

Signals From The Point

Official Newsletter of the Caribbean Contesting Consortium Editor: W0CG

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CQWW CW Contest Report by Gene Shea, KB7Q

Band QSOs Zones Countries

160:	571	19	63
80:	2226	33	115
40:	3627	38	146
20:	3539	36	143
15:	2646	30	126
10:	514	17	37

Total: 13123 173 630 Total Score = 31,023,905



CQWW CW 2019 Team L-R: N7WA, KY7M, K9DR, W0CG/PJ2DX, KB7Q, NA2U, VE3CX, N7IR, N5OT

We pulled off another multi-multi CW contest at the very bottom of the sunspot cycle without much drama. The Internet stayed up, the power stayed on, and 10 Meters gave us a brief, but intense opening. Just two glitches was all Murphy could muster.

In the weeks before the team arrived Geoff, W0CG had hacked his way thru the brush and in a solo effort strung our relocated USA/JA Beverage receive antenna, and improved the feedline situation. Gary, N7IR complimented the effort by completely redoing the receive antenna switching regime inside the shack. The addition of quality chokes on both end of the Beverage feedlines seemed to make for quieter reception, we could hear down to a deeper level of signals. In addition, Gary built and installed several band specific receive bandpass filters that markedly cut down on interstation interference.

160 Meters – Gary, N7IR did a solo ironman tug here, conditions were not great, but 573 Q's and 81 valuable multipliers went into the log. After the contest Gary discovered a bad solder joint on a receive bandpass filter that hampered his ability to hear. Damn you Murphy!

80/15 Meters – Lee, KY7M, Mark, N5OT, and Dan, K9DR were relentless on getting everything possible from 80 meters with 2226 Q's and 148 multipliers. They turned around come sunrise and took on 15 Meters also with some really fine rates to grab 2646 Q's and 156 zone/country multipliers. Dan was a lastminute addition to our team. To his credit he slid seamlessly into the hot seat, carrying on as if he'd been coming to Signal Point for years. He is joining CCC and will come back for more!

40 Meters – Fred, NA2U, and Gene, KB7Q set a new 40M high water mark for the station with 3627 contacts and 184 multipliers. Being able to rotate the Yagi toward Asia and the improvements to the Beverage receive antennas really paid off. They also enjoyed the new cascaded receive bandpass filters on the Beverage antennas. 40M really is the "money band" at the bottom of the sunspot cycle. The second hour of the contest Fred did 193 Q's. The new monitor at position #3 is superb. Bright crisp, and at the exact right height.

20 Meters - Tom, VE3CX and Mike, N7WA produced the best result on 20M since 2013 with 3539 contacts and 179 mults. This is amazing, especially considering

where we are in the sunspot cycle. They were relentless day and night and it paid off big time. At the start of the contest we noticed that the 20M contacts were not propagating into the other stations' logs. After some head scratching, we found that some unkind soul had unchecked the "log across all computers" box in N1MM+ Logger. After the contest we re-synced the logs and recovered the 34 contacts just fine.

10 meters – We all took turns guarding the band and making noise. It snapped open Saturday afternoon and we turned our 10 Meter go-to guy loose. When the dust settled Geoff, W0CG had 514 contacts and 54 multipliers. He also had the best single hourly rate of the entire contest with a 201 Q/hour.

The 13,123 contacts from this contest pushed the PJ2T total on LoTW over the one million mark.

Additional Comments from Geoff

We were especially privileged to be taken care of by Chef N5OT. Mark's skills are wonderful on the radio AND in the kitchen. Some of the entrees were presented in a way that made us feel guilty eating them, they were so professional. Here he is putting the final garnish on chicken breasts.



Here's N7WA before the contest, contemplating great rates and pileups.



CCC Financial Snapshot

As of November 30 the balance is at \$3992.23. This balance puts us in a comfortable position to cover unpredictable maintenance needs and to fund an NR0X tower trip to the island. We do still have two members who have not paid the annual dues that were assessed in May.

A Million LoTW QSOs

One million. Such a big number. We made our millionth PJ2T LoTW QSO on the WWCW weekend. Alex Murashkin, UT3V, was QSO number 1,000,000 at 0942Z on Saturday morning, 14.039. In total we have many over a million PJ2T contacts, but this Logbook of the World Milestone is really notable.



Alex Murashkin, UT3V and friend.

PJ2T's New RX Antenna Infrastructure: Complete

You've already read about the new RX antenna infrastructure project. It's complete. We now have four coax runs to a new distribution box across the street. The photo shows that box installation in progress on November 6 as the concrete base is drying.



The <u>indoor</u> part of the RX antenna system re-do is also finished, and is entirely to N7IR's credit. Gary was appalled at the ratty, leaky hodgepodge of cables and connectors and the attendant cross band interference and garbage signals on those antennas. He took action. In the past year he designed and built an entirely new RX system consisting of bandpass filters and attenuators for the shack, common mode filters indoors and outdoors for all receiving antennas, and entirely new cabling in the shack. This was a giant undertaking.

