LDG (17039) and Joe N0RF all came to operate and support the expedition.

Jay WS0Y

Jay WS0Y was "amazing." He told me that "my bug" was making dits much to fast for his "dahs!" As a result he was ruining my cw reputation because he was using my call! What a guy!

Pete WC0G

Pete WC0G is an excellent operator and a very accomplished DXer and a very good cw man.

Linda N0LG

I don't think anyone enjoyed operating more than Linda. It all seemed new to her but she jumped right in and has that infectious smile. She also brought her beautiful Begali straight key!

Kent KA0LGD and Linda N0LG having a cw run and a good time.

PeteWC0G and Jay WS0Y making folks happy with a ND contact

Kent KA0LGD and Steve WC0G enjoying a ragchew on the porch.

Pete WC0G and Kent KA0LDG taking a turn in the saddle.

Tim K0CRF enjoying some ragchew time.

It was a great time and the "Fargo gang" are a great bunch and were a tremendous help in filling the logs for those needing North Dakota.

As a "sorta" city boy I learned so much about North Dakota farming life and agriculture from Jay WS0Y but the best surprise was Jay's witty comments. It was Jay's idea to dub this trip as "Bill and Ted's Excellent Adventure." I think should there be another "expedition" in the future, I'll make sure to invite Jay along for "comic relief," he has the Knack!

Finally, it was a long drive as you can see from the posting but it was well worth it for the new friends found and of course for filling in some well needed North Dakota QSOs in SKCC members' logs.

To collect one of those "beautiful" (and needed) North Dakota QSLs, send your envelope to the SKCC QSL Bureau and get on the "Good in the Bureau" list.

73 from,

"Bill and Ted's Excellent Adventure...with Their Sidekick Jeremy"… in North Dakota

Bill W0EJ and Ted K8AQM/0

Bill and Ted and our

"sidekick" Jeremy K8JAD/0

New 40 Meter Frequency

New 40 meter operating Frequency has been listed to better accommodate our European members. SKCC Member Operating Frequencies suggested calling frequencies in Mhz:

1.813.5
3.530
3.550 *primary
NEW7.038
7.055 *primary
7.120
10.120
14.050
14.114
18.080
21.050
21.114
24.910
28.050
28.114
50.090
144.070

73 de Jo PG4I #11019T

SKSE March 2021

Results for SKSE: 04-Mar-2021

Overall | QRP | QRO | QRO+ | SWL | By SPC | Soapbox

Overall results

Rank	Callsign	Name	SKCC #	SPC	QSO's	SPC's	S/T/C	Score
1	*VE3KZ*	Bob	22804S	ON	12	10	3/2/0	185
1	*F5DE*	Bernard	6247S	FRA	10	9	5/2/0	185
3	*DD2AW*	KAMI	21630	GER	10	7	1/2/1	110
4	ON7DQ	Luc	14984T	BEL	9	7	1/3/0	108
5	*KN1H*	John	2089	NH	7	7	3/1/0	104
6	*K0KEX*	Rick	5220S	MO	6	6	2/1/0	76
7	*DL8FMA*	Mane	NONE	GER	5	4	1/1/0	45
8	EA3WX	LOU	11443	ESP	3	3	0/1/1	24
9	*K1NV*	JON	2609S	NV	2	2	1/0/0	19
10	KC3NDU	Keith	22980	PA	1	1	1/0/0	16
11	HB9IRF	Gerald	12483	SUI	2	2	0/1/0	14
12	*EA7EGU*	Manuel	159T	ESP	1	1	0/1/0	11
13	*F8DTU*	Franck	8662	FRA	1	1	0/0/0	1

Pretty "slim pickin'" for the March SKSE. As stated by many 20m was very flat.

No pictures submitted but some interesting comments:

"Have you ever had days when you kept checking your SWR because you can't hear anyone and nobody answers your CQs? Most of the time was like that but my thanks to all that got through anyway with special thanks to IK7FPU and F5GSK on 20m and F5DE on 40m. 73 Bob VE3KZ"

"To answer VE3KZ Bob's question: "Have you ever had days when you kept checking your SWR because you can't hear anyone and nobody answers your CQs? " Yep !! Today I was checking out a Yaesu FT 991A..my first thought "Nope" but then I realized the situation. Saying goodbye to 20, a few buttons pushed, 40 was the place to be two hours go by quickly. My thanks to the stations worked...nice start to March activities...73 Rick k0kex"

"Contacted W4LRB and KC5F on 20 m, ON7DQ, YU7AE, DL8FMA (NM) and DD2AW on 80 m, N1GKE, VK4TJ, VE3KZ and YO2BBX(NM) on 40 m.. Nice to be called by John VK4TJ after a long time not contacted him. Many thanks to all and see you next time in SKS-E or WES activities.
73 de Bernard F5DE"

Confessions of a Casual Contester

from the shack of DavidVE4DL

I am not now, nor ever have been, a Contester. I don't see myself becoming a Contester either, if one defines the term to include round-the-clock operations, intravenous fluids and diapers, and frequent relays of cold, one-hand meals. Not my thing, at all. BUT.....

November is in the history books. I worked WAE RTTY, but not much results. I don't know if it's because nobody is doing radioteletype anymore, or conditions locally were poor, but I had only North American QSOs, and not many of them. I still enjoy RTTY for the challenge, it's not the sure decode of some other famous modes I use, so the mental test is there, pulling real information out of the nonsense decodes. I kinda hope it makes a resurgence with Solar Cycle 25. Just as I wish I had an ACR teletype to work it with.....(god, I'm old.)

I worked ARRL November Sweepstakes, both CW and SSB. Not really active, nothing thrilling to report on either.

I put in 12½ hours on the CQ WW CW contest, one of the real biggies. I didn't score high, because I chose not to work most Americans (it's only 3 of the 30-odd zones possible) and concentrated on DX for 81 QSOs and 29 Zones in 31 Countries. I'm good with that. I had a number of first-time countries, too: Latvia, Finland, Sweden, Madeira, Cayman Is., Grenada. I picked up Greenland – town of Nuun. Looks like about six houses and a ham. He'll get a card.

And my last contact of the weekend – VK4JU in Cairns, Queensland, Australia! Australia is a first-time to amaze and astound the masses. Literally half-way around the world from me. Got him on 15m in late afternoon Central time (about grey-line here) after a 15 min struggle. Saw him spotted and tuned there, almost tuned away from all the QRN, but he was there, fading in and out. Took many CQs to be sure of his call, then the signal strengthened and I started sending my call – about a dozen reps before he noticed me. A few more reps for him to be sure of my call, then the exchange four times. It was great for me, I hope it was good for him, too. He'll get a card for sure. I danced around the shack after that, and shut down. How could I top Australia on 15m?

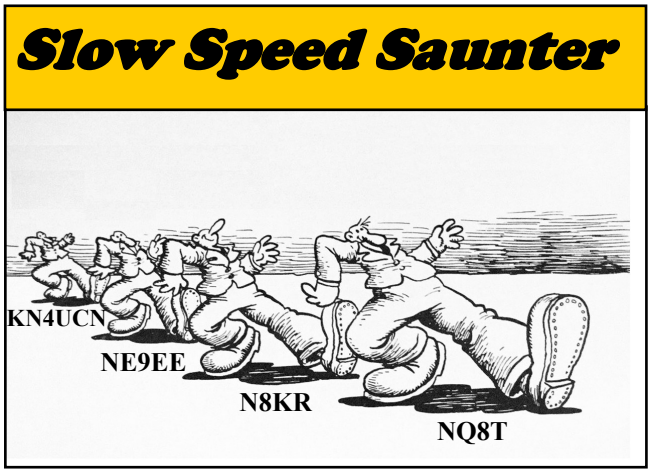
I did have some Americans asking where all the NU, NT and YT ops were? I couldn't answer that, but I didn't get them either. A VO1 was on, but shut down just as I started calling him. No joy there.

That's six contests in the books using N3FJP's logging software. I really like it a lot. I will keep N1MM+ in reserve, for contests not covered by ACLog modules. I do find the ACLog contest loggers to be much simpler to set up and use, and WAY simpler to upload the results afterwards. The bandscope is a little clunkier, and some bells and whistles aren't there, but I don't really need them.

I finally got around to trying the Bureau method of QSLing. I've been using electronic of course, and sending real cards to milestone contacts by regular post, but I decided $1.39 each was getting stiff. Sent a few bucks to the VE4 Incoming Bureau – a week later I get 4 cards from 2018! Howzzat? I'm looking into sending by the Outgoing Bureau, it's a little more complex, but I'll work it out. These 4 guys have been waiting a couple of years for a reply, and the Greenland and Australia mentioned above. It is not as immediate as eQSL or LoTW, but a lot of hams spent good money on printing interesting cards, it's nice to collect a few. I'm ashamed of my homebrew card now, maybe I'll order some better ones.....

But it isn't contesting. Nope. Not at all.

March Slow Speed Saunter 2021



Participants and QSOs by SPC

AL: 2 / 19	CA: 4 / 22	CO: 1 / 6	FL: 2 / 5	GA: 1 / 4
IL: 2 / 15	IN: 5 / 70	KS: 2 / 14	LA: 1 / 8	MI: 1 / 6
MN: 1 / 5	MO: 1 / 6	NC: 2 / 20	NH: 3 / 20	NJ: 1 / 12
NY: 1 / 1	OH: 3 / 62	PA: 2 / 9	TN: 3 / 17	TX: 3 / 29
UT: 1 / 1	WI: 1 / 12			

Fun time! 73, Bob KN4UCN

Made a dozen contacts. Wanted more but busy day here today. Used my TS-590SG at 75 watts to a multi-band vertical and Kent straight key. Probably my fav SKCC event. 73, Curt K2CWM NJ

MNY TNX! to all! Always nice to meet new (to me!) people. ..... 73, Steve NQ8T

Does my score count as all qso's were made at speeds greater than 45(mph)? An hour + drive from Plymouth, IN to Fort Wayne went by quickly with 8 fun qso's! (two were lengthy ragchews!) Icom 7100, hamstick, and Junker (not my car). FUN! 73, Ken N8KR

Another fun event, lots of new members. 73, Nee NE9EE

Meet Jim, AF3Z

I've been a ham since high school, 1967: **WN3INP**, then **WA3INP**. I started out with Heathkits. Unfortunately, I sold them years ago. But as 2018 turned into 2019 I finished up a project of recreating my origingal 'shack.' I've restored a DX-60, HR-10, and the HG-10 VFO. Here's the new version of my old operating position

Jim “hard at work” (play?) at his main operating position.

CONGRATULATIONS to Mike Maner WI5H SKCC member 11770S In San Angelo, Texas

In February 2021 the SKCC held a drawing for our very first Slow Speed Saunter Presentation. All members participating four or more times in the monthly Slow Speed Saunter during 2020 and who recorded their activity on the SSS Reports page had their callsign in our virtual hat for the drawing.

Mike, having operated in six of the Slow Speed Saunter Operating Events during 2020, was recently presented with an SKCC engraved Green Machine Cootie key made by Steve W1SFR SKCC 9103S. The Green Machine Cootie key is mounted on a gorgeous base of green marble quarried in the state of Vermont and engraved.

Photo courtesy of Mike's beautiful and talented XYL , Barbara N5VLD

" I believe this Cootie key landed in the right hands" W4RQ said, "because Mike is an avid CW operator (and Cootie key user) who is always willing to help the newer folks develop their CW skills."

Mike is active in many CW clubs and has already put this key to good use. Here are Mike's own words (from his QRZ.com page):

" The SideSwiper or Cootie Key shown was recently presented to me by the Straight Key Century Club when I won a drawing celebrating the SKCC Slow Speed Saunter operating event and the operators that participated multiple times in the SSS during 2020. Read about the monthly Slow Speed Saunter at skccgroup.com or click on the link to SKCC web site later on this page. A big "Thank You" from me to Rich W4RQ the Slow Speed Saunter Administrator and the Board of Directors at the Straight Key Century Club. If you are looking for a place to get into CW or get back to CW after a break or if you are a skilled CW op already, take a look at the SKCC and join us on the air. With more than 24,000 members world wide and hundreds of active members participating in multiple monthly events we have a good time! And while you are looking, drop by the SKCC SKED page."

We hope to make the Slow Speed Saunter Participation Presentation an annual event. Please join us on the first of each month in the Slow Speed Saunter, and be sure to record your participation on the Reports page! You could be our next Presentee !

For complete information about our SSS monthly Operating event, go to:

WWW.SKCCGROUP.COM > Activities > Slow Speed Saunter

73, RichW4RQ

KX3: QRP Ecstasy

Published January 2017 in *The Printed Circuit*

January 2017 not only brings in a new year for me, but also a new radio… well actually, a used radio. Since I sold my Kenwood TS-480SAT, I purchased a used Elecraft KX3 from a very good old friend I've known since my early Novice days. With the addition of the KX3 it will afford me adjustable power from 10 watts all the way down to 0.1 watt. Likewise, I'll now have additional bands plus other modes to operate that were not available on my YouKits HB1B. A question that comes to mind is if I'll be tempted to run higher power than the 5 watts which is bill of fare for low-power QRP CW operation. My response is no, even though the KX3 will power up to 10,000 milliwatts. What about SSB? Again, my response is no, especially since I purchased the radio withouta mic. Also note that I now no longer have a radio that will go over 10 watts.

After opening the box and putting the radio on my operating bench it was then time to open the manual, and the box with all the cables. Since I do use Anderson PowerPoles® I decided to make up the very necessary power cable which can be used at home or from inside the Van. Now comes the task of pondering through the many pages of the KX3's operation manual. For this I'll take my time sifting through each page, as you can see, the KX3 offers more functions than the HB1B. It actually has more functions than I had expected! With the manual open it was time to compare the functions listed for the radio. It was interesting to note that they recommend using a stereo plug even for the hand key.

After searching high and low through several junk boxes, I did find a three-conductor audio cable and attached thewires from the tip and shell of the connector to the key's terminals. The KX3 does not have the auto-tuner installed, so for now I'll be using my Elecraft T1 to match the antenna. I'll also look into getting an antenna analyzer to get my antennas cut or tuned closer to the frequencies I like to operate on, thus reducing the need for a tuner. So next came the joyful task of connecting the tuner and the antenna to the radio. Prior to turning the radio ON, it was time to make one more pass at the manual to see where things are. For portable operation, I purchased the KXCB3 charging board, and installed 8 *Eneloop* AA NiMH 2,100 mAH rechargeable batteries which should give me around 4 to 6 hours of operation away from the van or the house power supply. With shaking hands, I pressed the two buttons to power it up. Once ON, I changed bands to 40 meters, found out how to switch between AF and RF functions, turned the main tuning dial to 7.060 MHz, increased the input power level to 5 watts, activated the tuner, depressed the hand key, and as I watched the lights in the house dim, I was now tuned and running an impressive 5,000 milliwatts.

With phase one complete it was now time for phase two. I guess it really didn't matter which phase it was, but then It was time to read about the filters, and more particularly something called the "roofing filter." Since I'm only interested in operating CW, for now it seemed unnecessary to worry about SSB mode, PSK or many of the other functions of the radio. No, but wait, I needed to change the AGC from 'Slow' to 'Fast'. Since everything looked normal (whatever that means,) I sent out my call. Though, it wasn't time yet to call CQ yet as I needed to still learn more about the radio. By this time it was midnight and I figured I would have a clearer head in the morning.

You may be asking me; since I have the KX3 what happens to my old HB1B? The answer to that is very important: the HB1B has been used daily, and has been my main radio now for over two years, 30 months to be exact. It's still here and available for me to power up on a moment's notice for a CW QRP session. I plan for the KX3 to be used mobile/portable and for

now as my new main station radio. Although both the TS-480SAT and HB1B are both very good radios, I have to say; the audio and functions on the KX3 are superior. Likewise, the receiver and filters outperform either of the two radios I've mentioned. I believe that learning and getting used to all of its functions may take this ole guy some getting used to but will be worth it.

The time had now come to fire up the radio and give it try on CW. Until now all I've done was make cables and listen around the bands. After making sure the Windom antenna was connected to the tuner, as I was operating from my home QTH, I turned on the radio only to hear… nothing… zero, nada. Wait, I can't say I didn't hear anything, I did hear some noise. I went outside with a flashlight to verify that my Windom was still up and that I still actually had coax connecting it to the radio. I went back inside and turned the radio on again, still nothing except a *20 dB over S9* noise level. At this point panic set in. I pulled my HB1B and connected it up to power and the antenna. I tuned around 20 and 40 meters and was only hearing noise on this radio. Next I checked http://bandconditions.com which revealed that most bands at that time were in the deep red, 20 meter registered as a '2' and 40 meters registered as a '6'. Armed with this information I was able to beat down a panic attack and rested easy. The next day I was more than eager now to try a few CQ's. 20 meters sounded fair so with key in hand I started my quest to see if anyone was out there and hearing me. The first station I worked was on 14.061 MHzat 18:03 z from NH. There was deep QSB (fading) but we were able to exchange reports and maintain the QSO for 18 minutes. A second station called me but it was very difficult copy and we didn't make it due to the heavy QSB. Two nights later at 02:45 z, the 20 meter band was in poor shape again but I was able to work a station from WI prior to the band changing. Although signals were down we were able to exchange reports. A few days later, 20 meters sounded much better and with my 5,000 milliwatts I was able to get a "559" report from an OK station at 18:34 z. While chatting with him, I found out he was licensed in May of 1952; he beat me by three years. His first rig was a homebrew which used a 6L6 powered crystal-controlled oscillator, with a BC-432 receiver. It's always great to meet hams who were licensed in the "early days" of ham radio, he's 81, and we had a really nice chat. We both agreed the days when we were Novices were really fun days. I really hadn't been on 80 meters in quite some time so getting back on seemed like I was back in my Novice days, but many of the old guys I hung around with were either no longer with us or not still on CW. I used to hang out on 3.710 and 3.722, xtal-controlled with my old AT-1. It felt good and I had wished some of my old Ham friends were still on. If you can picture this; there I am the other night, on 80 CW, around 3.550 listening to two hams in a QSO, with my ear buds, leaning back in my office type chair, eyes closed, and the next thing I knew, it was 05:00 z and all I heard coming through my ear buds was the rush of static noise. I thought to myself, when I was a Novice I could stay up all night without a problem. Now all I have to do is close my eyes and it's "good night Irene". Throughout the month I've been able to make several CW QSO's ranging from NH, WI, Ok and TX to name a few. I have to confess, I have not yet added to my list of working WAS running QRP. My list remains as follows: AZ, WI, MI, OH, WV, VA, TN, MA, NH, VT, RI, CT, MD, VA, DE, GA, FL, TX, LA, PA, MO, NC, SC, MN, OK, NY, KS, NE, IL, AL, NV, NY and KY. Many of the states listed I have worked several times. Likewise, my QRP CW countries list remains the same including Norway, England, France, Canada (x3) and Bulgaria. All were on 20 meters, only running 3 watts on CW. With the bands in somewhat poor shape why not try some "grey-line" propagation? Operating during twilight hours, as the layers or the ionosphere are changing, can get you some pretty decent DX. This may be an attractive option since the bands are on the down side of solar cycle 24. You can find out about grey-line propagation by going to:

http://www.astrosurf.com/luxorion/qsl-propa5.htm. You'll find a great article entitled: "Working the Gray Line" by Paul Harden, NA5N.

So where do we go from here? I think it's time to take this puppy on a short road trip! But not so fast; I needed to verify that my power connectors would mate up with the connectors in the van. I found that I needed to reorientate. The connectors so they would mate correctly. Once completed it was time to head off to try out my KX3 in a new place. I found a nice place to park at Lake Ella near the water's edge with some large oak trees for a backdrop. Since I had some time, why not, this would be my first outing with the KX3 in the van. 20 meter Ham-Stick whip antennas and mounted the 17 meter stick on the van's roof. The antenna seemed to load and it was now time to belt out a few CQ's in the hope of working someone. I parked myself on 18.080 MHz and let out a CQ once again breaking my rule 105, which was listen and pounce and not call CQ. Since the band sounded fair I decided to increase power from 3,000 milliwatts to 5,000 milliwatts and give it a go. Sorry to say, after a while the band didn't sound too good. Looking at band conditions, 30 and 40 meters were the best, but I didn't have my 30 or 40 meter sticks with me. I did try a few CQ's without any luck, likewise no strong stations to try and call.

"W1FJI/QRPp," Say what? Since the KX3 will power down to less-than 1 watt, I've decided to run CW QRPp for a while during the month of February 2017. I went on one of the QRP reflectors on Facebook and asked if there were any folks running QRPp and I received several promising responses. It's interesting to note the differences in responses as to the many power levels the <1 watt folks have been using while running QRPp. I'll be publishing my QRPp operating schedule on a few of the Ham Radio reflectors, indicating date, time and frequency. I've always wanted to give QRPp a try and now that I have a radio that will do it, why not? I realize that we are headed to the bottom of solar cycle 24, which means that propagation condition will be lackluster to say the least, but I'm sure it will be exciting to work some stations while running <1watt, I'll try 0.5 watts first. This will mean it's time to make my portable antennas more efficient and get them up higher. In the few days I've had the KX3, it has outperformed my expectations! I'm still learning about the radio and having fun using it. As you can see from the above, in the few days I've been making contacts whenever I can get on. Most nights the bands haven't been very cooperative, while during the daylight hours contacts have come easier. Obviously the test will be how this little sports car of a radio performs over the long run.

Well, that's about it on my new/used KX3 for now. No matter what rig you use or what power comes out of it, just get out there, have some fun and operate!

New Tower Work and Antenna Work Tool!

"This is the real deal," Percelay says. "It can go up to 3,000 feet high. It goes about 45 miles an hour. It can stay aloft for 30 minutes, or go about 19 or 20 miles. It's computer controlled, and super stable—you can actually take your hands off the controls and it will lock in position. It's wild."
Check it out at:

https://www.adweek.com/adfreak/how-bubba-watsons-hovercraft-golf-cart-not-april-fools-joke-148368

February Brag 2021

The "Brag" is one of SKCC's premier events. Every month more and more operators submit their entries and enjoy telling about their monthly operations. It is not an event to "brag" about your accomplishments, far from it; it is telling of the enjoyment of working other SKCC members. Just checkout the number of operators world wide who have enjoyed operating in the month of February and see the wonderful stations of those who have submitted photos. Maybe it's time for you to make an entry in this event?

Participants and QSOs by SPC

AL: 1 / 39	AZ: 1 / 12	BEL: 1 / 5	CA: 4 / 94	CT: 1 / 27
CUB: 2 / 81	ENG: 1 / 3	ESP: 1 / 14	FL: 4 / 178	FRA: 1 / 175
GA: 3 / 59	GER: 2 / 8	IL: 3 / 46	IN: 3 / 77	ISR: 1 / 0
ITA: 1 / 2	KS: 1 / 171	LA: 1 / 24	LAT: 1 / 26	MA: 5 / 155
MD: 5 / 153	MI: 4 / 125	MN: 1 / 198	MO: 2 / 35	MT: 1 / 42
NC: 1 / 22	NED: 1 / 36	NJ: 2 / 57	NY: 3 / 71	OH: 4 / 144
OK: 2 / 11	ON: 1 / 168	PA: 3 / 84	RI: 1 / 78	TN: 4 / 124
TX: 4 / 175	VA: 1 / 39	WA: 2 / 273	WI: 2 / 130	

Nice Fun month. All contacts were great. Even took time to work and shovel snow. It's great to be on the Air. 74 Unique Brag Qso's, 116 total, Qso's 30 Non SKCC contacts, couple of Marathon (60 minute plus) Qso's and a bunch of Parks on the Air, which I didn't count separately. Oh, and a bunch of ssb contacts too. Need to capture a winter picture of the Vertical. The Snow just melted so now I need to wait for more snow. Let's see, Ya, it's N.E. Ohio, we'll get more in March. 73, Bud AA8CL

Not too many QSO's this month, but I did have a marathon with WA3SCM, and an almost marathon (2 min short) with K9VKY...Thanks Dave and Brian!! Here is a look at my recently renovated station. 73, Russ K1RWT

Fun month, and got the Brag Bonus Station as well. Used either my 12 year old IC-7000 with a J-38 key, or my Kenwood TS-590SG and Kent key. 73, Curt K2CWM NJ

Thanks to all who participated in making this another fun SKCC month. I'm getting close to the Sx6, so my priority was chasing new T's, and my Brag count was down. My 80m Inverted Vee also came down in one of the winter storms. With warmer weather, I hope to get it back up shortly. In the picture, I'm operating portable from Westin Bend State Park across the river, in Missouri. The rig is a Kenword TS-570 with a Cootie key, antenna was a 40m G5RV. Hope everyone has fun on the air. May God bless you and your families in the New Year. 73, Ric KA3LOC

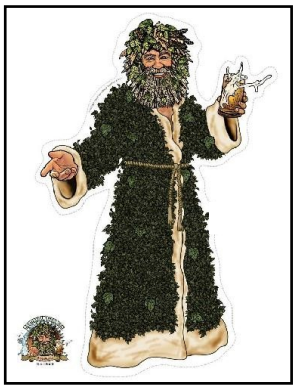
Brags are falling off lately, but will try and do better next month. Thanks for the QSOs and thanks "SAM" for bonus points 73!! Picture is in honor of NRR. 73, Dave KB1WOD

Well, a rough month here in ETX. Ice/snow and no power for 5 days. Temps down to 0 deg. f. We made it with the fire place and coleman stove. The antenna had a big pine limb fall on it but it did not do any damage. Thank goodness for copper coated steel wire! Band conditions were pretty poor this month. Sure hope next month is better. CU soon. 73, Allen KA5TJS

I want to thank all the stations I had the chance to work and they were very nice. It is a lot of work. I wouldn't want to do again real soon. 73, KC5 "SAM" Virginia

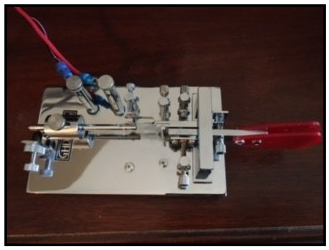
I'm trying to get a bit more time in. Great to see a number of new members and even the older "inactive" ones coming out of the woodwork. Hope to pound brass with you down the log...73, jack KK0I

February Brag 2021 II



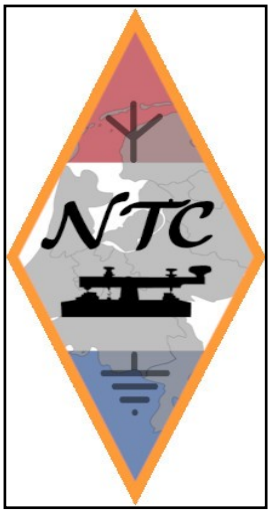
A low score month. Still lots of fun, though. 73, Tom KB3CVO

Not a great dx month for me hopefully March will be better, days are starting to get longer now. 73, Hanz YL3JD



Ice storm, loss of power and poor band conditions put a damper on the number of contacts this month, however, I enjoyed the activity and had a number of great chats none the less. Have been experimenting with using a bug left handed with a GHD reversible bug the XYL gave me for Christmas. 73, Dick N5KIP

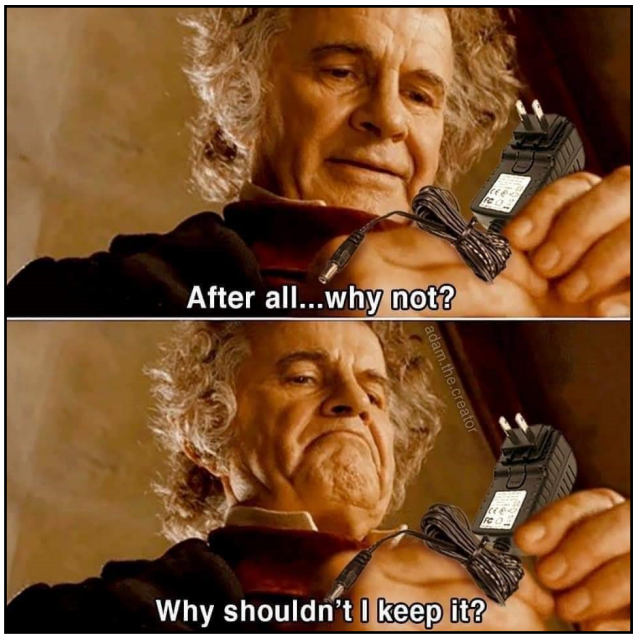
Got back into this a bit more this month. I am working a bit more seriously on my copy speed. I'm doing short session with material from codeninja.com at least twice a day. I'm still much too slow, but I believe I am making progress. I need only 2 more new C, T or S for my Tx5. 73, Ken N9KJU



It's been a strange month. Some days with no propagation at all toward the US. But we have a new CW club: the Netherlands Telegraphy Club! 73, Jo PG4I

From Weird to Even More Weird!

Darn...guess I need a new radio….woo hoo!!!

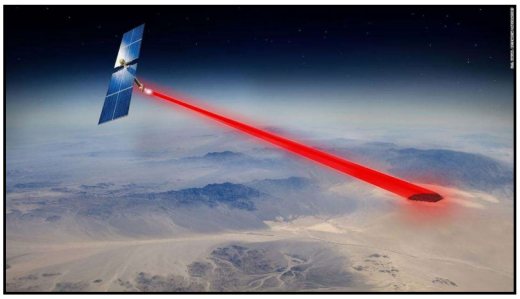


Looks like "Billbo Baggins" is into amateur radio! I keep the same things...why not! (de "The Hobbit")

Solar Power from Space!

Here is an idea long over due. How about a "ring" of these around the earth and transferring power from daylight areas to dark areas...all in geo-synchronized orbit?

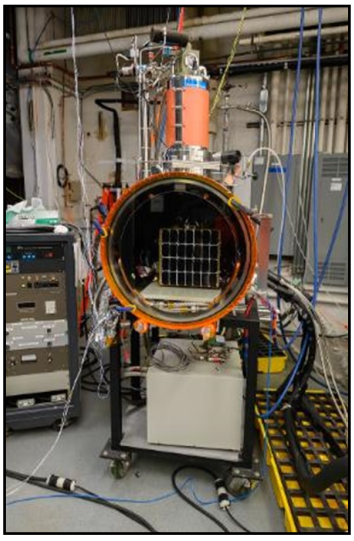
"Pentagon scientists successfully test solar panel in space collecting energy that could one day be beamed to anywhere on Earth ."



An artist's concept of a space-based solar power system beaming to military and remote installations.

Scientists working for the Pentagon have successfully tested a solar panel the size of a pizza box in space, designed as a prototype for a future system to send electricity from space back to any point on Earth.

The panel -- known as a Photovoltaic Radiofrequency Antenna Module (PRAM) -- was first launched in May 2020, attached to the Pentagon's X-37B unmanned drone, to harness light from the sun to covert to electricity. The drone is looping Earth every 90 minutes.



The Photovoltaic Direct Current to Radio Frequency Antenna Module (PRAM) sits inside thermal vacuum chamber during testing at the US Naval Research Laboratory in Washington, DC.

The panel is designed to make best use of the light in space, which doesn't pass through the atmosphere, and so retains the energy of blue waves, making it more powerful than the sunlight that reaches Earth. Blue light diffuses on entry into the atmosphere, which is why the sky appears blue. "We're getting a ton of extra sunlight in space just because of that," said Paul Jaffe **KJ4IKI**, a co-developer of the project. The latest experiments show that the 12x12-inch panel is capable of producing about 10 watts of energy for transmission, Jaffe told CNN. That's about enough to power a tablet computer.

But the project envisages an array of dozens of panels and, if scaled up, its success could revolutionize both how power is generated and distributed to remote corners of the globe. It could contribute to the Earth's largest grid networks, Jaffe said. "Some visions have space solar matching or exceeding the largest power plants today -- multiple gigawatts -- so enough for a city," he said.

The unit has yet to actually send power directly back to Earth, but that technology has already been proven. If the project develops into huge kilometers-wide space solar antennae, it could beam microwaves that would then be converted into fuel-free electricity to any part of the planet at a moment's notice. "The unique advantage the solar power satellites have over any other source of power is this global transmissibility," Jaffe said. "You can send power to Chicago and a fraction of a second later, if you needed, send it instead to London or Brasilia." (*...or a DXpedition in a remote place!)*

Chris Depuma (left), gives guidance on the PRAM in Washington, DC, on October 10, 2019.

There are some advantages to building in space. "On Earth, we have this pesky gravity, which is helpful in that it keeps things in place, but is a problem when you start to build very large things, as they have to support their own weight," Jaffe said.
The mission of the US' X-37B space plane is shrouded in secrecy, with the PRAM experiment being one of the few details known of its purpose. In January, Jaffe and PRAM co-leader Chris DePuma, released the first results of their experiments in IEEE Journal of Microwaves, which showed "the experiment is working," Jaffe said.

The project has been funded and developed under the Pentagon, the Operational Energy Capability Improvement Fund (OECIF) and the US Naval Research Laboratory in Washington, DC.

A solution during natural disasters

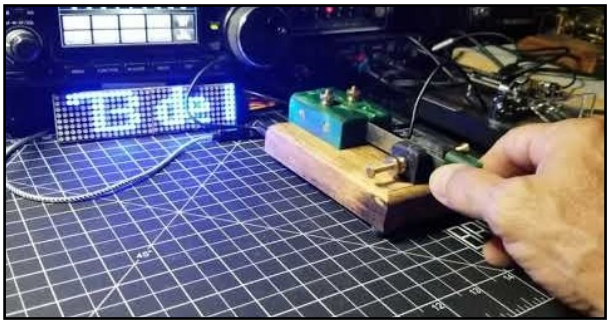
The temperature at which the PRAM functions is key. Colder electronics are more efficient, Jaffe said, degrading in their ability to generate power as they heat up. The X-37B's low-earth orbit means it spends about half of each 90-minute loop in darkness, and therefore in the cold.

Any future version of the PRAM might sit in a geosynchronous orbit, which means a loop takes about a day, in which the device would mostly be in sunlight, as it is travelling much further away from Earth.

The experiment used heaters to try to keep the PRAM at a constant, warm temperature to prove how efficient it would be if it were circling 36,000 kilometers from Earth. It worked. "The next logical step is to scale it up to a larger area that collects more sunlight, that converts more into microwaves," Jaffe said.

Beyond that, scientists will have to test sending the energy back to Earth. The panels would know precisely where to send the microwaves -- and not accidentally fire it at the wrong target -- using a technique called "retro-directive beam control." This sends a pilot signal up from the destination antenna on Earth to the panels in space. The microwave beams would only be transmitted once the pilot signal was received, meaning the receiver was in place below and ready. The microwaves -- which would easily be turned into electricity on Earth -- could be sent to any point on the planet with a receiver, Jaffe said.

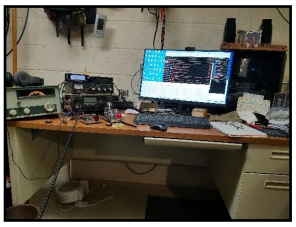
He also allayed any future fear that bad actors could use the technology to create a giant space laser. The size of antenna needed to direct the energy to create a destructive beam would be so huge, it would be noticed in the years or months it took to be assembled. "It would be exceedingly difficult, if not impossible," he said, to weaponize the solar power from space.
DePuma said the technology, if available today, would have immediate applications in natural disasters when normal infrastructure had collapsed. "My family lives in Texas and they're all living without power right now in the middle of a cold front because the grid is overloaded," DePuma said. "So if you had a system like this, you could redirect some power over there, and then my grandma would have heat in her house again."



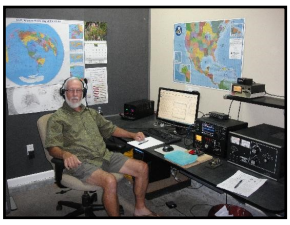
Another Home Brew

Sideswiper made from stuff I had in the workshop. Took about an hour. 73, Joe KI5AAI

March WES 2021

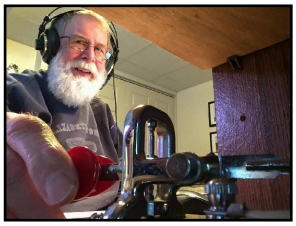


What an event. Bands were really active this weekend. Thanks for responding to my 47 year old HW-16 on xtal at 30-40 watts. Real good time between SKCC and Novice Rig Roundup. Contacted several stations for the first time. The pic represents my shack. Sorry, I had hoped it looked more lived in, hihi. HW-16 is going back on the shelf...maybe. 73, Bud AA8CL

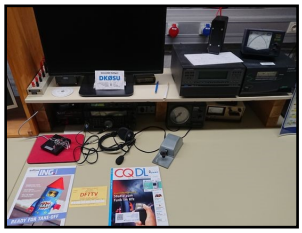


Don't like to complain, but especially early in the contest there was a LOT of really bad code especially from BUG users. Several stations were so bad that it was practically impossible to understand what they were sending. Come on guys at least get familiar with your key before trying it out in a WES. 73, Bob AC4MC

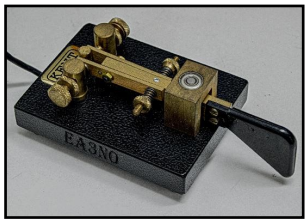
That was a fun WES! I got off to a poor start, but business really picked up later. Thanks for the QSOs. 73, Jim AD0AB



Enjoyed 20m and 40m and buggin' along! My picture shows the action from the point of view of keyer paddle ;-). I worked 2 SS - a skill I have not mastered! Thanks all! 73 - Jim AF3Z

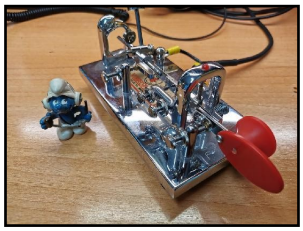


Thank you for all the nice QSOs! I am always happy to to meet old friends and to make new friends. 73, Stay well, fit and in good shape :) Tom DF7TV



Hi. Complicated to use the cootie for lack of habit. Thank you all for the qso. 73 de Lluis EA3NO

Thanks to everyone who copied my weak & fading signal this weekend. Used my Vibroplex Champion. Hearing so many bug keys on the air again is sweet music. 73, John AL7JK



Has been the first time I used a Vibroplex. Interesting experience HI! Weak propagation, next month I hope will be better. 73, Lou EA3WX/B

Weak propagation, next month I hope it will be better. Thanks to all stations worked me.73 Phil F5JWH

Looking for my future TKA, I used only a sideswiper during this WES. As often I made a three bands contacts with K3WW (20, 40 and 80 m). I enjoyed to use my old MK-701 cootie key (see photo). Thank you all and see you next time as always with pleasure. 73 and stay safe everyone Bernard F5DE

Not very good conditions for this WES, little propagation but very good QSOs with new members. Beautiful 40m period on Sundays after 8:00 p.m. GMT. Thank you for all these qso and see you next time with the Easter eggs. 73, Bob F6EJN

Hi everybody and thanks for the nice contacts. Average conditions on the both days. Had fun as usual. 73 everyone, stay safe and see you next month. 73, Bert F6HKA

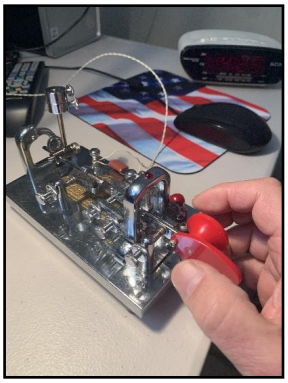
March WES 2021 II

Quite a challenge for me to use a Bug key, but in the end great fun. Used a Vibroplex twin Lever bug key circa 1919. Conditions were not good and Sunday pretty much a wash-out. 73, John G0RDO

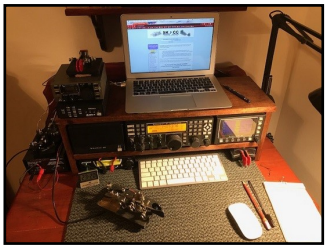
After a month break from cw activity, it was sure fun to make some contacts again. While the bands were not great, I really enjoyed working 40 on Saturday morning. Been using this bug, a Martin Flash Key since my novice days in 1966. 73, Dan K0FD

Great band conditions on this one, and no RTTY contests so we had the whole spectrum to ourselves. (hi hi) I ran my Kenwood TS-590SG at 75 watts to a vertical on 80m, 40m, & 20m, using my Kent Str Key. I always try to look at everyone's profile page after a contact, and add my callsign to their Web Contact Log if they have one... just part of the hobby for me. Great time! 73, Curt K2CWM NJ

Terrific fun, as always, though I just played for a few hours each day. I thought that conditions and participation were both fine. This is a really fun event, sponsored by a wonderful group! I was happy to be a / SS op, and nearly half of my contacts were using a cootie or bug. My setup was my K2 at 5W to a 20m EDZ at 50' on 40m, and an 80m dipole at 80' for 80 and 20m. My "bug or cootie" is the W1SFR TBFB, pictured below, far right. 73, Lloyd K3ESE



WELL CONDITIONS WERE DOWN FROM LAST MONTH, ESPECIALLY TO EU ON BOTH DAYS, AS WAS PARTICPATION FROM MY VIEWPOINT- DID INCREASED SPEEDS USING SS/BUGS SCARE AWAY SOME? I SLOWED FOR MANY AND USED SK FOR THOSE. THANK YOU FOR ALL OF THE QSO'S- GREAT FUN AS ALWAYS. 73, Phil K3EW

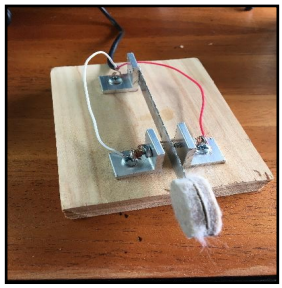


1944 - birth year - V-Champion Bug to K3 @ 70w to HOA Antenna - Unun random wire up and over garage. Some really nice signals on 20m this afternoon. Very limited time but unlimited fun. Thanks to all those who heard me. 73, Don K3RLL

That was fun, I got through the whole weekend with the Cootie. At times it felt almost good and at times out of control. 54 Cootie QSOs and 124 Bug QSOs. Thanks for all the QSOs.... The count of BUG/Cootie QSOs above is correct the math on original report was off, fingers to numb and

Great WES. Wish I had more time to participate, but, had a great time working those I did! Take care all. IC-7300 to 40 meter Delta Loop. All contacts made with my Torsion Bar Sideswiper or my 1968 Vibroplex Champion. 73, Bob K3ZGA

Enjoyed a short time. I'm worried because I think my radio is watching me! Naw, can't be! 73, Ted K8AQM

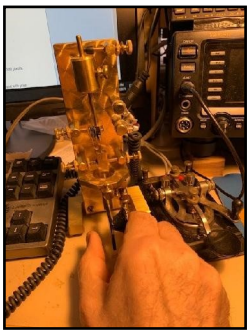


First time sending with my newly build SS. Hard to see the wire connecting the two paddles; makes it look like a keyer paddle (which will help make sure I can find it for the next SS event). But believe me, it sends like a SS (a little rough so far). 73, Pete K6TJ

Had fun chasing bugs and cooties. Should have brought more Raid hihi. Thanks for the contacts and see you next month 73, Dave KB1WOD

Thank you everyone for the fun WES. I can't say who had the nicest sounding bug but there were some great sounding ones! 73, Eric KB3NSK

March WES 2021 III



Ode to my Viz Vertical. A craftsman's delight, and sends great code, as well. Thanks for the Bug/ Cootie WES. 73, Frank K8FAC

Lots of fun playing S & P on Sunday. This month I got to use a new rig (IC-7300) along with my vintage Lex Logan SpeedX bug. Tnx for all the contacts gang, (especially the bugs and SSers),and a surprise 15 meter contact with Dennis W8BFX. Around 1930Z on Sunday he appeared to have the entire band to himself Hi Hi. Stay safe and C U all next time. 73, Bill KE3O

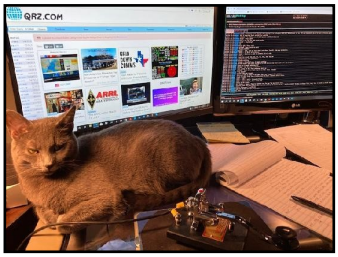
Too little time for this one because of family commitments, but did manage to get on for a bit with the 1967 Handbook all homebrew CW station I used for Novice Rig Round-Up, but with the RAF bathtub key swapped out for a WW2 Vibroplex. I have to say the bug technology has withstood the test of time. The homebrew tube stuff, fun, but not the daily driver the Lightning is :) Thanks to everyone that called in and got me started for the last 200 to get to S. 73, Scott ka9p

Thank you all for another great WES! I went a little further than normal this time with 50 contacts. I was a lot of fun and good practice with the sideswip-

Used the IC-761 and J-38 for this WES. 73, Randal KG5IEE

Out of town for most of this one but it sounded like the bands were in great shape. Always fun to play. The photo is from POTA activation this weekend. They were grazing in the front yard of the cabin. 73, Randy_KB4QQJ

Thank you all for another great WES! I went a little further than normal this time with 50 contacts. I was a lot of fun and good practice with the sideswiper. 73, Tim KD1W



Another fun WES has come and gone.. Did not get to work the bands on Saturday due to prior obligations. Sunday was crazy conditions on 40 meters. I'm in Dallas and have never worked so many Texas stations. Even made a couple of VE7 contacts on 15 Meter. If you happen to notice the Grey Fur-ball on my desk, that was the reason for some of my BAD SK CW Sending....LOL Some Dit's came out as Dah's..... Till next month 73 to all and everyone stay safe. Doug KG5YTS

How fun to get back on the Cootie and give out some bonus points, too! A few surprise QSOs on 10m and 15m each day, with contacts on 20m, 40m and 80m, as well. Thanks, all! 73, Steve KC5F

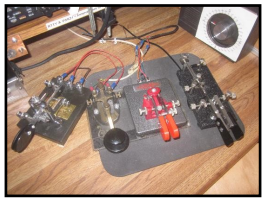
Saturday was pretty slow but Sunday picked up well. Only logged 4 Cootie ops but lots of bugs. No DX this month at all. New England was hot Sunday afternoon on 20. Nil on the upper bands this month. IC 7410 at 70 watts and the doublet at 30 ft. Used the W1SFR key for most of the contacts. Thanks for the bonus points guys! 73, Allen KA5TJS

This was my first WES from my new QTH in Mena, AR. FT 817, 5watts, Buddistick antenna, CW Morse straight key. 73, Terry KE5YUM

March WES 2021 IV

My second WES! Operated in the scan and pounce mode, I need to try running in the next WES. ICOM-7610, Begali Intrepid Bug, Vertical on 40 meters and a tri-band beam on 20. ACOM 700S amp with remote tuner. Ran 100 watts on 20 meters and 500 watts on 40 meters. Thanks everyone for the contacts, can't wait till next month! 73, Gordon KG7YU

It certainly was fun hearing all those bugs and cooties out there, and I think this theme brought out a few more participants (by the number of members I had not worked previously). Used my two favorite keys for this event, the "ole gal" (1919 Vibroplex Original) and the Begali HST. I was presently surprised to hear F6HKA jump in on 40 Sunday afternoon. It was a great event. Thanks, as always, for all the contacts. 73, jack KK0I

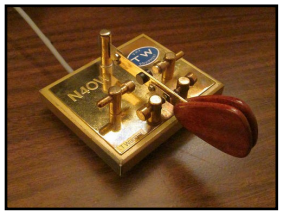


Well that was fun. I ran between the SKCC & NRR portions of 80M & 40M. Using my Kenwood TS-590S for SKCC/ NRR duties and either a Heathkit HW-16 or Drake 2NT and 2C for NRR. The Keys. To the far right a new brand new KN4YB Inline Dual Lever Bug.Thanks for the QSOs . 73, Rick KN8RHM SKCC the KEY to Amateur Radio

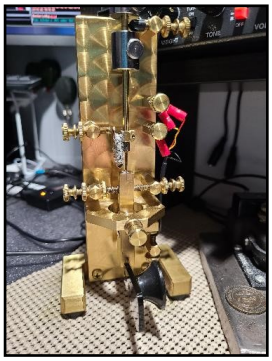
Enjoyed working all the Bugs and Side Swipers! My Was using my usual Blue Racer here... 73, Russ KK4WX

DX PROP got a little bit better, I had a great Radio time. Heard few Bug / SS, but good ones QSO Stats: 2 > 14MHz – 3 > 21MHz – 14 > 28MHz TA33 – 50W – Kungsimport SideSwiper made in Sweden in the 80´s by RO of Coastal Radio Station of SAG (Tribute to mi amigo Ben, SM6CKU) TU everyone for the QSOs. Take care & Stay safe. BCNU 73, Walt LW3EX - ..- ZUT

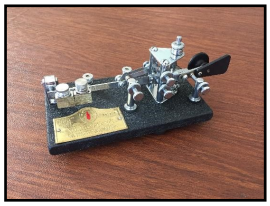
Thanks for the chance to break out my new vibroplex straight key. And thanks all for contacts! 73, Vic N6DVS



5 W using my FTdx3000 dialed down to minimum. Need the RX antenna to fight my RFI. Antenna Zero gain Vertical Key G3HGE "Twanger" sideswiper. Thanks to all that worked my QRP sigs. Think I will do this more often. Great to hear all the BUGS and Cooties. Much more human than those built in Keyers. 73, Al N4ow



First WES using a Bug. Lots of fun and a challenge at the same time. Thanks to Bob K3ZGA 12392S for use of the beautiful bug... 73, Dennis N0SMX



Made a few QSO's with a 1941 Vibroplex Champion. 73, Chuck NI0C

Hello all, argo 6 at 5wrs g5rv 35ft n/s inv vee.. only worked 15 states as I had other work to do.. tnx agn to board.mbrs..WOW, now 24082 mbrs.. each month abt 125 new mbrs to create QRM.. hihi.. I do that daily...hi.. the pix is my key nmbr 79.. I'm working on nr80, a cootie key.. the pix is a cootie/stkey.. just push down on paddle to use as a stkey.. my design..hi, no patent money, hihi.. nr80, will be a 2 paddle cootie.. hi, just something to do in basement shop on 3 lathes and 3 mills.. So, u all takecare and c u in April to make more QRM..hihi.. tnx, 73, Dave N9ZXL

Lots of stations to work. A fun activity. 73, Nee NE9EE

Tried working some NRR with my HW-16 and N1DWJ cootie, with limited success. Then went /portable to FDR Park with FT-450D and Whiterook Mini-cootie. Rounded WES out with IC-7300 and GHD Speed Key cootie. 73, Brian N4API

March WES 2021 V

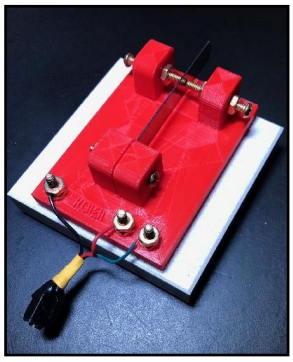
I had limited time to operate, but I enjoyed the few I logged. And since I was on my TBFB Cootie key, I was worth some bonus points to the stations I worked. I'll take that. 73, Ken N9KJU

Storms caused an early end to my WES but it was still fun. Used my Heathkit HW-16/HG-10B at 50 watts to an OCF dipole and a J-38 key. The HW-16 has been very busy the last couple of weeks with the Classic Exchange, Novice Rig Roundup and WES and it did just fine. I use a Timewave external DSP with it which helps out a bunch on receive. 73, Bill NZ0T

Another fun WES. Thanks to all! 73, Kevin W2NC

STRANGE WES!!! Lost power Sat. noon. House across the road on fire. Embers in 40mph winds burned my pump house down and power pole. No water. There went Saturday afternoon. Worked WES when power restored Sat. pm and Sunday. Used my old SGC-2020 QRP rig and 1938 McElroy bug. 2020 works but heavy AGC pumping from strong nearby sigs. Worked 50 through it all. So if my signals sounded a bit "smokey," now you know why - hi. In spite of things, still had fun. CU next month. 73, Paul NA5N

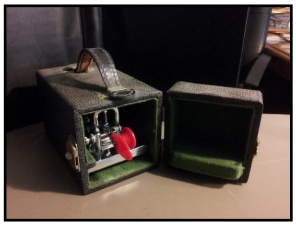
Lots of activity this weekend. Many great SS and BUG ops heard. Fun as always. 73, Larry VA3NU



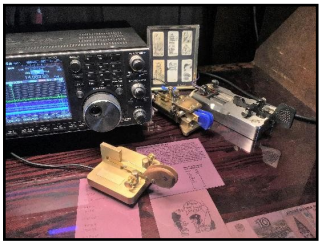
Apologizes to those that suffered my cootie sending and thanks to those that provided theme bonus points! 73, Pat W5WTH

Violin Side Swiper. 73, Steve NN0SS

This is the first time that I work in the WES. But not the last time! Tnx Rien, PA7RA SKCC 5362T



Fun event. I worked a few stations as I was in the Hamfest QSO Today Expo. Sill enjoyed what I got to work. 73, Jim W1RO



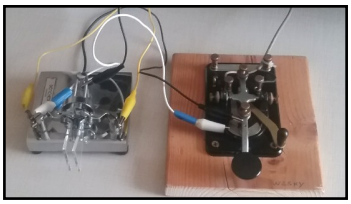
Fun Weekend! Thanks to all who put up with my cootie fist! 73, Rich W4RQ

Autronic key rewired as a side swiper. 73, Ron NT7R

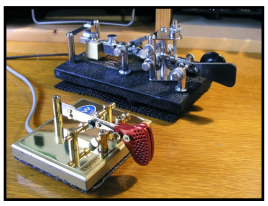
First day from home with a TS-520, second day from the club station with a IC-7400. Both with a Begali Sculpture Swing cootie. Great fun! 73, Jo PG4I

Couldn't work my usual schedule this weekend, and prop on 20m was weak at times. But still a lot of fun. Used either the bug or the SS for all but a few QSO's where a SK was better suited to the speed. Thanks to all! 73, John W1TAG

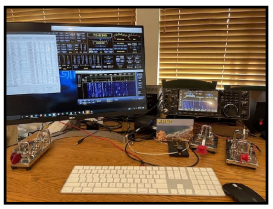
March WES VI



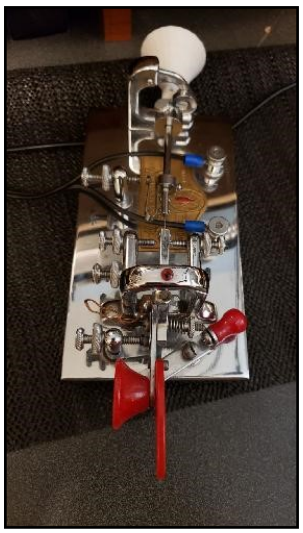
I try to work the WES's when I get a change. It is a fun challenge and a great way to progress through my SKCC targeted awards. This time I am hot to get my "S". After the 1st day on the air I read about using my paddles as a Side Swiper. I did that for the 2nd day to increase my QSO's and it worked. I simply jumpered my paddles to my J-38. But having had no research or practice in using a Side Swiper my CW sending was embarrassingly poor. It was nice giving out 5 points to my contacts on Sunday but they really deserved 10 to 20 points for putting up with my sending! 73, Peter W2SKY



The bugs outweighed the sideswipers for my 73 contacts. I worked 24 bugs and 11 SS. I went back and forth between my Vibroplex Lightning Bug (circa 1942) and my Twanger cootie. It was good practice for quick switching between the two key types. I found that if I would look at the key to remind myself what I was using right before touching it, I could switch without missing a beat (for the better part anyway!). Didn't have a lot of time so I tried to maximize my SPC count and had 47 for 73 contacts....just a mini goal for me to keep it interesting. Lots of activity and many newer members were on. 73, Dave W3NP



Another great WES. A lot of QSB for me on the west coast this month. Used dualing bugs - one for the left hand QRS (for a bug) and one in the right for QRQ. Each also worked as a backup for the other when a screw comes loose hi hi. Thanks to everyone who made contact. 73, Ted W6TED



Thanks to all the organizers of this event, my third. The 1952 Vibroplex Original Deluxe performed well. The operator got better as the event went along. I enjoyed sending "thanks for the bug" to my fellow bug users. Had a great time meeting new and old friends. Truly sorry for not answering everyone - band

Thanks to all who make these events possible. Also thanks to those operators I was able to contact. This event was good for me because I needed the bug and paddle practice! 73, Gerald WA5AFD

I was out QRP-portable for awhile on Saturday. In the process of doing some antenna testing, I made a handful of WES contacts. 73, Craig WB3GCK

66 Contacts in 32 SPCs. Several new stations. All with the bug, and maybe a s next time! 100w to a long wire on the fence up 5 ft. Contacts from California to France. Thanks for the QSOs - lots of fun! 73, Jack W9YY

Portable station this weekend. Here is WB9TFH setting up the wave files for WIQP.Rig yaesu ft757gx to a g5rv ant 100 watts. Thanks for the WES qso's. 73, WB9TFF Donna

Very nice WES, thank you all for the qsos! vy 73 Hanz de Latvija

Thanks for nice WES QSOs, hard work with QRP, I hope to better condx next time. Rig is FT-817nd, 350Hz cw filter + ext.audio fiter Vectronic 821K, key is Vibroplex Champion 1956. Antenna is double windom abt 10m up.73 Kare YU7AE

I haven't participated in a SKCC activity in a long time. As luck would have it, this WES coincided with the Novice Rig Roundup that I was participating in. I was using my homebrew Scrounger transmitter which is 80 and 40 meters only, crystal control and 4 watts output and made 5 WES contacts. I gave some bonus points using my Viz Key Cootie. My appologies for my poor sending at times as it was pretty busy around here with the grandkids and a 6 month old puppy.73, Jon WS1K

Strange Story of DC's Lost AM Radio Station Still Transmitting Road Closures From 2013

Editor...This unique story appeared on the QRZ.com page. Full credit to QRZ and the authors is given.

Tuning around the AM broadcast band, or any part of the spectrum, can turn up some odd and intriguing things as a radio amateur in the Washington DC area recently pointed out.

73, John, WØPV

The Strange Story of DC's Lost AM Radio Station Still Transmitting Inauguration Road Closures From 2013

"Strong 'Fallout 3' vibes," says the radio amateur who discovered it.

BY ROB STUMPF MARCH 4, 2021

Not everyone pays the most attention to AM radio. To some, talk is talk and fuzzy signals are exactly that. Still, it'd be odd if the same broadcast looped continuously for eight years without anyone noticing—but it's not impossible.

As it turns out, that very scenario took place up until this week in Washington D.C. where an AM radio station had been broadcasting the same traffic report since 2013, and nobody seems to know why.

It was first pointed out on Twitter by Matt Blaze, **@WB2SRI** , security researcher and chair of computer science and law at Georgetown University. In certain parts of D.C., you could tune-in to 1650 kHz and be greeted by a looped recording. The message, which read off the call sign *WQOQ613* and warned listeners to avoid the 14th Street bridges, had been repeating since at least Jan. 21, 2013—the day of former U.S. President Barack Obama's second inauguration. But that was more than *eight* years ago. Why in the world would this message still be broadcasting? And why could it only be picked up in certain parts of the city?

To answer that question, I reached out to several individuals who work for the District of Columbia, including the technical contact registered with the FCC. Within an hour of sending off an email, my phone rang and Bill Curry, the chief of communications security at Homeland Security Emergency Management in Washington D.C., was on the other end.

Bill was immediately interested in the rogue signal. He didn't seem rushed or bothered by the fact that the message was being broadcasted, but was instead curious that it managed to stay alive for so long without anyone knowing that it existed or complaining that it was out of date. See, Bill has been a *radio enthusiast* his entire life, even building homemade *Ham* (?) radios before he began working with RF professionally, so the thought that some unmanned station was looping a recorded message was...intriguing.

While on the phone, Bill's brother flipped on his historic Zenith Trans-Oceanic radio and sure enough, the traffic report began to play. Couple his interest with the security and communications work he does with Fusion Centers and it was clear that he needed to know where the signal was being broadcast—if, for nothing else, to satisfy his curiosity.

I get a weak signal at my receiver location, but here it is, FWIW. https://t.co/2w59d29Giv

“Don't forget to avoid the 14th Street Bridge. “

— matt blaze (@mattblaze) March 1, 2021

After exchanging stories about adventures in our own siloed worlds of engineering, Bill had a theory that actually seemed quite plausible: someone just forgot to flip the off-switch. See, when it comes to radio communications in Washington D.C., many people live under the "if it isn't broken, don't fix it" philosophy—especially since erecting a new radio tower is an extremely complicated process within a certain radius of the nation's capital.

According to Bill, the signal may have been originally transmitted on several temporary stations, all of which were thought to have been decommissioned some time ago. Some of these transmitters may have been affixed to telephone poles on the side of the highway, while others could've been stuffed into two-wheeled trailers to be towed wherever needed. The equipment in these trailers is often powered by solar panels so it can operate without an external power source. His bet was on the latter, that the case of the mystery radio signal may have just been sitting in a vacant parking lot getting power from the sun and transmitting the same traffic information day after day for eight years.

Because the location of the transmitter wasn't documented, Bill needed to organize an effort to locate it. His team set off with a Radio Direction Finder (RDF), a device with a unidirectional antenna meant to help find the source of a radio signal, and began the hunt. And by the following afternoon, the signal finally stopped broadcasting across the D.C. airwaves. And after eight years of faithful service to 2013 inauguration day drivers, the station now appears to be off the air.

— matt blaze (@mattblaze) March 3, 2021

It's honestly kind of upsetting to know that it's gone—a little less electricity in the air. Just as quickly as it was found, the mystery signal simply fizzled out. Someone at Bill's directive must have found the transmitter and finally finished the job someone forgot to do eight years ago. We'd like to think of it as a service, considering the license expired later this year anyway (a decade after it was issued).

Unfortunately, while the signal may be no more, we still don't know exactly where it was being transmitted from. Perhaps it was a trailer parked in a vacant lot, or maybe a station was stuffed inside of an old decommissioned building. The world may never know—but at least we won't forget about the eight years of a phantom government traffic report riding the airwaves of Washington D.C.

New Bug

KD1JT Dennis I decided after 30 years I should try a bug. This is KN4YB's little dual lever right angle. Came on Friday, set it up Saturday morning, practiced a bit (less than an hour) and met Steve KC5F on the sked page, and asked if he'd suffer through a QSO with me. He was on a cootie he hadn't touched in a year, so maybe felt it was fair play. Got the contact with Steve, and made half a dozen more. I really like it, and am happy to report that I don't find using a bug difficult at all. I made a recording of myself, to gauge my sending. It's at https://soundcloud.com/dennis-collin-753867967/kn4yb-demo

Editor...The following article is reprinted with permission of the author and the "Allen County Hamnews" where it first appeared.

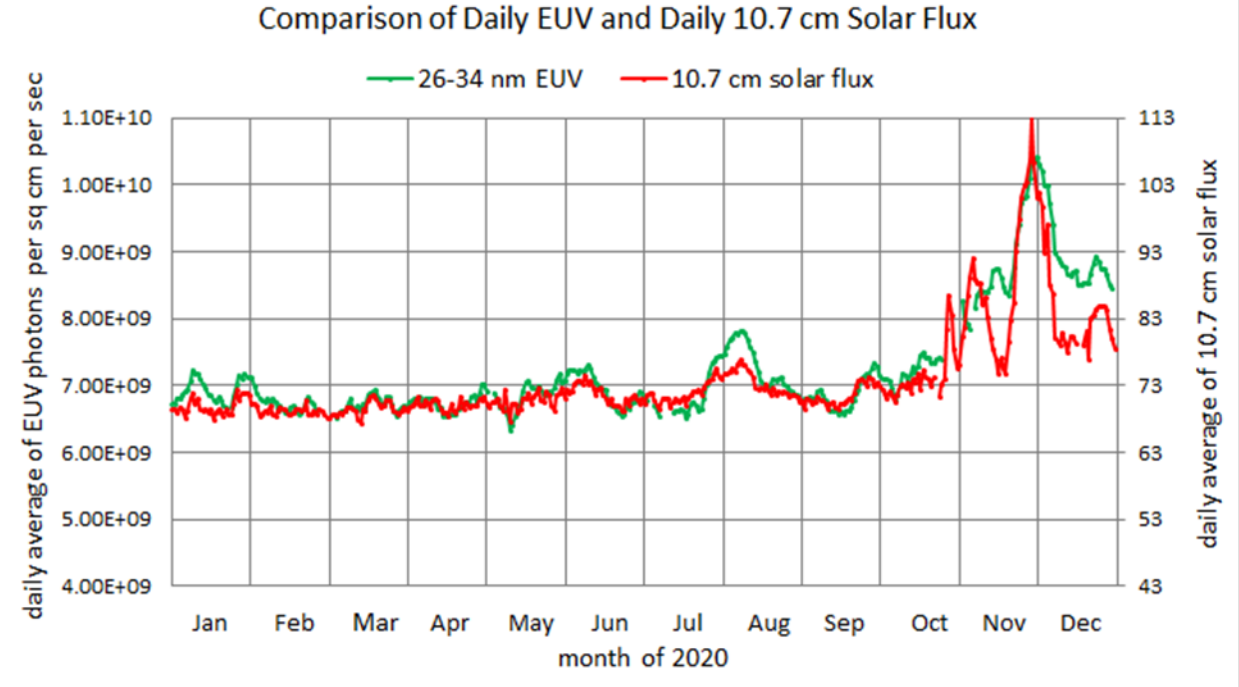
Comments on Solar Cycle 25

Carl Luetzelschwab, K9LA

The first official sunspot of Cycle 25 (active region AR2744) occurred on July 8, 2019. There were some earlier sunspots from Cycle 25, but they weren't big enough and didn't last long enough to be assigned an active region number. As a side note, the last sunspot of Cycle 24 was in July 2020 – one year later. This tells us that solar cycles overlap – we see sunspots simultaneously from both the new cycle and the old cycle.

Although the first Cycle 25 sunspot was in July 2019, it took until January 2020 to see Cycle 25 sunspots on somewhat of a regular basis. But things didn't really pick up until the end of 2020. If you operated on the higher HF bands (15 meters, 12 meters and 10 meters) at the end of 2020 (including the CQ WW DX contests in October and November and the ARRL 10 Meter contest in December), you know that we had some pretty good worldwide propagation.

The reason was the sun hiccupped and gave us a big spike in extreme ultraviolet radiation (EUV – the true ionizing radiation for the F2 region). Of course this was accompanied by spikes in both sunspot number and 10.7 cm solar flux (both are proxies for EUV). See Figure 1 of EUV and 10.7 cm solar flux during 2020. Unfortunately, things then settled back down in early 2021 and we returned to solar minimum conditions. After 14 days of zero sunspots in early February 2021, things have picked up again starting on February 19. Hopefully we'll see some increased Cycle 25 activity – and some better propagation on the higher HF bands.



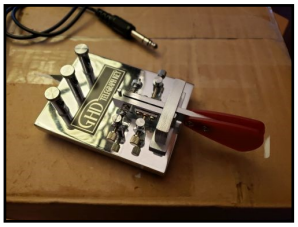
March SKS 2021

Used my 45 year old TS-520 and a different straight key for each QSO. 73, Bill AA4Q

This was a fun event this month, can't explain why. I didn't work everyone I heard but had fun on both 80m & 40m QRP. Thanks for all who answered not only my qrp signal but all of us 5w and below. Spring has Sprung. Be safe out there. 73, Bud AA8CL

Nice sprint, good condx. Made contacts on 20m, 40m, & 80m. Ran my TS-590SG at 75w to a multi-band vertical, using my Kent Straight Key. Fun! 73, Curt K2CWM NJ

Nice conditions on 40 & 80. Always a busy evening with local net ops...good training to multi task thank you all 73, Rick K0KEX p.s. This Coopers Hawk watched while worked on antennas. I was on high alert Hi Hi



Tons O Fun, as always! Thanks to all who participated, and dug my 5W signal out of the noise! Below: a shiny GHD single-paddle key, currently wired as a cootie...available! 73, Lloyd K3ESE

Always a good time. Thanks for the Qs. See you next month. IC-7300 to a 40 meter vertical delta loop using a Begali Spark. 73, Bob

There were some really BIG signals on both 40 & 80 tonight & we appreciate all the contacts . Nice to work several stations on both bands too. Hope to see everyone next month. 73 Larry K8TEZ

It's been a while. I kept missing the sprints. Bill, (NZ0T) reminded me this time. I had a good time and just stayed on 80 meters. Ran my IC-7300 and 80 meter dipole...73 all and see you next time. 73, Bill N0UMP

Picture of Sarasota Bay taken at sunset just minutes before SKS. 20 meters was good for the first half hour with 22 logged before getting frustrated with the digital stuff on 40! Found a spot, though, and had fun! 73, Ken N8KR

Fun sprint with good sigs, mostly 40M, even with the couple other QRP stations worked. Used an old SGC-2020 QRP rig (just fixed) with TFD dipole or 5BTV vertical as seemed best with my old Mac key. Enjoyed all the QSOs. 73, Paul NA5N

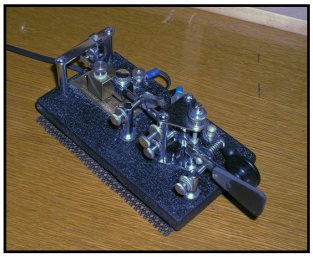
Conditions were pretty good, got 5 on 20 and 5 on 40. 40 was pretty crowded! Thanks for the contacts and have a good month. 73, Allen KA5TJS

Wellll ... TNX! fist was pretty shaky tonight! I am not much of a contester. I really appreciate every QSO!!! It's magic to me ... 73, Steve NQ8T

March SKS 2021 II

Late start, very late. Still, I got a chance to use my new-to-me Navy Flameproof key, (TU for the advice N4OW). Always look forward to SKCC events... thank you folks. Stay healthy, 73, Blue W1BLU

I couldn't get my antenna to tune up on 80M so had to stay with 40M. Business was fairly brisk, but my dogs were unimpressed! 73, Frank W1ZAH



Made 9 contacts on 20 before going to 40 and 80. Condx were decent. 40 was very crowded. A total of 9 of my 43 contacts were in FL!! Vibroplex Lightning Bug circa 1942 for all QSO's. 73, Dave W3NP West Virginia

Got contacts on 3 bands tonight 20, 40, and 80. Was surprised to get the 20 meter contacts! Running 100 watts to a long wire antenna strung on the backyard fence up 5 feet off the ground. Who says you need a high antenna? The guys in the photo keep the squirrels off my antenna. Thanks for the contacts and see you on the air! 73, Jack W9YY

Started on 20, made one contact and switched to 40 which was very good even at 7.0635 until the last 15 minutes when things got real slow. Used the ole K3 at 100 watts, an OCF dipole at 30' and a Bencher RJ-2 key. 73, Bill NZ0T

Straight Key Night 2021

From the April, 2021 page 79 comes many laurels for SKCC members. The article cover picture is the vintage station of Ralph N4RLI #18591. Ralph's vintage station consists of a Heathkit DX-20 transmitter paired with a Knightkit V44 vfo and a Heathkit HR-10 receiver.

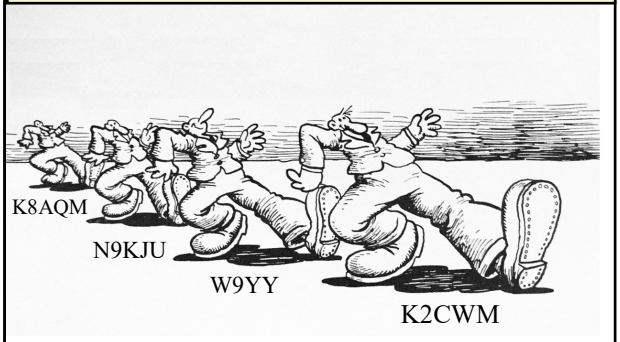
But even more laurels for SKCC members! SKN participants are asked to vote for both "The Best Fists" and the "Most Interesting QSO." Checkout who in SKCC (bold type) got recognized as:

"Best Fist"	"Most Interesting QSO"
AA4TB	**KK0I**
AC6YY	W2WLD
N1XI	**WB4SPB**
N6KZ	WB6PGJ
N9HAL	
WB8ICN	(well done guys!)

There were many, many SKCC calls listed as SKN participants and no doubt more not listed.

April Slow Speed Saunter 2021

Slow Speed Saunter



Participants and QSOs by SPC

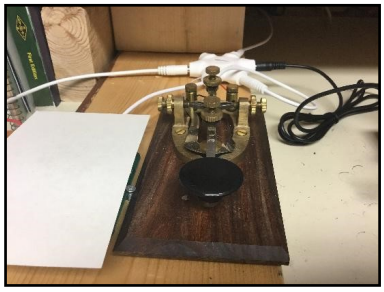
CA: 4 / 61	GA: 1 / 7	IL: 2 / 35	IN: 5 / 85	MD: 1 / 17
ME: 1 / 2	MI: 2 / 17	MO: 1 / 5	NC: 1 / 16	NH: 2 / 3
NJ: 1 / 30	NM: 1 / 11	OH: 3 / 57	ON: 2 / 7	PA: 1 / 6
TN: 2 / 15	TX: 4 / 11	WI: 1 / 7	WV: 1 / 4	

Good to see so many QSOs this month, we just need more pictures and entries!

Very nice event. Made 30 contacts, probably a personal best for me in this event. Reverse Beacon Net listed my speed around 11 to 12 wpm, which is where I like to be in the Slow Speed Saunter. Ran my 13-yr old IC-7000 at 50 watts into a multi-band vertical, using an old Lionel J38. Look forward to next month. 73, Curt K2CWM NJ

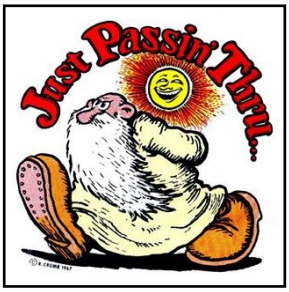
Always fun to make a few slow contacts! 73, Gene W9KMK

I certainly enjoy this activity! TNX! to all who had the patience to work my snail paced fist. Got a few more QRP x2 for the log and met a few, new to me, operators. C U next month . 73 Steve NQ8T



I found 40 to be the band to use for SSS on Wednesday evening and on Thursday late afternoon and early evening. 23 total QSOs including a string of stations during the last two hours of the event. Thanks for all of the new contacts and old ones as well. Used a Signal Electric straight key. 100 watts to a long wire on the fence up 5 feet. (who says height is important?). 73, Jack W9YY

I took the day off work to allow more time to participate. Two of my contacts were non-members who seemed to appreciate hearing a slow CQ. All my QSOs were with my TBFB Cootie Key (love that key). Bands were better for the opening hours. QSB was rough in the late hours. I always enjoy this event. The bonus was working K2IZ, the April Brag bonus station, as my 2nd QSO of the new month. Thanks John. 73, Ken N9KJU



Two very FB "extended" QSOs with N4QR and W4VN (non member). 73, Ted K8AQM

Announcing VE9SKCC/VY2 Expedition!

De Ted VE9AQM/K8AQM

The province of Prince Edward Island has always been a difficult catch for SKCCers chasing the Canadian "Maple Leaf Award." Not anymore! A group of SKCC members operating as VE9SKCC/VY2 will be operating September 8-13 from the "PEI DXlodge" (Google PEI DXlodge) during the September Canadian operating event. The operators include:

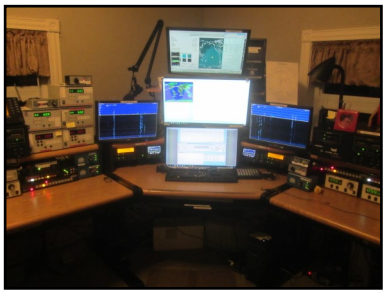
AC8W (VA3ACW) #2813	KD8VSQ #13072t
K8AQM (VE9AQM) 1629s	N8LJ # 8954t
KG8CO (VA3DXQ) 6362	NU8Z #11237t

Antenna view

The expedition depends of course on the boarder opening between Canada and the United States and the Covid situation.

The station has two operating positions and we plan to have a third and cover all bands 160-10m including the WARC bands. All QSLing for VE9SKCC/VY2 will be done via the SKCC bureau only. Directions for using the bureau can be found on the SKCC homepage.

PEI DX Lodge



Operating position 1

Operating position 2

What A View!

I feel spring. Hello, every one. I visited Korean Rock with my friends which is about 20 miles from south west of my shack. But I don't know why it is called Korean Rock. We met the man who has a tent there and he said, " I came to shoot the night view " That's a good idea !! We walked for about seven hours and got tired! hi hi 73, Take JR2IUB

Editor...The following article is reprinted with permission of the author and the "Allen County Hamnews" where it first appeared.

Tuning Up by AC9EZ

Antenna Bootcamp: Part 1

For the past couple months, this column has delved into several antenna designs, such as doublets or K2AV over FCP inverted L antennas. However, what if you are a newcomer to the world of diy antennas? Where do you find the wire from which to build the antennas? What is a good source for pvc enclosures or antenna connectors? This article, part 1 of a multi-part series, will focus on answering some of those questions.

Antenna Wire

For a wire antenna, we need a few simple pieces of gear, but most importantly, we need wire. I have personally used many different gauges of wire. But, the most cost effective wire I have found is stranded copper #14 THHN insulated wire. This wire comes in a 500 foot roll and costs $50 from Menards. The wire is tough. From ice and snow to entire limbs from trees a foot in diameter, this type of wire can handle it all (this comes from personal observation at station AC9EZ!). The outer insulation of the wire is nice and slippery, allowing the wire to slip easily over tree branches or garage roofs.

This wire will be affected by UV rays and normal weathering. However, any decently-made antenna constructed from this wire should last a couple of years of outdoor service. The wire is not particularly heavy, so it is trail friendly for portable operators (e.g. POTA/SOTA/IOTA…) What is even better, is that this type of wire comes in several "stealthy" colors, such as green or black, both of which blend in nicely in any suburban lot.

Coax Cable and Open Wire Feedline

Probably one of the more expensive items for any home-brew antenna is the feed line. Feed line is itself like a Pandora's box of a subject, with multiple different design considerations. For this article, let's stick with two design goals - cost, and low loss.

Feed line can be divided, broadly, into two basic categories. The first category is coax cable, which can be bought as either fully assembled cable complete with connectors, or purchased in bulk without attached connectors (you or a friend attaches the connectors yourself). Open wire feed line consists of ladder line, window line, and TV twinlead (*see Figures 1 and 2*).

Figure 1

Figure 2

All of the various types of open wire feed line can be purchased, but the traditional 600 Ohm impedance "ladder line" (used since the early days of ham radio) can be homemade. The cost of coax cable or open wire feed line is directly related to the cable's amount of loss - the lower the loss, the more expensive the feed line. Additionally, if one is considering open wire feed line, there is choice between solid and stranded conductors, and the gauge of the conductor (just like regular antenna wire). If a multi-band, resonant antenna is used, then coax cable is the natural choice. If a doublet or doublet-derivative antenna is used, open wire line is a much better choice.

Depending on the frequency of use of the antenna, feed lines as small as RG-58 cable can be used without too much loss (the lower the frequency, the lower the loss). As the feed line between the rig and antenna gets longer (and as the frequency in use gets higher), feed line loss gets progressively larger. For most hams, 50 feet of RG-8X or RG-8 coax will work well for a beginner set up.

If one is considering serious operation on the VHF/UHF bands or a serious contest/dx station, then such low loss-high cost cable as LMR-400, LMR-600, or Buryflex should be considered. Practically any type of coax or open wire feed line can be purchased either assembled or in bulk from Ham Radio Outlet, DX Engineering, and Davis RF, but expect to pay high prices for low loss coax! Open wire line has very good low loss characteristics (better than many coax cables), but it usually requires the use of an antenna tuner or balun.

Enclosures, Baluns, Ununs, Transformers, and Toroids

Sometimes, a particular antenna requires more than antenna wire and a feed line to work properly, such as a 9:1 unun for a random wire antenna or a 49:1 transformer for an end-fed half wave antenna. Doublet antennas, if used with an "unbalanced" tuner, require a balun to transition from the balanced, open wire feed line to the short run of unbalanced coax cable.

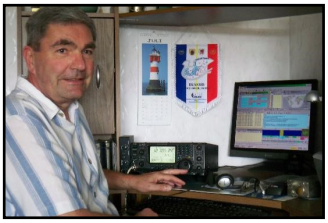
Weatherproof, pvc enclosures can be purchased for roughly $10 from the local "big box" stores, such as Menards or Lowes.The enclosures come in different sizes, and include a rubber gasket around the inside of the cover, to help prevent moisture intrusion (*see Figure 3)*. These boxes can be easily drilled out with a basic hand drill, and they provide adequate protection for one's balun/unun/transformer for several years of variable Indiana weather.

Figure 3

Wing Nuts/Bolts/Support Rope/Connectors

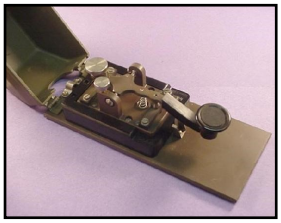
Any homemade antenna requires various pieces of "hardware" to attach the antenna wire, to connect the coax, and to support the antenna from one's support of choice. Basic screws, nuts, and bolts come from either a local hard ware store or "big box" store. Antenna or coax connectors come from places like DX Engineering, Davis RF, MFJ, or even online auction/swap meet sites like Ebay or Amazon. If purchasing from a non-ham specific site, be aware that there are some very low quality or oddly designed connectors that are present in the rf connector world. It might be better to spend a little more on good quality connectors from known, ham-friendly sources, than to take a chance on some unknown source of possibly cheap/poor parts.

SKSE April 2021

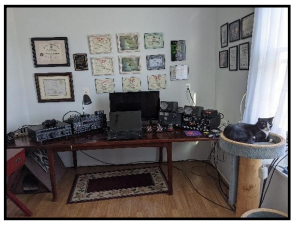


Very bad QRN, no source found on the weather map. Some QSB caused by unsettled geomagnetic field. But had fund with 10 QSOs. 73, "JO" DL5KUD

I played a bit with the good old-fashioned Yaesu FT-101B, freshly installed CW filter, it was weak propagations but a little surprised on 20m is W4LRB and FG8NY, power is abt 100W, key is Vibroplex Champion bug and antenna was double windom. Thanks everyone for nice evening. Happy Easter to all, 73, Kare YU7AE



Many thanks to DL5KUD, HB9IRF, DJ1YFK, EA7EGU, YU7AE, EA3GMH, DD2AW, ON7DQ, PG4I, F5UQE on 40 m and W5ZR, FG8NY, WB2FUV, NU8Z, K8BLQ on 20 m. Sorry nobody worked on 80 m ! A Junker key was utilised during this SKS-E, a very nice pump key. See you soon and happy Easter to all ! 73, Bernard F5DE



73, Mike K1EEE

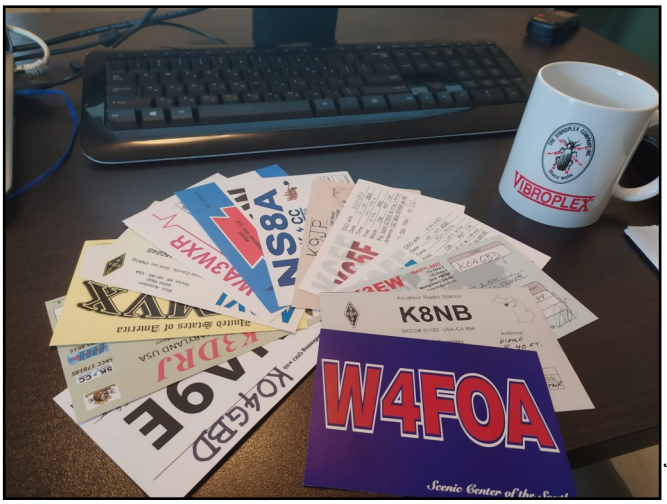
Very noisy here tonight with my vertical aerial. Just gave it a few mins. on 20m and rewarded with FG8NY Jean. Rig - TS440s 100watts 20ft vertical Marconi PS No213a morse key Jack Russell Todd adjudicating. 73, John G0RDO SKCC 2133s

Work the SKSE!

Happy Easter and stay healthy. 73, de Gerald HB9IRF

Nice to have 20 meters open so late for a change! Here's the logo for the Netherlands Telegraphy Club. 73, Jo PG4I

SKCC QSL Bureau



Look what Aaron, KO4GBD got in the mail this month from the SKCC Bureau. The bureau is a free service for members and all you have to do is have your own SASE on file and then send QSLs for stations you worked who are also bureau members (check on line list to ensure they are members before sending cards) and the bureau will sort and place them in members' envelopes. Once a year cards are mailed out. BTW, this is the way you receive your K3Y card(s)….*and the future VE9SKCC cards!*

One of the biggest selections of adapters and connectors is MFJ. At station AC9EZ, I have repeatedly used and re-used the same five SO-239 connectors that I purchased several years ago. For a quick solution, one might try the DIY store in the Glenbrook Shopping Mall, which has a very nice, albeit somewhat limited, selection of common connectors.

For the beginner ham, remember that most coax cables use male, PL-259 connectors. These male PL-259 connectors connect to the female, chassis-mount SO-239 connectors, which are mounted on enclosures and base or mobile radios (*see Figure 4)*. Chassis mount BNC connectors are mounted on some QRP radios and QRP antennas (*see Figure 5)*, with male BNC connectors used on some coax cables.

Figure 4

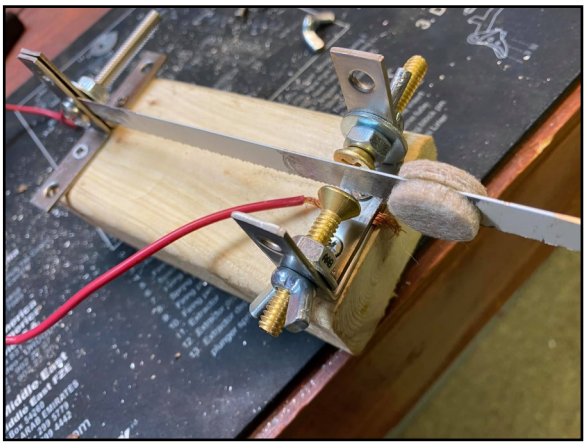
Figure 5

One words of caution about connectors. Try to avoid using too many adapters:

As you increase the number of adapters, loss can increase, and the number of potential failure points in the antenna system will certainly increase.

Conclusion

The above details are by no means an exhaustive list of the various materials one can use for antennas, but it does give a starting point on where and what to look for the basic antenna building supplies. Don't forget that local hams love to help out their fellow hams. If you're looking for advice or even some help putting an antenna together, put out a call on the local repeater or net! You never know what some hams might have stored in their shacks, basements, or garages. One ham's junk is another ham's treasure!



Home Brew

Just built my first side swiper. Probably about 15 bucks in parts including the hacksaw blade I'm using as the keyer. 73, David KG4HWO

Editor….Valuable information from an article published April 1, 2021 in The Communicator" of the Surrey Amateur Radio Club.

Scientists Warn RF May Disappear Completely by 2040

A new study published in the science journal Standing Waves shows that RF signals are disappearing at an alarming rate. Some scientists are going so far as to say that if action is not taken immediately, the airwaves could be completely silent by 2040.

The study's chair, Dr. Bunsen Honeydew said, "We looked at daily activity on the HF bands from 3.5 to 29 MHz over the last 11 years. For a while the bands were showing healthy growth with plenty of activity, but in just the last five years signals have become much weaker and some have even disappeared completely. Worse hit has been the 10 meter band where we haven't observed a signal for over two years… the extent of the devastation is breathtaking." But what is causing it? Scientists have a few theories but the main culprit seems to be that there are simply too many antennas absorbing a limited supply of RF. As this simple formula shows, RF is depleted at a rate inversely proportional to the square of the distance between any two stations:

$$\lambda = \lim_{k\to\infty}\left(\frac{a_{k+1}}{a_k}\right) = \lim_{k\to\infty}\left(\frac{\frac{\sin(\frac{1}{k+1})}{k+1}}{\frac{\sin(\frac{1}{k})}{k}}\right) = \lim_{k\to\infty}\left(\frac{k}{k+1}\right)\cdot\lim_{k\to\infty}\left(\frac{\sin(\frac{1}{k+1})}{\sin(\frac{1}{k})}\right)$$

$$= 1\cdot\lim_{x\to\infty}\left(\frac{\sin(\frac{1}{x+1})}{\sin(\frac{1}{x})}\right) \overset{\frac{0}{0}}{\underset{\text{l'H}}{=}} \lim_{x\to\infty}\left(\frac{\cos(\frac{1}{x+1})}{\cos(\frac{1}{x})}\,\frac{x^2}{(x+1)^2}\right) \overset{1\cdot 1}{=} 1.$$

Scientists warn that, as cos (1/x) increases, we risk reaching "the point of no return" where RF levels will never recover.

But what does this mean to the average ham? The short answer is we must all help conserve RF. Where hams used to just have one radio, it is now common to own three or even four radios, each with an RF absorbing antenna.

Of course, some of the worst contributors to the crisis are the so-called "Big Gun" stations. These use aluminum farming techniques that have gotten way out of control… covering acres of land with multiple towers reaching up to 100 feet and scooping up every signal that goes by.

The International Amateur Radio Union (IARU) and member societies like ARRL are calling for urgent action and plan to table a number of propositions at the next WARC meeting in Geneva. Among them would be a limit on antenna farming, a program for offsetting RF absorption by deploying more transmitters around the globe, and requiring hams to turn off their receivers when not really listening.

Perilous times.

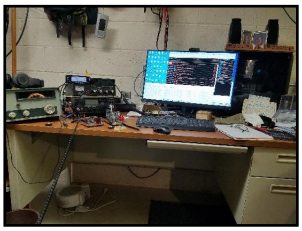
- *Adrian VE7NZ reporting*

Hello Adrian, thank you for this enlightening article and for drawing attention to this growing problem. I understand that this may lead to an RF preservation tax much like the carbon tax that is now in place. I for one will be installing reflectors on all my antennas, when they are not in active use, to bounce the RF back into the aether.

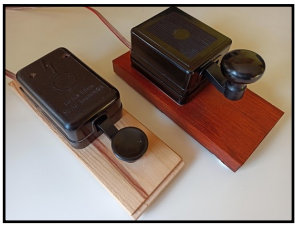
I will certainly include this timely article on page 13 of the next issue of The Communicator in the hope that it will spur others into action before its too late.

John VE7TI
Editor 'The Communicator'

March Brag 2021



Fun month. Met many new members and non-members in 46 states and countries. See you in April. 73, Bud AA8CL



I completed my personal challenge - Morse March. Only CW QSOs for whole month, at least one a day. Was not that hard as I feared - thanks to HomeOffice :-) And finally assembled wooden base for my first key - it requires still some adjustments before my working key can be replaced - temporary solution is working

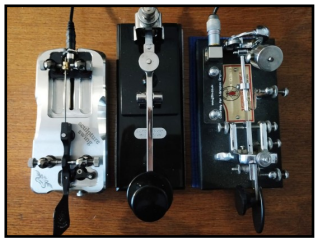
Didn't get as many as I would like to get, but it was still fun. Mostly used either my TS-590SG or my IC-7000. Just one HF antenna, an elevated Butternut HF6V Vertical. Kent straight key. 73, Curt

Thanks for brags! See you next month. 73, Dave KB1WOD

Most active in NRR this month using my Tube Rigs. The HeathKit HW-16 or Drake 2NT & 2C. Thanks and Take Care. 73, Rick KN8RHM

Thanks for this month's brag QSO's all. Stay safe es CUL, 73, Rick N8XI

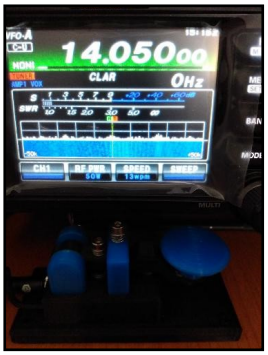
Lots of band condition challenges. 73, Chuck N0CW



Only small openings this month to the US. When will the sun finally awake? 73, Jo PG4I

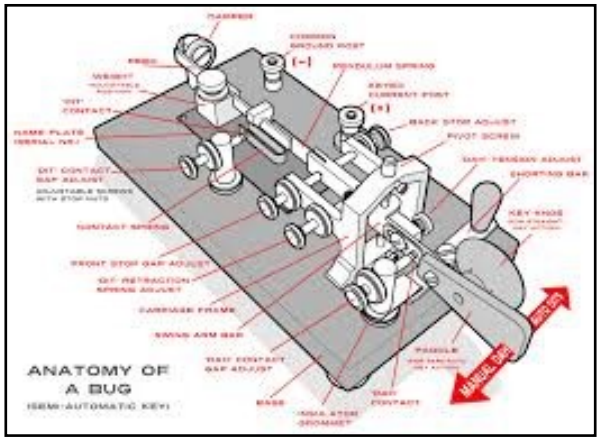
Happy Spring!! March is trying to blow down my antennas, but so far so good. 73, Gene W9KMK

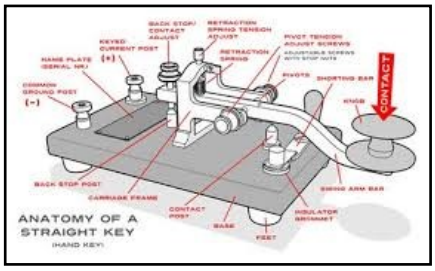
Looking forward to be an egg. hoping for good condx. (picture: dog and me after a long walk in the forrest, slowly spring is kicking in here in Latvija). 73, Hanz YL3JD



Saludos atodos gracias por sus contactos la estoy pasando muy bien cuidensen mucho 73, Che WP3PW

(Greetings to all, thanks for your contacts, I'm having a great time, take care 73, Che WP3PW)





Shunt Feeding Towers Made Easy

By Tom McGinley, K7QA

Editor...The following article first appeared in CW Ops, "Solid Copy." and authored by Tom, K7QA #24253. It's an excellent article on how to shunt feed a tower for 80m and/or 160m.

Many hams, frustrated in their quest for operating excitement by the sorry performance of so-lar cycle 24, suffered unnecessarily. An inexpensive antenna improvement for the low HF bands is readily available to many of them, one capable of yielding dramatically improved performance over a tower supported inverted vee or low di-pole. For those who possess a tower with a top mounted beam or other antenna, that tower can be easily used as a vertical antenna.

Verticals always generate more low angle radiation than dipoles at equivalent heights and are more effective DX transmitting antennas. The transformation is made by coupling RF to the tower using a method called "shunt feeding" and is the focus of Part 1 of this article.

For those who have more than one tower at their QTH, additional towers can be shunt fed forming a directional array (DA) that produces gain and nulls in desired directions depending on the tower locations. I'll discuss the methods used to implement a two tower DA array for both 80 and 160 meters in a follow-up article that will appear in the May issue of *Solid Copy*.

Lessons Learned in AM Broadcasting

I have always been a big fan of AM broadcast radio, especially directional tower arrays. Having spent over 50 years as a broadcast engineer building or repairing dozens of AM antenna arrays, I've discovered a few realities about vertical tower antennas that seem to have been ignored or misunderstood by much of the ham radio community, especially for those new to the hobby. I have adapted some of the lessons learned in successfully deploying a very modest two tower shunt fed DA array for 80 and 160 meters at my QTH.

Too many hams overlook the opportunity of using their grounded tower as an effective antenna on the low bands. After all, most all ham radio verticals and broadcast tower antennas are series fed across a base insulator. Some ask how a vertical tower not insulated at the bottom from ground can be fed with transmitter power. The simple answer is shunt feeding.

An easy to understand analogy is the gamma match used to feed a Yagi where the driven element is one continuous radiator attached to the boom in the middle. The coax shield is connected there and the center conductor is connected to one side of the element at some distance out from the center via a capacitor.

An easy to understand analogy is the gamma match used to feed a Yagi where the driven element is one continuous radiator attached to the boom in the middle. The coax shield is connect-ed there and the center conductor is connected to one side of the element at some distance out from the center via a capacitor.

A ham radio grounded tower or monopole can be driven in a similar manner following this analogy. The "gamma" wire runs from a capacitor/inductor combination at the base or "middle" of the antenna and connects at some point up the tower below the top mounted antenna rotating mast. The other "half" of the radiator is the ground system or counter poise.

The Truth About Taller Towers

Many hams seem convinced that a 50 ohm or a quarter wavelength feed point is necessary or optimum to feed a vertical antenna. Or that a 1/4 wave vertical is the most efficient length. Neither is true. The only magic about 1/4 wave antennas is they are easier to match to 50 ohm coax. Vertical radiators taller than a quarter wave produce more gain to the horizon up to 5/8 wave-lengths.

Two meter enthusiasts know that a 5/8 wave whip is 2.5 dB better than a 1/4 wave whip. More gain to the horizon is certainly desirable for working DX. Towers taller than 5/8 waste their energy at very high takeoff angles and become NVIS radiators or cloud warmers. Towers taller than 1/4 wave present a higher impedance driving point that requires a matching network for 50 ohm coax lines. The 5/8 wave vertical whip is close to 50 ohms resistive and only needs a series inductor to cancel the large amount of residual capacitive reactance. But antennas between the 1/4 and 5/8 wavelengths generally need at least one inductor and a capacitor in one of several possible configurations to achieve a 50 ohm match to coax.

Before looking at shunt feeding and matching networks in more detail, let's remember the long established basics of getting a vertical antenna to perform well as a radiator. An efficient ground path. So installing numerous buried or ground level radial wires, or a few radial wires elevated above ground up to 1/4 wavelength long is certainly necessary.

The classical studies specify 120 buried wires to reduce ground losses to an ohm or two. The more the better but for ham radio, 20 to 50 wires is usually adequate depending on the quality of your local topsoil. Even a dozen makes a big difference. I simply laid out #14 insulated stranded wires along the top of my back yard lawn and secured them with galvanized ground staples. The lawn growth quickly made them invisible. They are all bonded together at the tower base along interconnected copper bars and straps tied into four 6 foot ground rods.

For locations that can support it, a radial wire system elevated above ground using several wires is as effective as the buried or ground level radial system. Those systems usually impose more maintenance and obstacle headaches however.

Shunt Feeding Prerequisites

Shunt feeding towers for the low bands has at least three caveats. They can be too tall for best radiation pattern efficiency unless they are sectionalized and partially detuned with skirt wires. A top mounted Yagi or other large antenna adds significant top loading and effectively extends the over-all length of the radiator. A typical multi-element triband Yagi adds an additional 30 to 45 feet of effective electrical length to the tower.

Slant wires running to near the top of the tower.

Remember that anything taller than 5/8 wave is a cloud warming waste. Towers with large top loading need to be under about 100 feet for 80 meters and under 200 feet for 160 meters.

The second prerequisite is to make sure any metal guy wires used are not too long or close to resonance. That means breaking up their lengths with egg insulators at intervals shorter than about 1/10 wavelength to prevent reradiation and pattern distortion. Rope or Phillystran guys are exempt, of course.

The last requirement for assuring an efficient and stable shunt fed tower is continuous, very low resistance electrical conductivity from top to bottom. Bonding the coax shield feeding the top mounted Yagi to the boom and at ground should be adequate in most cases. If the coax shield at the feed point of the top mounted antenna is electrically insulated from the tower mast, running "tracer wire" bonded at each end and the slant wires junction level should be added.

Feeding the Tower

The task of feeding a grounded tower with an appropriate feed wire arrangement and matching network back to 50 ohm coax has several options. Most of the online resources that describe shunt feeding towers recommend installing a folded unipole (wire cage) or several drop wires or aluminum rods off the tower supported by a series of insulated side arms. This method almost always describes the need to find the 50 ohm resistive tap point where a shorting clip is installed. That process usually requires multiple trips up and down the tower to find the so called magic 50 ohm spot.

The bottom of the wire feed system can then be driven by 50 ohm coax in series with a simple variable capacitor as a gamma matcher to cancel the rather large amount of inductive reactance at the feed point. Some suggest an omega matching network that uses two variable capacitors to achieve a more precise match at the favored frequencies.

The Simple Slant Wire

Instead of going to all the extra effort of installing a unipole wire cage or drop wires with support arms for the shunt feeder, I simply used a pair of #10 insulated stranded copper wires securely attached with strain relief near the top of each of my towers just below the rotating masts. Two wires are used instead of just one to improve efficiency and bandwidth. They are pulled tight and terminate together away from the tower base about 2 feet above ground level. See photos .

AM broadcast calls this slant wire feeding. Several notable papers by respected broadcast consulting engineers have demonstrated that even a single slant wire feeder performs almost identical to a series fed tower or a grounded tower using the more complex unipole wire cage feeders with only very minor pattern distortion.

The bottom of my slant wire connections are 12 and 16 feet respectively from their bases. The towers are 40 feet and 52 feet tall below the masts and Yagis. The distance from the base and length of the wires varies from 50 to 60 feet but these measurements are not important except for modelling.

High Impedance Advantages and Matching

Attaching the slant wires at the top of each tower results in a high driving-point impedance at the bottom end of the wires. I measured about 1000 ohms Z on each with a Rig Expert AA-230 pocket analyzer. Resolving such high impedance measurements into their R and X components is difficult since the readings change with every sweep and are heavily affected by nearby objects and ground. Most all of the popular antenna analyzers are designed for a 50 or 75 ohm source impedance using an N connector, so measuring very high Z loads will usually reflect imprecise results.

Matching networks

One of the advantages of using the high impedance feed point almost always results in a lower series Q and wider bandwidth response. Series Q is defined as Q = X/R. My measurements aver-aged less than a 2:1 ratio. On 80 and 160 meters, the VSWR measures under 1.5:1 and covers the entire CW end of both bands without needing a tuner.

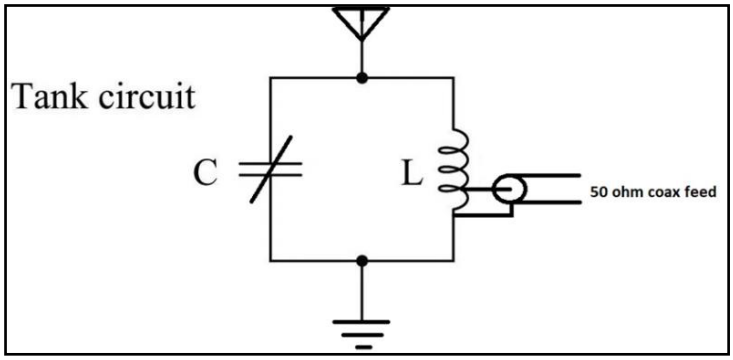
I originally matched the high impedance on my taller tower as a single radiator back to 50 ohms with an L and then a pi network using impedance matching software calculators. I installed the coils and large air variable capacitors in weather resistant plastic storage tubs, elevated above ground and the snow line with cinder blocks. For high power operation, the capacitor needs adequate plate spacing to eliminate high voltage arcing and the coil should be heavy copper wire, ribbon or tubing to reduce losses. Vacuum variable caps are better of course. See photo above.

The Parallel Resonant Tank Solution

After spending too much time measuring impedances and calculating needed component values with L and pi network matching, I remembered how easy it was to match my 40 meter bobtail

using a parallel resonant LC tank circuit. The slant wire feeder is connected at the top and the 50 ohm coax feed is tapped a few turns up from the bottom end ground connection. The need to accurately measure the actual high impedance of the slant wire feeder was not really necessary using the tank. It just needs to be low Q for good bandwidth. Q for parallel resonant LC networks is defined as Q = R/X. For 80 meters, a coil of about 15 uH works well with a 200 pF variable capacitor.

The tank circuit was not only easier to set up for a perfect 50 ohm match with the AA-230, but it also yielded the best bandwidth compared to other basic network designs. I had been running my west tower as a full parasitic radiator in a two tower DA array with a variable capacitor to ground at the slant wire feed point. I have since changed that to a tank circuit and initially set the coax tap point on the coil for a good match as single antenna. This has allowed me to easily drive the west tower with power along with the east tower to be able to achieve a more optimized DA pattern. See diagram above.

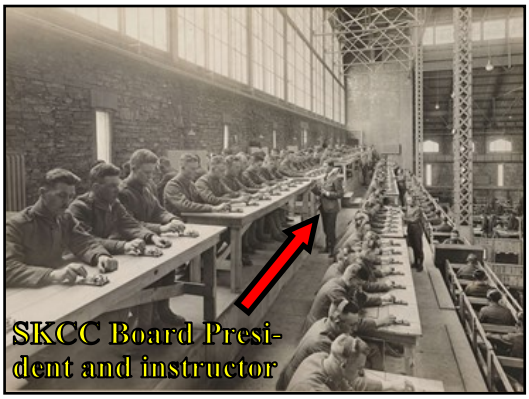


Wire Antennas No Longer Needed

My east tower is 72 feet to the tip of the lightning rod but functions like a 0.42 wavelength radiator with the tribander top loading on 80 meters. I considered shunt feeding it on 40 meters hop-ing it might achieve 5/8 wave efficiency but with the top loading, EZNEC confirmed it was only a cloud warmer at over 0.85 wavelength.

I originally installed an inverted V fan dipole covering 40, 80 and 160 meters five years ago at my new QTH to get on the air. The apex was at 55 feet above the house chimney with the ends 30 to 45 feet up. Since installing the shunt fed towers and Yagis, the performance differences on all bands have been dramatic. So I replaced the fan dipole with a chimney mounted 5 element 6 meter Yagi. See photo of my house on page 27

Deploying a second or even a third tower in a DA array using the shunt fed approach is really the fun part of this kind of project. **Next issue**, I'll describe the methods I used to achieve success in that effort.



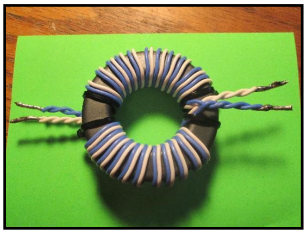
New Member Training

Here is the first class to go through "New Member Training." The purpose of the class is to introduce all new members in correct SKCC operating procedures in making QSOs and the correct and proper use of the straight key.

Thought is also given by the Board of Directors to have **ALL SKCC** members complete the training course in the near future! Watch here for more information, time and dates of classes beginning.

April WES 2021

Great fun again chasing Eggs and Peter Rabbit. Even caught up with SKCC on 80. Thanks to all who answered my and all the QRP signals. 73, Bud AA8CL



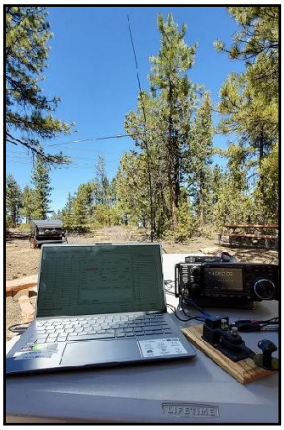
Band conditions on 80M and 20M poor to fair, 40M great Saturday and Sunday nights. Photo shows a homebrew 1:1 balun I use on all my dipoles and loop. Thanks for the QSOs! 73, Bob AC1GF

As always, lots of fun! 73, Jim AD0AB

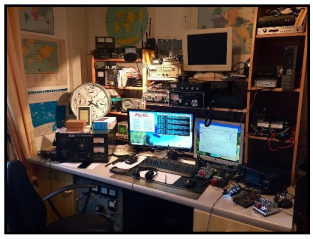
I drove up to ND for the ND QSO Party, and figured I'd spend a little time in WES as well. Stayed in a tent (had the campground to myself), with only the finals for warmth (not needed during the day, but it got down freezing overnight). The rig was a PFR-3B QRP CW kit, powered by solar/battery, keyed with a mini straight key, and feeding dipoles for 40 and 20 m. Logging was all paper for both events. It was fun to hand out the ND multiplier! Thanks for all the QSOs and some progress on my S-quest! 73, Bill

It seemed the Saturday activity went later into the night - very welcome, as 80m was in pretty good shape. I missed a few QSOs on Sunday afternoon, as my Second Op, Emmy Lou, decided to plant herself in the middle of the operating desk. There is an N3ZN straight key somewhere behind all of that fur! 73, Gary AF8A

This was my first WES (what took me so long?) and I was glued to the radio! Using a straight key for a weekend was fun and nostalgic as it rekindled the same kind of excitement I felt as an 11-year old new Novice ham in 1960. Running QRP I managed to make 28 QSOs in 18 SPCs. Best DX was K7VM in WA (8547 km / 5311 mi). Rig is a KX3 to a 20m vertical EFHW antenna. Straight key is a Begali Blade. I'm looking forward to participating in more SKCC Weekend Sprints! 73 Paul CT7/K9PM Paul



It's been a long time since I participated in a WES! I've been working to get familiar with my new IC-7300. I opted for a backyard, picnic table operation for an hour or so. I stuck to 20 meters where QSB seemed to be the theme. I'm glad those I worked were able to pull out my portable signal. I used my IC-7300, Buddipole antenna system with my Navy Flameproof key. I hope to participate more in the future. I'm limited on portable antennas at my QTH. I heard Bert, F6HKA but sadly, I was not able to make the trip. It was great to exercise the Navy Flameproof again, even if it was only for a handful of QSO's. 73, Phil AK8CW from Utah!



Not the best condx, but as always much fun in the WES. Nice theme !!! 73, Joerg DL9YCS

Only active for a few hours but glad to be here for another nice event. Many thanks to all, see you soon and stay safe everybody ! Here about 80 watts CW, GP antenna and a Junker Straight Key as a SKCC rig. 73, Bernard F5DE

April WES 2021 II

Beautiful day here in the NYC metro area, and I brought my Brown Brothers Ham Key and KX-1 outside, hooked up to a random wire strung up 30 feet on a telescoping mast. 73, Colin AE3A

Thanks everybody for the nice contacts. Conditions were not very good here. Bands very QSB and QRN but had fun as usual. Hopefully conditions will improve soon. 73 everyone and see you next month. Bert F6HKA

Thanks for all the QSOs. Lots of double bands and some triple bands. the openings are longer than recently. See you soon. 73, Bob F6EJN

SunSDR2 Pro - Fan dipole - 250W Tks to all operators listening for French SKCC stations. 73, Jerry F4FLO

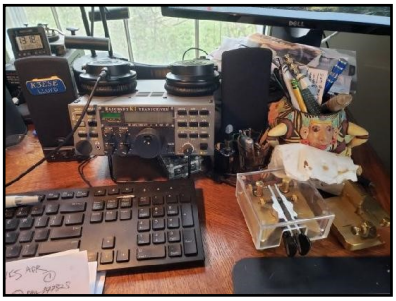
Operating from my Condo here in Florida is tough at best so I went to one of our local parks Saturday afternoon. My station was very simple, FT891 into an ATAS 120 antenna mounted on the roof of my van, Straight Key and paper log. I did not make many contacts but had a lot of fun. Thunderstorms rolled in late afternoon so had to pack up and go home. Sunday was a complete washout so hoping for better weather for next month's WES. 73, Dan AI4RJ

Good fun but conditions very poor again. Around 10 hours operating for 10 QSO's with 20m providing 6 QSO's. Only 1 QSO to USA (Chas K3WW). 80m = G4PVM Paul. 40m = F6HKA Bert, F5JWH Phil, PG4I Jo. 20m = K3WW Chas, EH5FMU Joaquin, YL3ID Hanz, YU7AE Kare, I5ECW Vanni, VE3KZ Bob. NA Stations heard but not managed to work on 20m W9GT, W4TMW, W5ZR, K8AQM. 73, John G0RDO 2133s

Easter "WES" theme is always fun. Hunting Eggs, chasing Rabbits, and what about those KS1KCC stations. Thanks to everyone for a fun event. The 1957 "Lightning Bug" arrived Thursday. It has a special meaning for me. I was licensed in June 1957. The SKCC group provided the motivation to enjoy them. 73 Rick K0KEX5220S

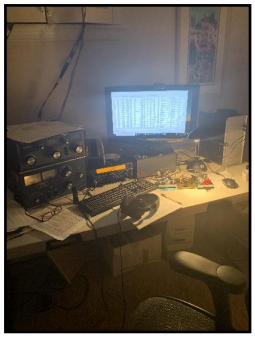
Set my goal at 50 contacts, and that is what I made. Collected a basket full of EGGS and managed to work our club station KS1KCC on 3 bands. A good showing for me. Used my Kenwood TS-590SG at 75 watts into a multiband vertical, using my Kent Straight Key. Fun event. 73, Curt K2CWM NJ

73, Alfrado IK4POF



Despite only having a little time here and there to jump into the fray, it was an excellent time, as always. High points included working Walt, LW3EX, on 15m with about 2W, and late Saturday (here,) at 0308Z, I heard Bert F6HKA calling, loud and clear, on 40m, so I turned down to 1W, and he gave me a 579. At 0331Z I got a 589 from Bob, F6EJN, also with 1W. Nice conditions! My setup was a K2 at 5W to a 20m EDZ up 50' on 40m, and an 80m dipole up 80' on other bands. 73, Lloyd K3ESE

April WES 2021 III

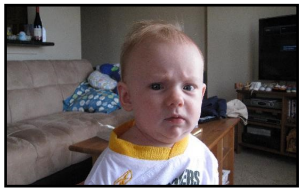


Bands slowed to a crawl both afternoons- Otherwise great participation and okay conditions for the SFI Thanks for all of the KS1KCC and regular QSOs. 73, Phil K3EW

QRP-Labs 80m QCX-Mini @ 3w - 107'EFRW @ 20'. No time this weekend. Does my QCX-Mini make my Begali Blade look fat? 73, Jody K3JZD

Heavy storms rolling through FL this weekend but hooked up an antenna (of sorts) between storms when I found out my attic dipole doesn't work with a wet roof! Who knew? (SMILE) 73, Don K3RLL

Pretty busy but some real slow spells. I should have stayed up later with no more time limits. Missed MT for WAS this time, I think it was WY last month. Nice to say hi to lots of the gang. I set up my Cootie next to my favorite straight key and did most of my CQing with the cootie and replies with the straight key. 73, Chas K3WW

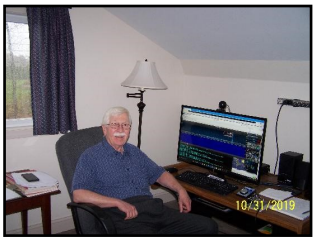


Just had a few hours on Sunday but it was a fun time as always. Picture says: "Grandpa, you didn't get the rabbit". 73, Craig K7VM

Great time as always. Storms curtailed some operating time. Thanks for all the hard work the organizers put in to make these events so much fun. 73, Stay safe. See you next month. IC-7300 at 100 watts to a 40 meter vertical delta loop. Used my 68 Champion and Begali Spark this month. 73, Bob K3ZGA

Great fun being an egg! The Cwazy Wabbit insisted we turn on the amp to deliver eggs, which made us more of an alligator than a bunny when the neighborhood noise was high, so apologies to anyone we missed, and thanks to those that hung in there with us. 73, Scott KA9P

Main station down, went to backup. Mainly 40 meters. Had a good time under less than perfect conditions. 73, Al K9FW



We celebrated our Easter this weekend so I didn't have a lot of operating time. It was fun chasing eggs and KS1KCC stations. See you next month 73, Dave KB1WOD

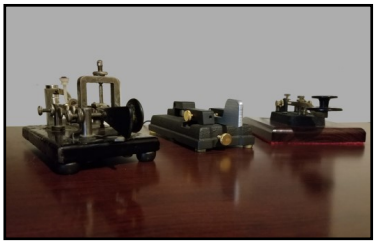
The weekend started out bad. Storms Friday night killed power till about 9:30am Saturday morning. Spent most of the day cleaning up limbs from the yard. Sunday was pretty good. I got ON and PR for some local DX. Picked up 4 eggs. IC 7410, 80 meter doublet and a W1SFR cootie. 73, Allen KA5TJS

Easter is always my favorite time of the year. Thank you everyone for the fun WES. See you next month or sooner! 73, Eric KB3NSK

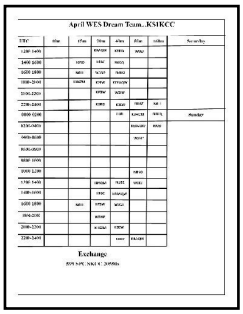
Bands were noisy at my QTH. Apologies to those I couldn't pull out of the mist. Had a great time, however! Best QSO - helping get a new ham on the air for the first time! Tnx all! 73, Terry KG5OWB

April WES IV

Another great Easter WES has come and gone. A great couple of day's Chasing baskets to fill. I always enjoy this one and the Christmas theme.. Bands were pretty good in the mornings.. 40 was my go to this weekend for the most part. So until the next one, 73 be safe and CW rules Doug KG5YTS



Limited time this weekend. Bands a bit noisy....thanks Andy (KD9KHA) "Peter". Catch you all next month. 73, Jack KK0I



What a great event! Sixteen operators around the country taking shifts as "KS1KCC" and gathering 969 QSOs (including dupes). From K3EW in MD to Max KH6ZM in HI we offered everyone a chance to work the club call. If you wish a QSL you must QSL via the SKCC bureau so check the SKCC web page on using the bureau. 73, SKCC KS1KCC

Another fine event except the bands were horrible here. Only ran the club station for a little while but ran most of the time as WA3GM. Only worked 2 eggs and one peter rabbit. 73, C U L DAH KS3KCC

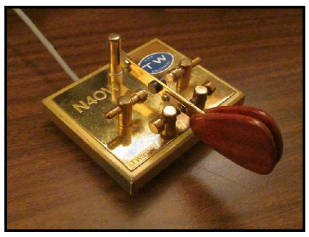
Ruff and erratic DX PROP plus local QRN but, lot of FUN QSO Stats: 1 > 14MHz – 19 > 21MHz – 3 > 28MHz TA33 – 50W – Home Made DSK + 1923 Siemens & Halske SK that belonged to the FCCA (Railroad landline) rescued from scrap and restored.TU everyone for the QSOs. Take care & Stay safeBCNU 73, Walt LW3EX- ..- ZUT

Having reaction to covid shot on Saturday so didn't operate till Sunday but had a great time. Used my IC-7300. 73, Bill N0UMP

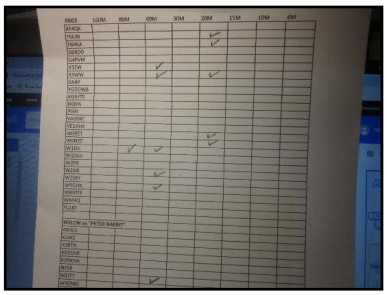
I could only dabble around briefly on the air this weekend, but happy to be able to pop in for a little while. 73, Jim N4EES

Lots of fun. WES never comes quick enough for me every month.... See you next time. 73, Dennis N0SMX

Took home an even dozen Eggs + Peter Rabbits. Cool theme and plenty of fun. Best band conditions Saturday evening on 40M. Here is picture of 40/20 parallel end fed wires sloping from 26 to 15 feet. Not much pumpkins (sorry -- Halloween theme maybe. 73, Chuck N0CW



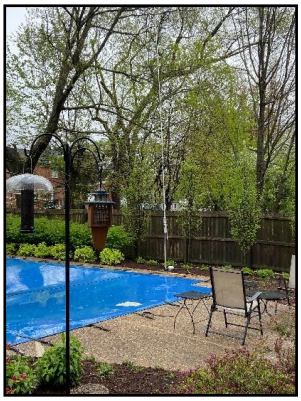
One hour Saturday and the last 45min on Sunday. Huge thunderstorm with 40mph winds Sunday limited my WES time. 40m was excellent. Always a fun time. 73, Al N4ow, 11375s



Well this WES was kind of a bust for me. Saturday propagation was poor for me and my only surviving antennas are my INV "L," then my great granddaughter had her 6th Birthday Party. Which was cool...Sunday I was busy with things around the house.I even made out an Excel Spread Sheet to check the Eggs and Peter Rabbit(s) off and one I received for the KS1KCC ops.But as you can see it is very sparce. Still fun tho' and shook the bugs outta my new bug.73, Rick N8XI

April WES V

K1 5wts g5rv. 38 qsos.. tnx to board members. Tnx to all..hope to creat more QRM in month of May.. hihi.. pix is another design of mine, another cootie/st key.. I call them SKSS (st key side swiper).. hi..wutz next .hi. agn, more new monthly mbrs.. when on 20mtrs I always ck up at 14114 for anyone there.. so, hope to c u all agn in May to make more QRM ..hihi. it's fun.. 433 qsos this yr. I count them daily..hihi..take care u all, and stay safe.. c u in May. 73, Dave Larsen n9zxlqrp@gmail.com



Managed to put up a new HF-2V vertical before this WES. 73, Chuck NI0C

Best WES ever with 70 QSOs despite the poor propagation. First day at home with my Kenwood TS-870, second day at the club with an ICOM IC-765 and a Steppir beam. Thanks all for the QSOs and fun to be an egg! 73, Jo PG4I

Those LICW ops are "good eggs & bunnies"! TNX! to them for their hard work and good ears! Also to the KS1KCC group ... Hpe 2 C U next month. 73, Steve NQ8T

In spite of the storms, this was a good WES for me. I enjoyed using my new (to me) J-38. TU to all participants and a special thanks to those who 'pulled duty' as the bonus stations. 73, Blue W1BLU

Another fun WES! Time off both days -shopping on Saturday and boating on Sunday but still plenty of time to operate. Used my K3 and Bencher RJ-2 key. Antennas were an OCF dipole at 30', 2 element 5 band quad at 40' and a 43' vertical with remote tuner. Thanks to all the bonus stations! 73, Bill NZ0T

BLUE RIDGE W4YK AMATEUR RADIO CLUB

This month I operated using the BRARC club call, sing Search & Pounce to get us from Cx2 to Cx3 and Tx1 to Tx3. Operating in a couple of other activities at the same time, it was fun using two calls and several different exchanges and keeping them straight and in the right logs! (Op Steve, KC5F, Trustee for BRARC). 73, Blue Ridge ARC W4YK

Lost some time to family activities on Saturday, and daytime conditions were not great here. Found Peter Rabbit twice, and collected 16 eggs. Activity level seemed pretty good, and a number of new members were worked. The FT-mode expansion on 80 and 40 meters is getting irritating. Anyway, it was a good weekend. Thanks to all. 73, John W1TAG

April WES 2021 VI

I spent four 2 hour segments operating as KS1KCC on 20, 40, and 80, so I didn't have the time to work as many stations as normal with my own call. Switching between the 2 calls, names, and SKCC numbers was a little bit of a challenge but it went fairly smoothly. K3 Line to OB 10-3 and 160m horizontal loop. Keys: Vibroplex Lightning Bug c1942 and Junker straight key. Worked KS1KCC on 4 bands with Max in HI on 15.Biggest surprise was working Walt LW3EX on 10 meters as KS1KCC using my loop as I don't have my OB 12/10 meter yagi up yet. Condx were all over the map with a lot of storm related QRN. 73,Dave W3NP de West Virginia

This was a fun theme, enjoyed chasing Peter Rabbit about and the multiple KS1KCC ops. Worked Max on 20M. First 160M QSO for W2ITT as Peter Rabbit. Very pleasant couple of hours. Ended just as the thunderstorms started rolling in. Thanks to all for the QSO's. 73, Steve W6WU

Was fun to have a basket of eggs to give out 107. Band conditions were different. 73, Ray W9GHX 20870S

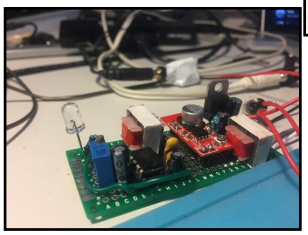
Not a lot of time on Saturday but di manage some time on Sunday. Just returned home from FL for the winter so getting back into things. Tnx fer all the Q's & C U L 73, Greg WA3GM

Band conditions were generally poor, although Saturday night 40M was in good shape. Missed some of the usual multipliers. Always fun!! Running FTDX-3000 at 90 watts to inverted vee, with a Bencher straight key. 73, Mike WB2FUV

Only worked a while on Saturday (local time). A few Eggs and Peter Rabbit, Mainly tried to work people who needed my number or I needed them for my next S level. Great theme and good condx during my moments on the air. Worked 20, 40 and 80 Meters. Ran my KX3, PX3 and KXPA100 Amplifier. 73, Mike WI5H

Thanks for the QSOs and the nice time. Conditions not very good. I played a bit with the good old Yaesu FT-101B, abt.100W into FD-4 Windom antenna and Junkers key. Worked from work place at Mt. Fruska gora WWloc JN95ud 539m ASL. 73 de YU7AE Kare

Spent a couple of hrs doing KS1KCC and had an overall good time in the WES. 73, Jack W9GT

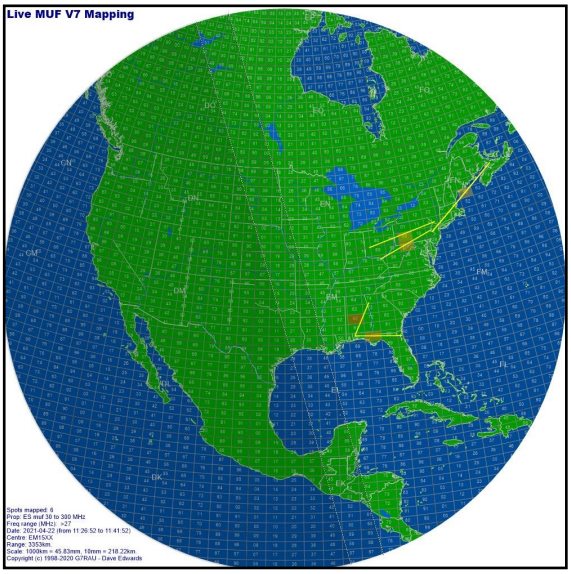


Wes was great to do. Could have some better condx but FUN. (on the picture,small project, a zero beat detector i build nice to look at when tuning, see if the hearing is correct HI). 73, Hanz YL3JD

The SKCC High Band Operating Event

The event is a monthly activity during the summer months. This is not a contest, but a time to look for contacts on the 15, 12, 10 and 6 meter bands. The sporadic e-layer propagation season generally runs from late spring into summer. This is a time when you can make contacts on the high bands even if there are no sunspots or F-layer propagation. Es (e-layer ionization clouds) are unpredictable and can come and go multiple times during the day.

Since e-layer propagation is often not present, it is a good idea to check the online maps to see if the current conditions appear to be favorable for your location. Two sites that you may want to use are G7IZU's page https://www.tvcomm.co.uk/g7izu/?page_id=112 and DXMaps page https://www.dxmaps.com/spots/mapg.php . G7IZU excludes FT8 contacts from the map. If you use DXMaps open the Modes/Props tab and make sure that Digital is unchecked.



G7IZU site map from April 22 showing MUF for 30MHz to 300 MHz

These sites map contacts from the dx clusters and show the possible location of E-layer ionization clouds based on the assumption that there must be a cloud halfway between the two stations to support the contact. If the map shows favorable ionization clouds, you may have propagation to areas that are on the opposite side of the cloud about the same distance from the cloud as you.

The SKCC Sked Page is an excellent way to find stations to work or to post the frequency where you are calling cq.

Since this is not a contest there is no formal reporting, however I would really appreciate an email letting me know how you did on the high bands along with your comments.
Good luck! Dan K0FD 15034S
K0FD@arrl.net

Note from K7DWI

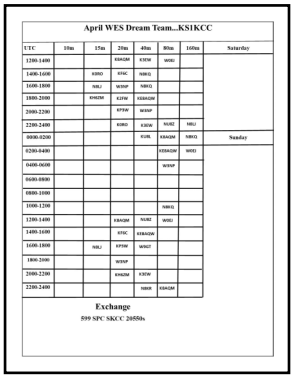
I enjoy operating CW (and other modes) on the higher bands (15,12,10, 6 Meters). It is just a challenge if you don't understand these bands during the Spring and Summer months. The higher bands have been open here on the West Coast for a few hours the past couple of days. That is very good. The Spring/Summer ***Es*** season is getting active a few days early.
If you are not familiar with what these bands do during the Spring/Summer ***Es*** Season, I invite you to watch my YouTube Video on the 7-Year Study on 10-Meter Sporadic ***Es***. It's long and sometimes it's painful, but can learn something.
https://youtu.be/XCZFmQchTxI

Meanwhile, the season officially to my experience begins April 25 and will go on until late August. It does peak around or just after the Summer Solstice (June 21-27).
This is my favorite time of the year. I will do my best to be on the Sked Page showing I am available for the High Band Event, 15 through 6 Meters. I can also do 2 Meters as well and would be tickled to do that.
73 Art K7DWI # 6907T

KS1KCC Mega Multi-Multi April WES Event

Did you chase all those "eggs" and Peter Rabbit during the April WES? How about KS1KCC, the official SKCC call for extra bonus point? There was plenty of opportunity to work KS1KCC on many different bands. Two operators, NQ8T and K3WW, worked KS1KCC on five different bands!

The KS1KCC multi-multi included 16 different operators operating at different times and on bands 160-10m. The operation involved the sixteen operators located in twelve different SPC locations: MI, OH, IN, NY, MS, MD, SD, IL, WV, PR, NJ and HI. A chart was used and published both on the reflector and Facebook showing the times and bands each operator would be on. Some stations worked KS1KCC more than once per band as they felt the challenge to see how many different KS1KCC operators in all the SPCs they could work. Of course that lead to dupes in our merged log but that was fine because it's all for the fun with making QSOs and operating!


April WES Dream Team...KS1KCC

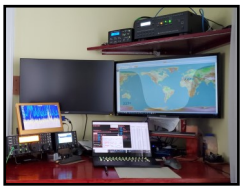
UTC	10m	15m	20m	40m	80m	160m	Saturday
1200-1400			K8AQM	K3EW	W0EJ		
1400-1600		K0RO	0TOC	N8KQ			
1600-1800		N8LJ	W3NP	N8KQ			
1800-2000		KP4EM	K2FW	K8AQM			
2000-2200			KP3W	W3NP			
2200-2400			K0RO	K3EW	NU8Z	N8LJ	
0000-0200				KU8L	K8AQM	N8KQ	Sunday
0200-0400					KE8AQM	W0EJ	
0400-0600					W3NP		
0600-0800							
0800-1000							
1000-1200					N8KQ		
1200-1400			K8AQM	NU8Z	W0EJ		
1400-1600			0TOC	KE8AQW			
1600-1800		N8LJ	KP3W	W9GT			
1800-2000			W3NP				
2000-2200			KP4EM	K3EW			
2200-2400				N8KR	K8AQM		

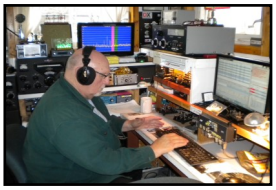
Exchange
599 SPC SKCC 20550s

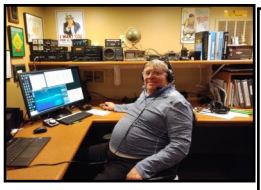
Including dupes when our logs were merged we made **965** QSOs! An outstanding effort by the members of the KS1KCC team! We had a total of 86 SPC!

When not operating as KS1KCC many of the operators were entering the WES with their own calls and making QSOs. Of course they too sought-out KS1KCC on various bands for their own bonus scores.

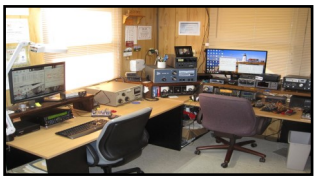
If you wish a QSL showing what information ...including the SPC from where your QSO was made (ie, PR, SD or HI) then send a QSL to the SKCC bureau and be sure to have and SASE at the bureau for your return QSL.

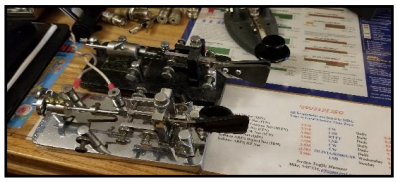

KF6C NY


K8AQM MI

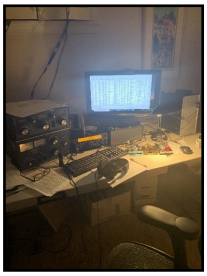

NU8Z MI

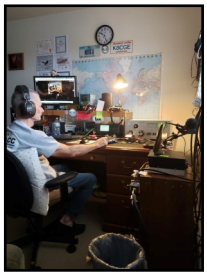
New KS1KCC showing SPC

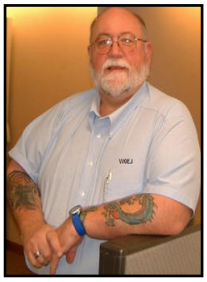

N8KR IN


W9GT IL


K0RO MS

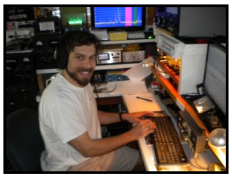

K3EW MD


N8KQ OH


W0EJ SD


KU8L MI


W3NP WV


KE8AQW MI

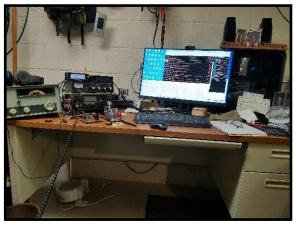

K2FW NJ


N8LJ MI


KP3W PR


KH6ZM HI

April SKS 2021

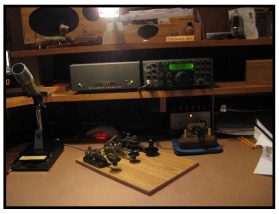


What a fun night. Thought I'd try 1w-QRPp. Got Great responses. Great to see lots of activity on both 40m & 80m. Thanks for all that answered my and other QRP stations. 73, Bud AA8CL

Ran 75 watts from my TS -590SG into a multi-band vertical using my Kent Str Key. Fun always. 73, Curt k2CWM NJ

K3@ 70w to wire up and over garage roof (HOA Restrictions :-(Lots of strong signals and good fists on 40m this evening made for fun time. Big signals into FL this evening were AC4MC and W3NP. 73, Don K3RLL

Conditions seemed good although 40 was a little noisy here. Used my new cootie a green machine which feels very nice. Thanks for all the calls. 73, Chas K3WW



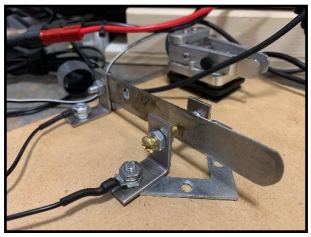
80M and 40M were hopping, tried several times on 20M, but nothing heard and no replies to CW. Thanks to all who pulled out my QRP 4W signal. 73, Steve K4JPN

Good turnout tonight-started on 40 & then went to 80...Thanks to those we were able to work on both bands. Stay Safe & see you next month...73 from the shores of Lake Erie. Larry K8TEZ

40 Meter band condx poor. First Sprint for my brand new IC7300. I have been a Ham since 1959
and this is the first new radio I have purchased! J38 key to a 4BTV GP. 73s and Stay Tuned Daryl K9QEW

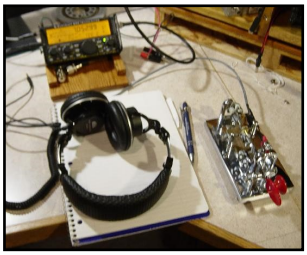
KS7KCC Operators for April 2021 SKS. 73, N8KQ,Randy(OH) W8ARC, Bob(WV)

Thanks for the contacts. Lots of activity. ICOM 7600 60w End-Fed Wire @ 50ft, Navy Flameproof Straight Key. 73, Dennis N0SMX

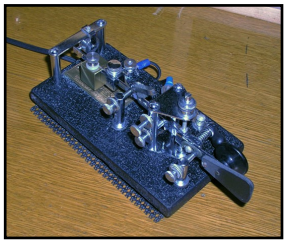


I haven't done an SKS event in a while, so this was fun. Thank you everyone for participating. 73, Derek N7PHI

Yep, Im in NC tonight at the cabin, not in GA! It was fun... has been quite awhile since I did a Sprint. I spent the first 7 mins calling CQ on 20m. Nothing - zilch. That cost me some QSOs! But working WA, OR, & ND on 40m this evening was great. 73, David ND1J



TNX! for suffering to copy my 5w and shaky fist! 73, Steve NQ8T

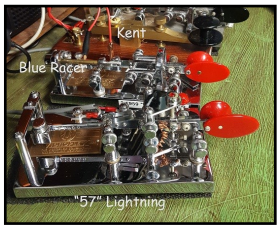


Started on 20 and got 6 west coast stations from BC to AZ before band quit producing. Stayed on 40 for the rest of the evening. 40 was surprisingly good compared to recent evenings with both short and long propagation. OB 10-3w on 20 and the 160m horizontal loop on 40. Used my Vibroplex Lightning Bug c1942 for all QSO's. 73, de West Virginia Dave

April SKS 2021 II

Spent all 2 hours on 40. Signals were strong but QRN from storms was very bad so I'm sorry if I couldn't pull some stations out of the noise. Use my Icom IC-7300, J-38 and OCF dipole at 30'. Thanks to all I worked for another fun SKS! 73, Bill NZ0T

Best Condx in awhile. Gr8 fun. Always look forward to SKCC events. Put my Navy Flameproof to work! Love that key, (TU Al, N4OW for the advice). 73, BLU W1BLU



Great Signals thru the QRN in Missouri. Congrats to K2IZ on the "S" and "Bonus' ops. Welcome to the new SKCC ops. IC 7300 65W 80M Zepp & 80M Loop 73, Rick "Missouri Outlaws" K0KEX

Thanks folks for the event. It is always fun. 73, Hector NP4W

Photos

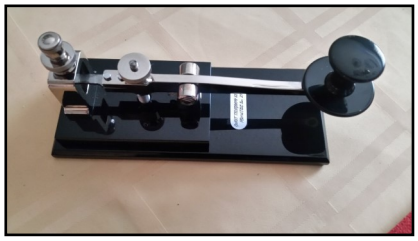
Jeff K9JP enjoying some patio QSOs

Ready for the WES this weekend (I think). Granddaughter (pictured) helped me put up an LnR End Fed. Running 5 watts from Shelby County, TN. We'll see how it goes lol. 73, Curt K2CWM/4

I'm not sure that's going to cover it, though it's a good thought. 73, Ted K3RTA

Took this on a little family getaway. Not expecting to make many Q's, but got four because WES was on. Had to look up my SKCC # it has been so long. 73 de KQ6UP SK . . Chris

Tough conditions today but was still able to make some contacts running 5 watts to an end-fed antenna at the local park in Phoenix. Thanks to those who stopped by for a QSO. 73, Warren KC9IL



Here is my new Key made by G0NVT. Anyone need a contact, let me know. David KN4OK 6233

Editor...The following article was first posted by K0KEX on the sked page and then sent to me by NQ8T, thanks keys, great stuff!

The Origin of the Word "Bug"

The technical and legal history of the name given to semi-automatic transmitters

There are two meanings to the word "bug" in the history of the telegraph. The first use of the word has its roots as a technical problem heard on duplex and quadruplex telegraph circuits. The second meaning evolved from the technical problem to become a nickname given to semi-automatic transmitters.

During the 1870s, long before the semi automatic key was invented, a "bug" to telegraph engineers, inventors and telegraphers had a very specific meaning. It was commonly associated with false signals that were heard on early multiple telegraphy circuits, specifically on duplex and quadruplex circuits.

With permission by *The Vibroplex Co., Inc.*

A duplex circuit allowed two messages to be sent in opposite directions at the same time with two operators at each end of the wire. When false signals occurred, the wire was considered "bugs" or "buggy." There is one story that this terminology originated on a duplex circuit when a cockroach covered in ink crawled across a tap of a rheostat causing the circuit to go out of balance. A rheostat was used in multiple telegraphy systems to create an artificial line for balancing the current of the main line. It is hard to verify if the cockroach story is true or merely folklore but the rheostat/duplex reference adds some creditability to it.

Later, when then Quadruplex was developed, there was a more specific use of the word "bug." In the Quadruplex, four simultaneous messages were possible on a single wire - two from each direction. One of the relays used in the "Quad" was called a neutral relay. When the current was reversing polarity on the line, there was a period when there was no magnetism on the coils of the relay. The armature on the neutral relay had a tendency to fall back on its stop generating false and interfering signals, or breaks on the wire. The sound of these false signals were refered to as a "Bug" on the wire, and the neutral relay's armature in this case, being the cause, was the "Bug."

Thomas Edison was plagued with these false signals with his early Quadruplex designs. According to *The Papers of Thomas A. Edison,* Edison's approach when he could not eliminate the cause of a problem, was to come up with *"an arrangement that rendered the effects insignificant."*

Edison designed various electro mechanical circuits to take care of the transition time when the polarity was reversing and he called his designs, "Bug Traps." His first bug trap consisted of a repeating sounder installed between the neutral relay and the local sounder. The delayed response of the repeating sounder isolated the false signals from ever reaching and activating the local sounder. After Edison, several other inventors came up with their own designs to eliminate these false signals on quadruplex circuits. By 1890, the term "bug" in the telegraph industry had evolved to commonly describe a fault heard on multiple telegraphy systems and

was used to identify the source of a problem on a circuit.*

Semi-automatic Transmitters

When the first semi-automatic keys appeared on the wires around 1904/1905, they were first advertised and called transmitters. But, around 1908, a change occurred when telegraphers started to call them by the nickname, "bug," because they frequently sounded like one on a circuit.

The first telegraphers to use the new transmitters were some of the best telegraphers in the country. They were considered "First Class" or "A1" telegraphers and worked the important circuits where high speed was a necessity -- they were paid bonuses to send fast and thus motivated to buy them. Naturally with that much practice, they were the first to master the new transmitters. But, the majority of the telegraphers trying out the new semi-automatic transmitters worked slower speed circuits with plenty of intervals with no activity. When they started using the new transmitters, they were criticized for sending many errors. Their lack of experience and mis-adjustment of the transmitters sometimes resulted in excessive and "clipped" dots also causing what sounded like a "bug" on the circuit.

Telegraphers using the new semi-automatic transmitters, in addition to learning to use them properly, had to learn to modify their sending technique and speed depending on circuit conditions and the type of circuit they were on. This too was to prevent false signals from being transmitted. This was noted by telegraph engineer and author, Donald McNicol in 1913:
....although the sending machines at present in use have surely made for increased speed of signaling, they have, in many instances, been the cause of poorly founded reflections being cast upon the electrical efficiency of a certain class of circuits.

The Bug Trade Mark

During the 1920s the right to use the word "bug" in trade was challenged in court. The case was between two of the best known key manufacturers is the U.S. at that time, The Vibroplex Co. and J.H. Bunnell & Co.

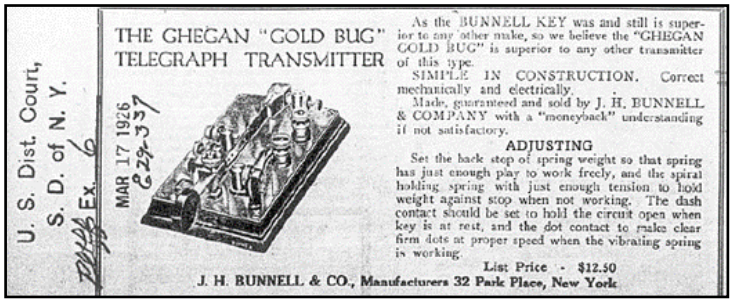
Vibroplex attempted to stop J.H. Bunnell & Co. from using the word "bug" in association with Bunnell's semi-automatic transmitter the "Gold Bug." Vibroplex had recently failed to stop Bunnell from manufacturing the Gold Bug in an earlier law suit that they lost in appeal. Prior to this law suit, Vibroplex had a very successful track record of stopping competitors in their tracks, and in some cases, even preventing them from even getting beyond the experimental stage. But, after Vibroplex's loss in appeal to Bunnell, they felt their only legal option left was to try stop Bunnell from using the name, "Bug" in a new law suit.

Vibroplex probably took on more than they bargained for when going up against the Bunnell Company and in a bitter court case, also lost this trade mark suit in both the lower and appeal courts. Beneath the Judges opinions in both courts are some interesting details on the history and use of the name bug and the character of the two companies selling them. I will highlight a few of the arguments for both sides in this case.

The arguments by Vibroplex:

From a Vibroplex Co. pamphlet showing their various Trade Marks

Vibroplex felt that a trade-mark relates solely to something in trade, and not at all to what is used in mere conversation. Vibroplex stated that on or about March 1, 1919, they adopted and began to use three new Trade Marks. First, the representations of a bug with conventional lightning rays radiating from it. Second, the words "Lightning Bug," and third, the word, "Bug" itself. Some of these trade marks along with "Vibroplex," were placed on all machines that they manufactured from that date forward. (Vibroplex formally applied for the three new Trade Marks a year later, on May 11, 1920.) They claimed that there was not one instance in existence of the word "bug" having been used in trade by anyone prior to them using it as a trade mark on March 1, 1919. They felt the word bug was never used by an inventor, maker or seller and challenged Bunnell to produce an ad that showed the word "bug" being used in describing an instrument.



Bunnell Gold Bug Ad

The arguments by Bunnell:

Bunnell felt that Vibroplex knew that its "broad patents" were about to expire and in view of the approaching termination of its "patent monopoly," applied for a trade mark in 1920 for the common name "bug," well aware of the fact that it had existed for at least a dozen years previously. In 1913, six years before Vibroplex claims to have first used the name bug, Bunnell designed an experimental bug of its own and named it the "Gold Bug." They felt that Bunnell has the right to use "Gold Bug" just as Vibroplex has the right to use "Lightning Bug" in trade.

Bunnell felt that all "fluttering arm, multi-legged appearing telegraph keys," had been known to and called by everyone in the telegraph art or trade, by their common name bug and that the name was used to distinguish them from the other genus telegraph key, "Morse" which is made and sold by many manufacturers. Bunnell stated that the entire trade applied the word bug not only to Vibroplexes but to all other species of "bugs" that were known to telegraphers, i.e., as with a Mecograph Bug.

During the lower court case, Bunnell's lawyer, Philip Farnsworth grilled Vibroplex president James Albright on the stand. Here is a brief sample where Farnsworth is trying to get a reluctant Albright to name the machines produced by its competitors in the past:

You know that there were a number of machines, six, or eight, or ten machines; what were their names before 1920, give us a list; you were president of this concern ?

Albright: *I do Not remember.*
Farnsworth: *Do you remember the Mecograph bug?*
Albright:*Oh, yes.*
Farnsworth: *Do you remember the "Auto-Dot" bug?*
Albright:*Yes*
And one by one Farnsworth asked Albright for the names, each time framing his questions with "bug" until it was finally objected to by Vibroplex's attorney, Murray Corrington - but overruled.

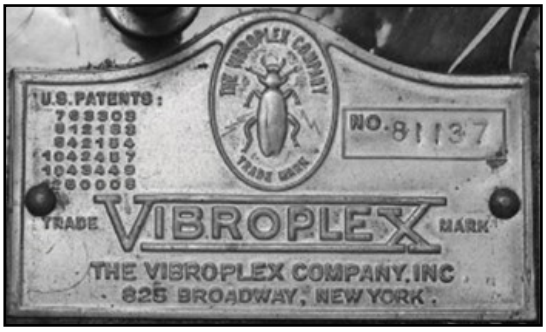
Judge Winslow asked Albright if there was any relationship between the fact that his trade mark applications were filed in May of 1920 one month before the first of their four primary patents was going to expire and wanted to know if there was any significance in that.
Albright's answer:*None that I know of.*

I n the Appeal case Bunnell cited the lower court's decision by Judge Francis Winslow who stated his opinion on the appearance of a semi-automatic transmitter: *This vibrating or fluttering arm, because of its aptness, probably suggested the name 'BUG'.*

Bunnell went on to argue that Vibroplex would have more of a case if Bunnell were calling their instruments Bunnell Vibroplexes, but instead thought Vibroplex was trying to take a public word and turn it into a private monopoly. *The case is precisely the same as if a plaintiff piano-maker were seeking exclusive trade-mark to the name 'piano.'* In January of 1928, the U.S. Circuit Court of Appeals upheld the lower court's decision in favor of J.H. Bunnell & Co.

All this legal activity obviously had little effect on the Vibroplex's popularity. The Bunnell Gold Bug was short-lived and quickly faded. Ironically, J.H. Bunnell & Co. during the law suits, was an active dealer for Vibroplex and had been selling Vibroplex Bugs continuously since around 1912.

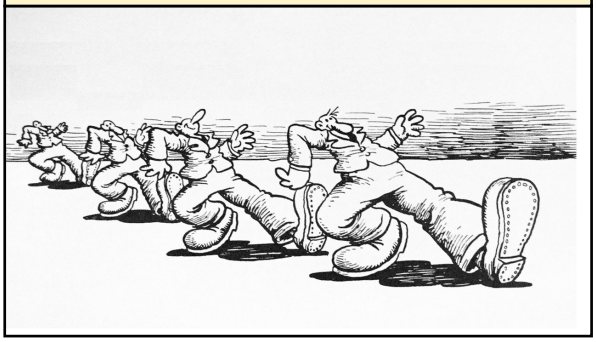
In the early 1920s, Vibroplex Company president, James Albright, designed a new metal name plate that included their bug trade mark. This move probably made the names Vibroplex and bug synonymous from that point on.
Today the Vibroplex Bug is admired just as it was when Horace Martin first introduced it over a hundred years ago.**
If you hear one on the air it is usually very recognizable, *because it simply sounds like a bug.*



** By 1890, the term bug may have been adopted for use in other technical fields.*
*** Horace Martin's first Vibroplex patent was issued August 9, 1904.*
The first public showing of the Vibroplex by Martin was at the Telegraph Superintendent's Convention
in Chattanooga, TN on May 17, 1905.
The United Electrical Manufacturing Company, (UEM) the company that originally manufactured the Vibroplex, first advertised the Vibroplex for sale in June of 1905. Horace G. Martin was the vice president and general manager of UEM.

Slow Speed Saunter May, 2021

Slow Speed Saunter



Participants and QSOs by SPC

CA: 1 / 23	FL: 1 / 4	GA: 1 / 4	IL: 1 / 8	IN: 1 / 2
MA: 1 / 1	MD: 1 / 7	NJ: 1 / 9	NY: 1 / 23	OH: 5 / 50
ON: 1 / 21	PA: 1 / 3	TN: 1 / 10	TX: 4 / 21	WI: 1 / 9
WV: 1 / 3				

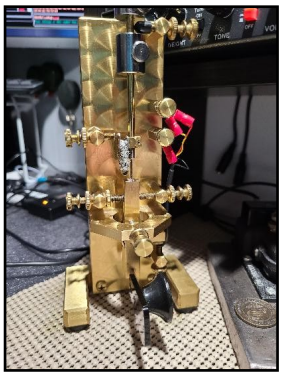
Slow Speed Saunter Results

Results for Slow Speed Saunter: 1-2 May 2021

Overall | Soapbox

Overall results

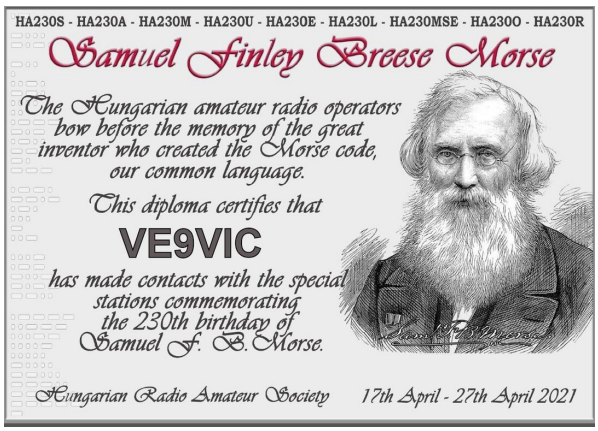
Callsign	Name	SKCC #	SPC	QSO's
WA6URY	Dan	15370T	CA	23
N0SMX	Dennis	11364T	FL	4
N4API	Brian	11673S	GA	4
W9YY	Jack	21824S	IL	8
W9GOO	John	21474S	IN	2
W1ZIY	Ron	9621T	MA	1
NN3E	Kevin	19625S	MD	7
K2CWM	Curt	3018	NJ	9
KA2KGP	Tom	1494T	NY	23
AA8CL	Carmen "Bud"	2339S	OH	1
KA8HFN	Larry	2046S	OH	5
KC8ALZ	Bill	23511	OH	1
NJ8L	Vern	13613S	OH	26
NQ8T	Steve	5919S	OH	17
VE3KZ	Bob	22804S	ON	21
KC3NDU	Keith	22980	PA	3
W4CMG	Cathy	20093T	TN	10
N8ZP	Dan	7578	TX	7
W4EIS	Lee	22601	TX	5
WE2KEY	JP	219C	TX	1
WI5H	Mike	11770S	TX	8
WB9TFF	Donna	7057S	WI	9
W3NP	Dave	3182S	WV	3



Great to get my BUG practice in… 73, N0SMX

As my old Elmer use to say…

"Don't get through the message….get the message through!"



Congratulations!

Congratulations to Rino VE9VIC, for obtaining this very fine award issued by the Hungarian Amateur Radio Society for making contact with special Hungarian stations commemorating the 230th birthday of Samuel Morse.

Well done Rino!

Brag April 2021

Fun Month. Lots of great contacts and qso's. Let's do it again. Spring has sprung. 73, Bud AA8CL

Better month for me than March. Picked up a Vibroplex Blue Racer being sold by a local SKCC member and got to use that for the last week of April. Just what I needed, yet another bug! 73/72 to all, Peter

I didn't get as many as I had hoped but still a fun month. Used either my TS-590SG or my old IC-7000 into my only HF antenna, a Butternut HF-6v vertical. 73, Curt K2CWM NJ

Rough month here. WX and band conditions and power outages. TNX for the FB contacts and new member I got to work. 73, Allen KA5TJS

I am still here. 73, Tom KB3CVO

Thanks All. Bands were up and down for me. Nice to have worked many new members. K2IZ John appreciate the Bonus. 73, and stay safe Rick N8XI

Bad propagation as usual but worked some 20 US stations on the last day when 20 meters was open late. Also got the bonus station that day. Thanks all for the QSOs! 73, Jo PG4I

73, Denis VE9DCD

Muchas gracias a todos gracias por sus confirmaciones de contactos 73, Che WP3PW

I had more QSO's than usual this month, excluding the sprints. I did go active on the schedule page more and talked with more hams. So thanks to all those I talked with. I have been working on improving the display on my ICOM 7300 and attached an example! I like this one! 73, Gene W9KMK

Bad condx, next month will be less, being a SES station for AGCW. YL50AGCW (one of my other keys, been used by my father). 73, Hanz YL3JD

Nice to get back into the swing of things now that I am back from FL for the winter. Nice to see some of the SKCC folks on my POTA Activations. 73, Greg WA3GM

Hello Everyone, I am very glad to have a QSO with you. Had fun With Marathons and club activities. I hope to chat with all of you again soon. 73 and CUL. Mark W8YA

VE9SKCC…Coming in September!

We do K3Y and now it's time to do a similar "Canadian Operating Event." Basically the same style operation as K3Y, VE9SKCC/VE# will take place all during the month of September. Canadian SKCC members will sign-up for operating times and all use VE9SKCC (special event call sign issued by Innovation, Science and Economic Development Canada) with portable designation for their Province via the following event coordinators:

VE9DCD……. VO1, VO2, VE1, VY2, VE9

VE3RDE……. VE3, VE2, VE8, VY0

VE4DL…… VE4, VE5, VE6, VE7, VY1

Just as with K3Y VE9SKCC stations will list their home calls and SKCC number in their report, for example:

K8JAD de VE9SKCC/VY2

TU 599 PE Ted VE9AQM 1629S BK

Software is being developed to have on-line statistics similar to K3Y to track working all Provinces in this event.

All QSL requests for VE9SKCC/# will be answered through the SKCC QSL bureau, be sure to send your QSL to the bureau and to have an SASE on file at the bureau. "How to use the SKCC Bureau" information can be found on the SKCC web page.

Hopefully all SKCC members will join in this event and it becomes a highly anticipated annual operating event!

73,
Canadian Operating Event Team

SKCC is pleased to announce the 8th SKCC Marathon Award presentation to Dave Slater, WA3SCM, #2968

Cecil K5YQF

After confirming several marathons for others this past summer, Dave signed himself up and got off to a great start. In December, he reviewed old logs for past marathons that could be included. Putting the old and new together, Dave's first confirmed marathon was on February 25, 2008. He concluded on March 10, 2021, with a 70 minute rag chew with his brother Jan, KA3BZQ.

Dave was first license as WN2AOL while stationed at Fort Monmouth, NJ. as a Signal Corps Instructor. Five months and 108 QSOs later, he had earned the ARRL Rag Chewers' Club Certificate and had his last Novice QSO was with his father Bill, W3LMB.

Dave left the Army in 1972, returned to PA, and was issued WA3SCM. He joined SKCC in March 2007. Dave often operated a motel QRP station while he worked at power plants across the USA. Retirement in 2012 has allowed Dave to enjoy radio full time. Dave is a rag chewer at heart as evident by his RCC Certificate and the SKCC Marathon Award. He views rag chews as a simple conversation held at an easy to copy speed for both parties. He's still amazed at the interesting stories that unfold, connections discovered, and just the plain fun that rag chews turn out to be.

Dave extends his thanks to all the CW operators who helped him complete the SKCC Marathon Award. His new quest is to earn The Lion City Award established by SARTS to include a QSO with his son Michael, W3LMB (his Grandfather's call). Along the way Dave intends to do some extremely slow CQ's for those new CW operators just starting out. Do you remember how scary your first few QSOs were? Look for him on the air; he seldom talks less than an hour!

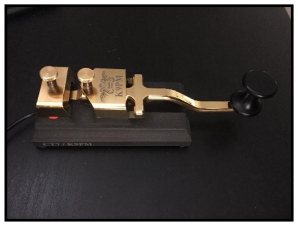
The Marathon Award was established in 2008 to recognize SKCC members who demonstrate their skill, talent, and love for ragchewing by completing 100 QSOs with other SKCC members, each lasting 60 minutes or more. The first award occurred in 2014, and now has a total of 8 awardees as of March 2021. If your interests extends to rag chewing and you're looking for a challenge, consider joining in the fun and developing your own rag chewing skills.

My Favorites for this oldster learning a new Skill. 73, Rich KC2CZK

SKSE May 2021

Many thanks to all for another pleasant event. I contacted 14 usual friends plus two new members : CT7AUP and GM4KHA. In addition to these contacts, I did a 20 minutes long chat with a French non member Pascal F5UFV, I gave him all useful infos about our club. Maybe a future new member ? All my contacts were done with another Junker key as I need more contacts with a Straight Key for my future TKA. All the best to everybody, see you all soon and Good Luck ! 73, Bernard F5DE

Pleasantly surprised with better conditions, mainly on 20m. Got to play with a rare GPO 6 terminal increment key and also a Marconi PS No213A, both straight keys. 20m Brian KF6C, Paul CT7/K9PM, Bob VE3KZ, Bob F6EJN, Manuel EA7EGU, Kare YU7AE. 40m Bernard F5DE. 80m Paul G4PVM. 73, John G0RDO skcc 2133s



RIG: FT-891, POWER: 5W, ANTENNA: VERTICAL EFHW. 73, Paul CT7/K9PM

20 meter open until late, which was great! Thanks all for the QSOs. See you in the WES. 73, Jo PG4I

Nice opening to Eu on 20m, on 80/40m is high noise level and weak propagations, rig is Blue Cool Radio (DL-QRP) 5W output, antenna is double Windom, key is british "Clansman" (PRC-320 radio) small key. Thanks for nice QSOs, 73, Kare YU7AE

Good Advice

Editor….The following is from a discussion on the Groups IO reflector regarding QRP and QRO. It's a pretty good discussion when power output might be proper for "special event" stations.

"Just my not so humble opinion, of course, but I always encourage the "special" stations in any event to run the maximum power they have available. Be in 1 W or 5 W or 1KW, the more power you can put out helps more folks hear you. While I can go from 5 W to 500 W, on those occasions when I am a special event station as in K3Y or the monthly brag station or an Easter Egg or Reindeer etc. I always try to run QRO to give as many folks as possible a chance to hear me. I'm not trying to say low power stations shouldn't be special event stations, I'm only saying run as much power as you can, especially during solar minimum, to hopefully help out other ops hear you. Of course, after saying that, I've gotten 339 reports running 500 watts from 579 QRP stations. Power isn't everything but it can help."

73, Leslie Hock WB5JWI

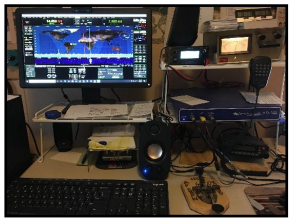
WES May, 2021

Great WES. 1st. time using my new Yaesu FT 450D and new WW11 J-38. This was NOS in the box. I do wonder if the navy knob is original, never saw one before with a navy knob. Worked numbers from 173 to one of our newest members 24152. Added some new to me contacts, Germany, Oregon, North Dakota, South Dakota. Thanks to all who participated. 73, Frank AA2XB

That was fun. Worked a lot of new numbers, thus, met more great folks, old timers and new comers to SKCC. See you thru the month for more Brag contacts and then the Sprint later in the month. Be safe out there. 73, Bud AA8CL

That was fun! There were a lot of stations, but they were weak at my location. Tom, DF7TV, in Germany was my only DX. Sorry, Tom for all the repeats. Selective fading kept knocking out the first letter of your call. 73, Jim AD0AB

Fired up my classic Argonaut 509 for this WES (coupled to a Brown Brothers straight key, to an inverted vee), and managed a few QSO's. But, a RTTY contest badly interfered - no CW filter in the rig! Very 73 to all, Colin AE3A



Had a great time using my new, to me. Flex-3000. After I realized my Hex Beam was 90 degrees off from my control box I was able to finally make some contacts! Thanks for everyone involved in this WES! I always look forward to this monthly event. 73, Kevin AF5SW #20090T

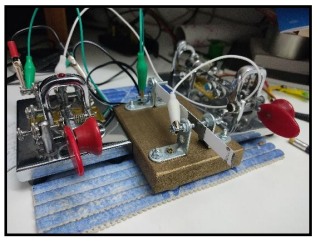
Went to the park Saturday and found a shady spot to set up using my FT 891 and Wolf River Coils antenna. Also got to try out my new KN4YB dual lever in-line bug and it is definitely a keeper. For some reason I had a really hard time getting the antenna tuned for 20 meters which is normally not a problem. When I first got on the air signals were strong and stayed that way until around 3 pm when it was like someone turned off the switch. Nothing! Anywhere! I listened for about another half hour, tried tuning the antenna for 40 but it wasn't going to happen. The good thing was making some much needed contacts with some really nice operators and a beautiful day here in Florida. Looking forward to another great WES next month. 73, Dan AI4RJ

I'm new to SKCC and enjoying reliving my novice days by pounding out those dits and dahs. Band conditions for this WES were poor and most QSOs were at the noise level. If you moved my S meter at all you got a 599! I missed a few of the usually active states but had a few nice openings into EU to make up for it. Thanks for all the QSOs and helping me up the ladder to S. 73, Bill AK6A

73, ORESTES CL3OR

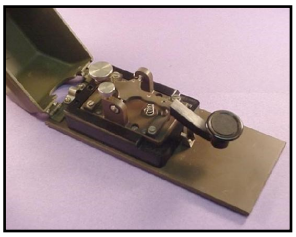
My second WES and my second month of using a straight key. Thanks for all QSOs. Enjoyed the challenge very much. It was a really fun. 73, David CT7AUP

My fan-dipole was broken during this very windy WES. Until the end, it was a great pleasure to copy new friends. TS-890S - Fan-Dipole - 300W 73, F4FLO Jerry



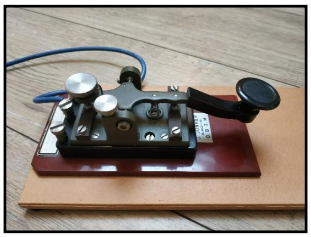
Thanks everyone for the qso's, poor propagation in EA3 land, hopefully the next one is better. See you in the next Wes. 73, Lluis EA3NO

May WES 2021 II



I took pleasure to have a few contacts but weather decided I have to stop as big lightning periods occured on sunday afternoon till 3 o'clock in the night. I prefered to unplug my antennas not to disturb my new 3 month old TS-590SG transceiver! Sorry, only 15 contacts but I wanted to be there for my WES #127 ! As my TKA level is not yet complete, I used one of my favorites straight keys, a German D.B.G.M. Junker Taste. 73, to all and see you soon again. Take care everybody, Bernard F5DE

Thank you all for these first year QSOs, for me 33. Thank you for the QSOs of the new members who have been numerous to this WES. Normal conditions and contest as a bonus, enough to make the ears work with multiple callsigns. See you soon for the June WES. 73 and good health Bob F6EJN



Thank you all for the qso. 25w in a dipole, not always easy to be heard. But a lot of fun to participate. 73, Franck F8DTU

Great fun but propagation not good. All my contacts (7) were on 20m and many thanks to KF6C Brian, K3WW Chas, F6EJN Bob, EA7EGU Manuel, EA3WX Lou, EA4DWJ Diego, IT9QAU Ferdi. Kenwood TS-440s 100 watts to a 20ft vertical, key a small mystery

Hello everyone, poor propagation, some contacts in the 20 meter band, anyway a lot of fun, greetings from Panama. 73, Ric HP1RIS

Another good WES. Nice to see high SKCC numbers and old-timers, too. Glad to work them both. Looking forward to the next one. Vy 73, Lee K1LEE

73, Rob IZ1TRK

Only worked 20M, enjoyed seeing lots of 1st year members that I haven't seen in long time. 20M was in good shape both days. Used a bug that just came in mail last week, a 1978 Deluxe Lightning bug. 73, Joe K0IVK

Slow start on Saturday with poor bands. Picked up later in the morning. Sunday also a slow starter. The SpeedX and the Vibroplex Champion shared the duty this WES. 73. Gary K1YAN

Spent about an hour this afternoon with my TBW-5 Transmitter and Drake 2B on 20M. Used my J-38 key and had a great time handing out a few contacts. 73, Mark K3MSB

My oldest granddaughter just graduated from the University of Memphis, so here I am in Shelby County, TN helping her celebrate. I used an LnR 42ft 40-20-10 EF strung out my 2nd floor bedroom window to a tree in yard. Rig was an IC-703 running 5 watts using an American Morse straight key. Powered from a 12v battery jumper box that I always carry with me when traveling. Really enjoyed this one. 73, Curt K2CWM/4 TN

Enjoyed. Also did a little RTTY and CQ-M activity, and also mentored a potential new ham 3 hrs. I love my new IC-7610! 73, John K3MD

May WES 2021 III

K3 to 31 ft Unun wire up and over garage with fast and slower bugs: Birth year 1944 Champion and 1960 E.F. Johnson Speed-X. One a smooth, precision CW machine; the other ..., not so much. :-) 73, Don K3RLL

TU All! While the bands were not the best, I enjoyed the QSO's I made and DX Stations worked as well. Everyone has great ears and equipment. 73 and see yo in the next WES! Jeff K9JP

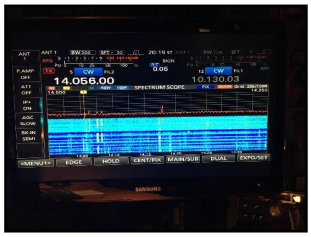
ICOM-7610, Tri-Band beam for 10,15, and 20 meters, 6-BTV vertical for 80 and 40 meters. ACOM 700S amplifier with remote tuner. Running 500 watts. Begali Intrepid Bug. Great WES! My personal best with 55 QSOs! Up until this contest I was only scanning and pouncing, I ran on a frequency a few times in this WES. I still have a lot to learn but it was a lot of fun, picking calls out of a pileup is no easy task! 73, Gordon KG7YU

Pretty much full time cootie again this month. SCPs were high but missed several states that usually show up. Extra time off for holiday activities. 73, Chas K3WW

Propagation was not that good but 20 meters opened up about 8:30am. Most of my contacts were on that band. Got 3 Canadians and that's all the DX I got. Terrible thunder storms Sunday afternoon and night. 7 1/2

IT WAS NICE MEETING SOME OF THE ORIGINAL MEMBERS ON THIS EVENT.
73, VIRGINIA KC5SAM

This WES was a lot of fun. It was nice to see some good band conditions on 20m and 40m. FT-891 @ 90w with an 80m EFHW @ 40 ft. I used my trusty Soviet TKF Straight Key this time. Looking forward to the next WES! 73, Dave K7TRT



Thanks to everyone that called in. The battle with band conditions and local noise was epic. All weekend I saw a few bands of dark blue (no local noise) but mostly short and long bursts of 10 over 9 ugly static (light blue) and weak signals. Thanks especially to everyone that hung in there. 73, Scott ka9p

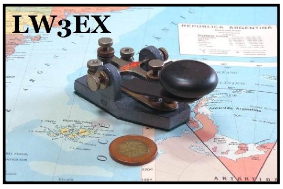
Great turnout this weekend- I worked a lot with the old KNWD Twins -They were bought new from Henry Radio in LA by K6TIB-Don Rowland in Atascadero, CA around 1972 . Shown are two R-599-A RCVRs & a T -599-A XMTR. When the going got tough I ran the FT -1k MK V & the Ameritron Amp. 73 & thanks for the QSOs Larry K8TEZ

I did a lot more CQ WES this time instead of S&P. Got 5 QSOs on 15M so bands are starting to pick up. I also got 8 first year members in the log. Thanks for the contacts and see you next month 73, Dave KB1WOD

Great fun. My wife has forgiven me for Mother's Day operation-- I think! 73, Dan KF4AV

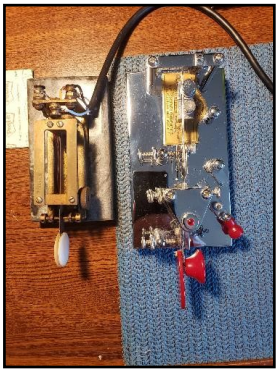
May WES 2021 IV

Managing around a family and work schedule for Mother's Day, I was able to get a few hours in. Fun searching for those "first-year" members. Being one myself, I felt very honored to hand out mine. KC0CGR, Bob (173) and W0HXL, Dick (94T) were the lowest numbers of the 13 I was able to contact. As always, thanks for a great event. 73, Jack KK0I

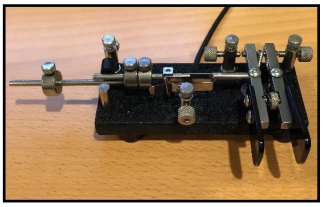


Almost NO PROP beyond the equator but I had fun for a while. Only contacted one SKCC pioneer, WA3ZDI TU Craig FB 10m DX QSO Stats: 2 > 14MHz – 1 > 21MHz – 6 > 28MHz TA33 – 50W – Home Made DSK + Taschen-Taste SK TU everyone for the QSOs. Take care & Stay well BCNU 73, Walt LW3EX - ..- ZUT

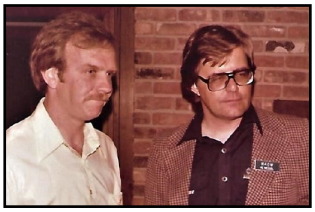
73, Russ KK4WX



73, CW KS7KCC

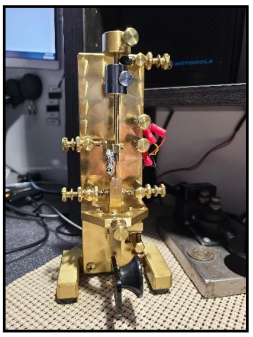


Had a fun time operating with my first bug (handmade by KN4YB - see picture). I'm still getting used to it - sorry for all the mistakes! Lowest SKCC member I worked was #83S, WB9HFK. It was fun to see the SKCC members stand their ground against the Saturday night RTTY invasion on 40 m! 73, Scott N3OLP



Golden Ear awards to F6EJN,FG8NY,CT1BQH ,EA1IQ,CT7AUP & PG4I for digging my QRP sigs out of the noise and qrm. Thank you very much. 72/73 de AL, N4ow -- 11375s(Photo Caption -- K9WA & N4ow, Hartford, CT 1980) Time Flys when you're having fun on the Ham bands. 73, Al N4ow

Fun as usual. Passing thunderstorms caused a few shut downs. 73, Phil KW2A



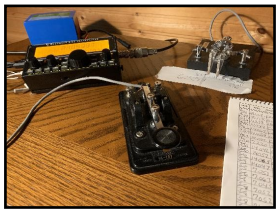
Great Fun again. Used a VizKey Vertical Bug borrowed from my friend K3ZGA.. Tnx Bob. 73, Dennis N0SMX

With Mothers Day and all that was going on I managed to squeeze in 15 QSO's including 4 OT SKCCer's. Used my "new" KN4YB Dual Inline Bug exclusively. 73,

Not a lot of time since it was Mother's Day Weekend. But I made a few contacts including two Dx. It was the first time that I ever had a Dx station (ON5UK) come back to my CQ call. That was awesome. Thanks, Luk and the few others I contacted.73, Ken N9KJU

Hi.. ft-817 4wts g5rv..40 qsos..21 states,1 VE and 1, Netherlands, pg4i, jo..wow! 4wts there.. no key project right now, only have 71 keys, they all make QRM.. hihi.. next month I think I will use my hb MAGLOOP for the WES.. Take care and will cu next month..hihi..73, Dave Larsen n9zxl

Another fine activity. Had lots of fun as usual. 73, Nee NE9EE

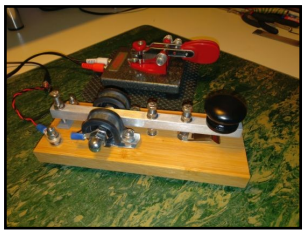


Lots of fun and happy I managed to get 12 QSOs. Running 5watts with KX2 and long wire antenna. Thanks to all who pulled my signal out of the noise! 73, Robin NG8S

May WES 2021 V

Great fun! TNX! to all the club leaders who keep these sprints going!!!! I appreciate all the QSO's I managed to complete ... I apologize to any one I may have stepped on ....72 / 73 to all Steve NQ8T

Not so bad for a change. In my eight 20 m QSOs there were one new DXCC entity (Serge, RL8C) and three new SKCC members (besides Serge, Ferdi, IT9QAU and Mats, RM2D). Thanks also to all other EU stations worked. My balcony mounted TAK-tenna 40 picked up quite a few US stations too, but enabled no QSO with any of them. Listened a few times to K3WW working station after station in a row… Looking forward to the next WES. 73, Vince S52CC

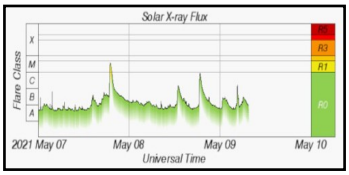


This was my third WES. I really enjoyed the event and was happy to work new numbers. Band conditions are improving up here in the north so I´m looking forward to the next events. In the image you can see my home-brew key, hi. Thank you all and 73 from springlike Finland! Samuli OH2M-GA

Thanks to all. A good workout for those enormous new Sennheiser headphones. How does everyone else keep the shack so tidy? 73, Ben VE1AHX

Great WES. Good to cross paths with so many good friend - but also good to meet so many new members with high numbers. CW is a long way from being obsolete! 73, Davce W1DV

WES is always fun. This was my first time submitting a score. Here's to many more. 73, Rin W4RIN



The sun got really active the day before the WES. So propagation was almost absent during daylight and early evening hours, but 20 meters was open really late. Worked CA several times after midnight. Thanks all for the fun, I finally reached TX8! 73, Jo PG4I

Another great WES weekend came to an end. Bands could have been little more active. I didn't find any strong openings, had to work for each contact. Still fun while it lasted. 73, Adam VE3FP

My MFJ Tuner (ordered Dec. 14, 2021 to use for the January K3Y event), finally arrived. That alone made my weekend. Put it to good use too. My personal best WES. As always, thanks to you all. 73, Blu W1BLU

My first time SKCC activity. Many thanks. 73, Serge RL8C

Somehow, Friday evening, I managed to disable my rotator on the 10/20m 50 foot tower. I was now solidly pointing at TN through to LA for the duration of the WES! This is a photo of "Old Faithful" the 204BA, and the 5el 10m Killer above it. Any ideas of QRP or 100W for WES were put aside as I contemplated a gain antenna with its back to Europe and the North-West. However it's all in the dBs and I have worked those areas with QRP in the past and I still had more than 5W ERP in those directions. I am happy with the results and hope to rectify the rotator problem when the weather improves. It looks like I doubled my best effort to date in the WES. Thanks for all those Q's. Great to meet so many new numbers. 73 Bob VE3KZ

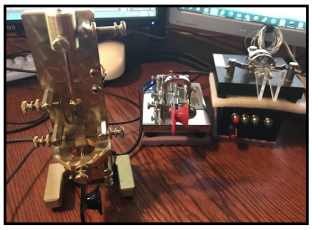
May WES 2021 VI

Life has a way of intruding on these weekends! Didn't get to spend much time, and 20m seems less productive with this crazy antenna when the leaves come out on the trees. Did work 8 1st year folks - nice to see a good turnout from that group. Getting ready for the annual move to Maine this week. Better antenna setup there. Thanks to all. 73, John W1TAG

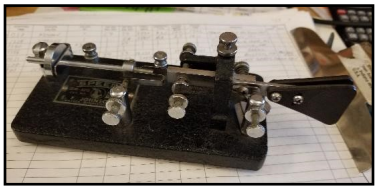
I thought band conditions overall were on the bad side. I did have 6 Q's on 15 meters. Wrked 6 EU stations on 20 including Mats RM2D in Moscow. Signals just seemed to be down with lots of QSB. Did not have a lot of free time for this one. Used 3 keys. Vibroplex Lightning Bug, Begali HST II sideswiper, and the Junker SK. I only wrked 4 low nr stns but there were a lot of newer members with high nr's...that's a good thing. 73, Dave W3NP West Virginia

GREAT WES this month, though time was a bit limited due to some Mother's Day activities. I made some new SKCC contacts that will bring me to "Tx4", and had QSOs with some new DXCC countries! I'm still getting used to my W1SFR Horizontal Torsion Bar straight key, so thank you for your patience! 73, Cathy W4CMG

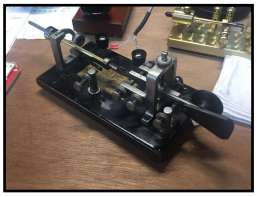
My best effort yet, thanks to all our OPs. Pic is of my original novice (old) bug that I still like to use, kinda like a pair of old shoes! 73, CUL CW Bob W4ED



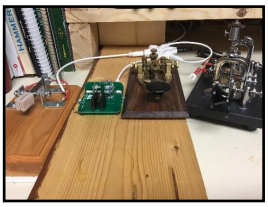
I had a great time for WES I hope the next one comes along really soon. 73, Mark W8YA



No time to operate this weekend. Had many other things to do. Just made a few contacts Saturday morning. 73, Jack W9GT



This is my 100 year old Bug with "dit-tamer" I made. Works great after all these years! Fun Wes this month thanks for all the contacts. 73,



I managed only 2 hours of operating time due to out-of-town guests and Mother's Day. I squeezed in 17 QSOs including 3 European countries, 3 new members, and 3 first year members. Running an IC7300 at 100 watts to a long wire strung along the backyard fence. See you on the air! 73, Jack W9YY

Band conditions were not very good here this weekend but still fun none he less. Tnx to everyone that I worked. Look for you next month and in between. 73, Greg WA3GM

Lots of fun once again. Bands were strange. 20 was long and short at the same time. I wish . First time for me to use a bug for more than half of the QSO's. I used a 1938 McElroy Deluxe key and also a Bunnell Model W Speed Key (Cootie). Also, used some of my "modern" gear FT1000D + Alpha 87A. Normally I use the boat anchors. . I love this club! 73, Mike WB0SND

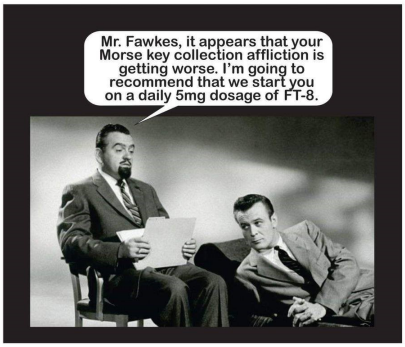
Hopefully I'll be on next WES. 73, Les WB5JWI

Lots of fun operating the WES with the Drake 2NT/2C and Heath HW16. 73, Dan WB8JAY 3717T

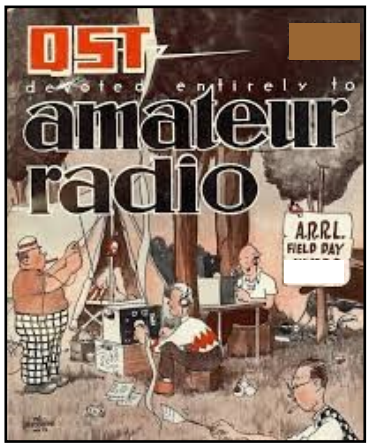
May WES 2021 VII

Only a few hours on Sunday. 40 & 20 cooperating with good activity. 73, WH6LE PETE

Enjoyed a lot up to the next WES. 73, Hanz YL3JD



ARRL to Extend Field Day Rule Waivers from 2020 Add Class D and E Power Limit



The COVID-19 pandemic-modified **ARRL Field Day** rules from 2020 will continue this June with the addition of a power limit imposed on Class D (Home Stations) and Class E (Home Stations-Emergency Power) participants. The news from the ARRL Board's Programs and Services Committee comes as many clubs and groups are starting preparations for Field Day in earnest. Field Day 2021 will take place June 26 – 27.

"This early decision should alleviate any hesitancy that radio clubs and individual Field Day participants may have with their planning for the event," said ARRL Contest Program Manager Paul Bourque, N1SFE.

For Field Day 2021:

- Class D stations may work *all other* Field Day stations, including other Class D stations, for points. This year, however, Class D and Class E stations will be limited to 150 W PEP output.

An *aggregate* club score will be published — just as it was done last year. The aggregate score will be a sum of all individual entries that attributed their score to that of a specific club. ARRL Field Day is one of the biggest events on the amateur radio calendar. Last summer, a record 10,213 entries were received.

"With the greater flexibility afforded by the rules waivers, individuals and groups will still be able to participate in Field Day, while still staying within any public health recommendations and/or requirements," Bourque said.

The preferred method of submitting entries after Field Day is via the web applet. The ARRL Field Day rules include instructions on how to submit entries, which must be submitted or postmarked by Tuesday, July 27, 2021.

The **ARRL Field Day** web page contains for complete rules and entry forms, as well as any updated information as it becomes available. Join the ARRL Field Day **Facebook page**.

Editor…..The following article is reprinted with permission from the author and Surrey Amateur Radio Club of British Columbia, Canada.

A Review of the Hardrock-50 Linear Amplifier Kit

Synopsis

The Hardrock-50 (see Figure 1) is a US-designed, 5W-in to 50W-out HF amplifier that operates on the 160 through 6m amateur bands. It includes automatic band switching, does not require tuning, and integrates seamlessly with popular rigs such as the Elecraft KX3 or Yaesu FT-817 series. An optional QSK board and automatic antenna tuner are available. The amplifier runs on 13.8 VDC and draws under 10 amps at full output.

The HR-50 is provided as a well-documented kit and can be assembled in about ten hours. It aligns easily using common test equipment and performs well. My own kit easily outperformed the amplifier's design specs. Price is US$299 from Hobby PCB in Florida at https://hobbypcb.com.

Figure 1

Background

Having recently returned to amateur radio, I was interested in the new digital modes, and especially the new digital HF mode FT8. My new Elecraft KX3 performed very well on the mode, and I was able to achieve WAS (Worked All States) in about three weeks using the radio's maximum recommended digital output of 5 watts into my 23-metre longwire antenna.

That said, working DX using FT8 while QRP was quite difficult, and although I worked a small number of foreign stations, I found that it took quite a bit of effort to be heard among the other stations who were using higher power and better antennas than I have. I had no problem *hearing* considerable DX; the problem was that they usually did not hear me. Something had to be done!

I started researching linear amplifiers with an output of 50 to 100 watts, thinking that being able to boost my signal at the antenna would likely make me more competitive and allow me to work much of the interesting DX that I had been hearing.

I learned that 100-watt class amplifiers were either low quality and affordable, or of high quality, but more expensive than my limited budget would allow. Reviews of some of the cheap amplifiers showed them to generate high amounts of distortion and even spurious illegal emissions. Not something that I would allow in my station!

Additionally, I doubted the necessity of running 100 watts on FT8 (my main communication interest) as the mode performs so well on very weak signals that more than 10-30 watts is hardly ever required to work global DX. 50 watts would give me enough "edge" to work a lot of DX.

My extensive research led me to a US-designed amplifier kit called the "Hardrock-50", from a small firm called "Hobby PCB"[1] in the eastern US. The amplifier covers 160 through 10 metres with an output of approximately 50 watts for 5 watts input, and about 40 watts output on 6 metres.

The prototype for the Hardrock-50 was a winner in a design contest sponsored by the ARRL in 2010. The much-evolved production version, now called the HR-50, is FCC "type accepted" and meets all legal requirements for amateur band operation.

Reviews of the HR-50 were excellent, and the documentation on the Hobby PCB website showed that the assembly and operation manuals were complete and well-designed, and reminiscent of the classic "Heathkit" manuals of the 1950s-1990s. It looked like a good solution to my needs.

Purchase

At US$299, the price for the kit met my budget, so in late January I "took the plunge" and ordered the amplifier kit. I ordered the optional full break-in (QSK) board as a US$30 option, but decided against the internal automatic antenna tuner (a US$179 option) as I already own a nice external auto-tuner from LDG. I planned to use that with the new amplifier.
The kit arrived in a few days. The parts were all of good quality, and the kit was organized into sub-packs of parts for each main component of the assembly process (front panel; back panel; main PCB, et cetera).

Assembly

I downloaded the HR-50 assembly manual to my iPad and followed it step-by-step. The manual is well-written and clear. There are three PCBs provided: for the front panel, the back panel, and the larger main PCB. My kit contained a fourth PCB for the optional QSK board. All the PCBs come pre-populated with the key surface mount components such as the microprocessors which control the amplifier. The PCBs are manufactured off-shore but quality is good. No SMD soldering is required.

Assembly starts with the front panel and works through the back panel, the main PCB, and lastly, the QSK board for those customers who have purchased this option. Assembly consists of inserting and soldering through-hole devices such as the four MOSFET power transistors, band switching relays, connectors, and headers and short jumper cables which link the amplifier's boards together.

The optional QSK board is installed above the main PCB through provided headers and nylon spacers. Hardware is of excellent quality (stainless steel) and everything fit together perfectly.

Assembly was straightforward and I encountered only a few issues with the assembly steps. For example, in one step in assembly of the main PCB, I failed to read the step to the *very* end, and unfortunately installed two 2-pin terminal blocks which were NOT required if one is installing the QSK board. I had to de-solder the two terminal blocks as they would mechanically interfere with the QSK board to be installed above. A minor inconvenience, and technically my error, as I should have read the step to the *very* end!

An amplifier is an analog device, so the main PCB contains about 15 toroidal inductors which are part of the different ham band filters. The ~1.5 cm cores and a generous supply of enameled wire are provided. Alternatively, a full set of pre-wound toroids is available as a kit option for US$30.

I chose to wind my own toroids for the experience, as I had never wound smaller toroids such as these. The directions in the manual were clear and photographs of what the finished toroids should look like are included in the assembly manual, so I decided to do the winding myself. I thought that it would be a great opportunity to learn a new skill. See Figure 2 below.

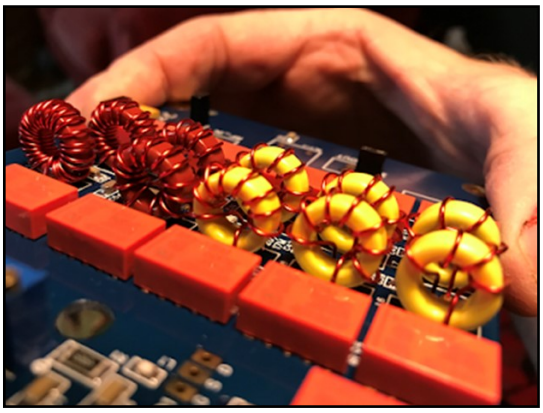


Figure 2.

Amplifier filter "Q" (and consequently, amplifier performance) is improved by taking care to wind quality toroids, so it is worth the time to complete these assembly steps properly. The turns need to be tightly wound and spaced evenly. Critical is proper counting of the turns through each core. The toroid winding steps took me about two hours.
The hardest part of winding the toroids is removal of the insulation from the wire ends. This can be accomplished either by scraping (Exacto knife or Dremel tool) or via application of heat from a soldering iron. I used a combination of the soldering

soldering iron method and scraping with an Exacto knife. This took a couple of hours, but I got it done. After building the kit, I discovered a great tool for stripping enameled wire[3]. It's designed for this purpose and works really well. I ordered one for US$14 on Amazon and would definitely recommend using one, as it makes stripping the enameled wire quick and easy!
Three small transformers must also be wound using supplied wire, but these were straightforward once I had completed the big toroid winding job.

The kit includes a large extruded aluminum heatsink to dissipate heat from the four power MOSFETs. This serves also as the chassis for the entire amplifier. The main PCB is secured to the heatsink, and the front and back panels are bolted to the ends of the heatsink. The four MOSFETs and a helpful temperature sensor are also mechanically attached to the heatsink. The provided aluminum cover then integrates everything into a nice-looking device, as can be seen in the attached photos of my amplifier.

After about ten hours of (fun) work over three days, my amplifier was complete and ready for alignment and testing. See Figure 3 below.

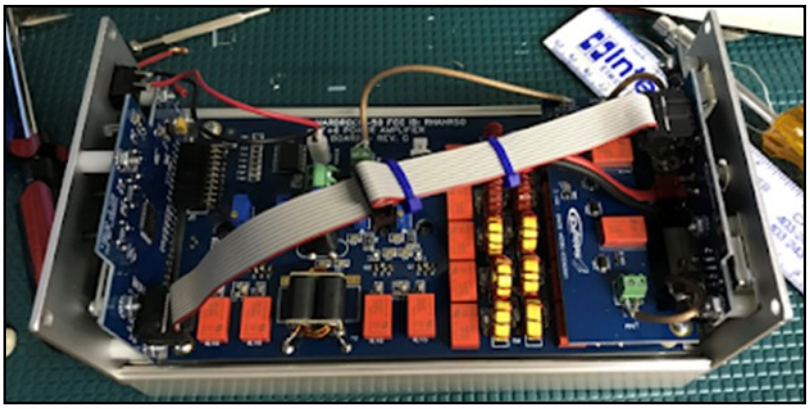


Figure 3.

Alignment

Alignment of the HR-50 requires a 13.8 VDC power supply capable of about 10 amps, a small screwdriver and an ammeter such as available on common DMMs. The process consists of setting zero-drive bias current on the four MOSFETs.

This was a straightforward process and my new amplifier tuned up easily and quickly.

Testing

Next came the moment of truth! I connected the amplifier RF input to my KX3, and the amplifier output to a good quality dummy load. For the automatic control signals, I connected my KX3's control output signals and serial port to the amplifier through a small KX3 interface board that I bought from Hobby PCB as a US$30 option.

I could have made my own (simple) control cable but chose the easy route in this case! Cable pinouts are provided in the assembly manual for those who want to "roll their own" interface cable. Three settings on the KX3 had to be changed to set the inter-device baud rate and route PTT to the HR-50. Similarly, three settings had to be set on the HR-50s control menus. Then, I was ready to go!

"First Light"

First, I wanted to confirm that the HR-50 was receiving band change information from my KX3. I reduced my KX3's output power to 0 watts and cycled up and down through the amateur bands on my KX3. The HR-50 received the band change data and nicely tracked band changes.

Next came a test of amplifier performance. I keyed the transmitter (still into the dummy load) and increased power to 0.5 watts. The HR-50 was working! I cycled through the bands and noted that power output was working well. On some bands, for example, I could easily exceed 50 watts output with only 2 to 3 watts of drive. I was suitably impressed!
On other bands, notably 20 and 80 metres, however, I noted that the HR-50's output was strangely low. What could be the cause?

Human Error

I'm as human as the next guy, and this section describes how I resolved this odd "low power on some bands" anomaly.

I investigated the low power situation, particularly on 20 metres, for a few days without resolution. I suspected that perhaps I had made an error in winding one of the toroids. I emailed Hobby PCB with a few questions and was honestly surprised when I got an email back from the amplifier's inventor, Jim Veatch (WA2EUJ) within an hour.

Jim was very supportive and gave me some suggestions for testing. He reminded me early that "Hobby PCB guarantees a working amplifier for every customer", and that if we could not resolve the problem, that I could simply ship my HR-50 to him and that he would personally find the problem and fix it himself. Impressive customer service!

I did some troubleshooting using Jim's suggestions, and the HR-50 seemed to be "normal" in all respects. Very odd; I pondered this overnight.

The next morning, I decided to go "back to basics" and troubleshoot from the KX3 outward. I put a wattmeter on the KX3's output – something that I had not done before as I was relying on the rig's internal (more accurate) digital wattmeter.

I noted that on 20 and 80 metres (the bands with the lowest HR-50 output) that even if I set my KX3 to read 5 watts on its internal wattmeter, that my external meter only read about 1 watt output. How could this be? The rig was almost new. Had I "blown the finals", as we used to say in the old tube-based rig days?

Then, a glance at the KX3's display caused something to "twig": the KX3's internal ATU was still on! The KX3 had previously been used with my non-resonant-on-20-and-80 longwire antenna and still assumed that it was feeding that antenna, not the amplifier. The rig was now connected to the (resonant) HR-50. Eureka!

I disabled the KX3's ATU, and the external wattmeter now showed 5 watts output on each band. The HR-50's output into the dummy load jumped to what it should be, 50 watts+ on 160 through 10, and 40 – 50 watts on 6 metres. I was in business! See Figure 4 below.

Performance

I hit the bands with my longwire and noted vastly improved reception of my signal by both NA and DX stations. The option to run up to 50 watts is great and has allowed me to make many more contacts that I could with 3 (maximum 5) watts digital on my "barefoot" KX3.

Figure 4.

Now, about three weeks in, the HR-50 continues to perform perfectly. The front panel user interface is easy to use, and the amplifier tracks band changes automatically.

Also appreciated is the fact that the amplifier is unaffected by high SWR at the antenna connector. An open circuit, or even a dead short at the antenna terminal will not damage the MOSFETs. Of course, I have not made either of these errors, but it is nice to know that the finals cannot be "blown", like in the "olden days"!

The heatsink gets quite hot using digital modes like FT8 with its 50-percent duty cycle, and heatsink temperature can reach 50 to 60 degrees Celsius. However, these heatsink temperatures are within the amplifier's "normal" range, and the HR-50 operating manual says that external cooling should only be considered if the heatsink temperature goes above 90 degrees C. This is unlikely, in my experience.

The QSK board in the amplifier also works well and provides silent and extremely fast T/R switching, including "inter-dit" reception when using CW.

Conclusion

For my station and operating profile, the Hardrock-50 was a great investment. The kit is professionally designed and well documented, the amplifier works as specified, and it is backed by excellent support. Assembly was straightforward and fun, and I learned something about winding toroids. I will also not forget to turn off my KX3's ATU when I return from portable to base operation!

I am extremely happy with the HR-50 kit and would highly recommend it to anyone running QRP and looking for a moderate boost in output power.

That's it for this review. Please feel free to send comments and questions to me at mcquiggi@sfu.ca.

Tips for Field Day

With solar flux expected to stay below 100 and early summer conditions, only a couple of bands may be productive at a time. Trying to get a phone and CW or digital station on the same band requires careful attention to antenna location, very clean transmitters, and cooperative, patient operators. Planning operating time helps get the most out of the bands and operators.

Recognize that the stations will be temporary and with antennas close by, there may be RF issues to deal with due to the strong local signals. A lot of RFI problems can be minimized if attention is paid to bonding all of the equipment together, including computers. Bonding can be as simple as laying down a sheet of aluminum foil and using short clip leads to attach equipment to it. Take a look at the bonding examples from W6GJB and K9NN for portable stations in the Contributed Examples section of http://www.arrl.org/grounding-and-bonding-for-the-amateur. The goal is to keep equipment at close to the same voltage, avoiding hot spots and RF current where it shouldn't be. Bring plenty of type 31 or type 43 ferrite cores for RF chokes on sensitive cables, too.

Wideband transmitted noise presents real problems for Field Day efforts with multiple stations all located within the 1000-foot separation limit. So do harmonics and other spurious emissions. Every station should use a band-pass filter and have additional harmonic-suppression stubs available, if needed. (See *The ARRL Handbook* and *Antenna Book* for more information.) One of the first setup tasks should be resolving inter-station interference. Make sure all of the radios are configured for clean modulation, with mic gain and compression carefully adjusted. This is great practice for SO2R (Single-Op, 2 Radios) or multi-op home stations!

May SKS 2021

Just happened to check 6m at 8 pm, the Magic band was filled with CW signals. Kansas, Canada, New York, Connecticut, Pennsylvania, & Virginia. The HB 5 el LFA yagi feeding the IC-7300 made for a fun evening. Ckd the band today, K7EMX/B was 559 but no CW signals. Thank you all 73 Rick K0KEX

Nice sprint, great conditions. Ran 75 watts from my TS-590SG into an elevated multiband vertical using a Kent Str Key. One of my better scores. Thanks to all. Curt K2CWM NJ

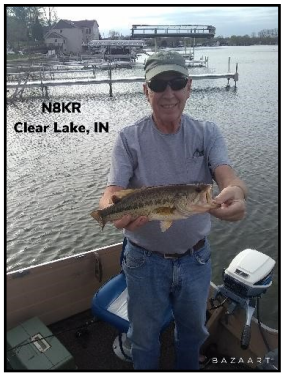
c.~1960 E.F. Johnson Speed-X Bug @ 70w to 31' wire up and over garage (HOA). Surprised with RBN spots from Europe & Russia but mostly short skip contacts. Nice time this evening on 40m with some good signals and better ears. :-) 73, Don K3RLL

Nice turnout tonight- 20 & 40 both in good shape here & was able to work several on both bands. John-Paul TNX for the bonus & was nice to meet you. Wishing everyone in SKCC a safe holiday weekend. 73, Larry K8TEZ

What a nice surprise to see 20m so open and quiet. 40m was also good. 80m seemed to work well for the few QSOs I made there, but hardly anyone there. Still fun, as always! Thanks, all 73, Steve KC5F

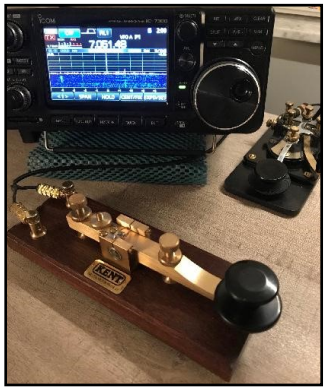
First SKS where I actually managed to make any contacts thanks to the new Hustler 6BTV. Need to get this thing tuned for the CW portion of 80 before next time. Need to work on my timing as well and recovery methods when I do make sending mistakes. Thank you all for the contacts, was great to add a few more towards my Centurion award. Since the new antenna was the star of the show, I am including it as my Soapbox image. 73, Steve KJ5T dit dit

Got in VERY late. Use my KX3 and Vertical. 20 was in very good shape after a very spotty daytime on that band. See you all next month. 73,



Got off the lake just in time to work the last half hour from the mobile. Icom 7100, hamstick and Junker key. Lots of fun, especially catching a load of fish including this nice bass! 73, Ken N8KR

Elecraft K3 at 100 watts with Bencher RJ-2 key. Antennas used 2 element 5 band quad at 40', 80-10 OCF dipole at 30' and 43' vertical with remote tuner. Spent the first 45 minutes on 20 meters but when that slowed down it was on to 40 meters and fighting S9 QRN from storms - sorry if I couldn't pull some stations through the noise! A fun SKS despite the QRN. Thanks to all I worked. 73, Bill NZ0T



Only had about 35 minutes for the SKS. Still, I wanted to use my new SK & what did I have to lose by going QRPp?! Tnx to those with wonderful ears and of course the whole club. 73, Blu W1BLU

Got a late start, but a very fun activity. 73, Nee NE9EE

From Face Book

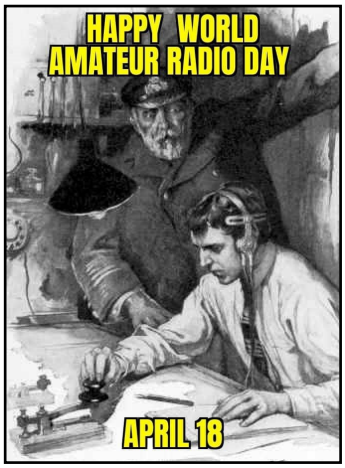
Installed new shelf in my office. Happy …73, Zeliko 9A4NA

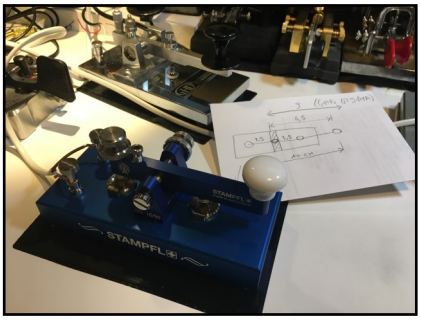
40 meters seems to be in good shape. I hope everyone is having a good WES weekend 73 de AI5DD Joe

Had a good time here in West Tennessee running portable QRP and now beginning to close up station for long 2-day trip back to Jersey. Made some nice SKCC contacts and did well for myself in the WES. Used my little American Morse Str Key (pictured). 73, Curt K2CWM/4

73, Al W4RAM

EMILIO CAIMI "light" keys - 1930 ca. - Regia Aeronautica Italiana (Italian Royal Air Force) 73 Michele IZ2FME





[MmtaSgypig 8 oartndsuo r2i htmgedh:24gSh AesM](#) · what do u think about it? any opinions pse? 73, Michele IZ2FME