He installed everything prior to CQWW CW and the performance of the new system is utterly astounding. The RX antennas are clean, quiet, and interferencefree. It's an incredible improvement to the station.

Gary homebrewed everything. Here, for example, is the common mode filter for the outside part of the new US/JA Beverage with connection cables I made up in Curacao. (Thanks W8WTS for showing me the correct technique for these crimp connectors.)



The next photo shows the improvements at the feedpoint of the Europe Beverage. The N7IR common mode choke is on top, wrapped in UV-protecting tape, and the 9:1 matching transformer is underneath. You can see the blue Beverage antenna wire (it extends 1000 feet from this point), and the wire to the grounding system coming out the bottom.



Following is the feedpoint for the new US/JA Beverage. The 9:1 transformer is taped to the side of the common mode filter and both are screwed into this stout tree. The green wire is the beginning of the 880 foot antenna, which has a proper resistive termination and ground system at the far end.



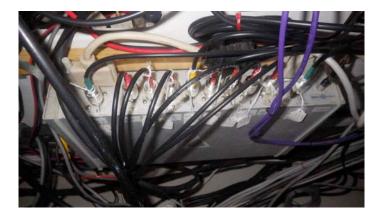
Here's N7IR dismantling the mess of old cables at the Station 1 and 2 K9AY RX switchbox.



Below, Gene is mating cables to Gary's homebrew filter and attenuator boxes.



Here's the neat, organized, and highly functional result with Gary's new cables in place at one of the K9AY switch systems. Red = Station 1/2, blue connotes Station 3/4 RX cables.



Credit also to Rick, N0YY, designer/builder of the operating tables, that it was very easy to move the desks so that Gary could get easy access to the cable routes and switches (below).



We all owe a tremendous thanks to N7IR. The thought of doing these improvements would never have entered my mind. Gary did the engineering design, all of the many hours of fabrication and testing, shipped all of it to me to go on the ocean freight, and then did the install on the island. This is a dramatic improvement to the performance of the station – you won't believe it until you hear it!

This final photo shows all the cables final dressed into place and labels on the splitters and common mode chokes. The three spare RG-6 runs from the road box also terminate here.



PJ2T's "All Heliax" Project: Complete

Last December we decided to install hardline to the Pacific and South America tribanders. The former antenna was compromised and the latter totally inop. In January we bought 400 feet of Heliax that VE3CX picked up in Western Illinois on the way to Dayton. Following that VE3CX, N0YY, and K8IV donated very liberal additional amounts of Heliax, so much that we would be able to replace ALL of the feedlines to the transmit antennas with Heliax. That project is now complete. Every single transmit antenna at PJ2T is now fed with hardline. Our objective was not so much to save on feedline loss, but to achieve a mechanically robust transmission line system that would be maintenance free. To that end, we even replaced the line to the 160 TX antenna with Heliax. This is almost folly electrically but an extremely good move mechanically.

I used the N0YY and VE3CX pieces first and replaced the SA and Pacific feedlines, and both antennas now work perfectly. We used them to good advantage in the CW contest. VK/ZL jumped out of the radio on 10 when I punched up the "Pacific" button as did the PYs and LUs on the SA button.

I used 14 hardline connectors from RF Industries in San Diego. At about \$31 each these are a good deal, and thanks to WB9Z for donating four of them. I got proficient pretty quickly at installing these, one of which is shown below.



Bringing the Heliax into the shack required repositioning nearly all of the cable entry points at the bulkheads in the shack. It took considerable head scratching to figure out the smartest positions for the new cables, and a lot of contortions to move them all to different positions. I used pink notes at every cable position to keep from getting hopelessly confused. The photo shows one of the three coax entry bulkheads.



In addition, the six port bulkhead's six ½ inch holes needed to be enlarged to ¾ inch to accommodate the bushings that hosted the hardline connectors. Here's N7WA who gamely spent a couple of hours with a round file to make the holes big enough to handle the hardline bushings.



From there it was straightforward to raise each cable into place on the towers and then secure them down the towers, across the overheads, and around the porch into position. Here are two of them ready to be raised to the 75 foot point on the US/JA tower.



For a couple of weeks it seemed like there were cables and yellow ropes everywhere: in the yard, hanging from the porches, and at the bulkhead. Here Dorothy caught me on the top of the ladder dressing in two of the Heliaxes and consuming some of the 1200 tie wraps and eight rolls of Scotch 33 tape.



The next photo shows the ditch to run the Heliax to the 3el 80 wire beam. Lots of digging, and 11 radials had to be carefully navigated. W0NB and I did this original installation many years ago, and now it has been updated with hardline. I slid the PVC segments on the Heliax around the radials to protect it from future radial-digging-guys who may not realize the transmission line is under the radials. Call 811 before digging.



Finally, here is the Heliax feeding the 160 TX antenna.



It was worth it, and we are now "All Heliax." Thanks to VE3CX, K8IV, N0YY, and WB9Z for your donations to this project. This project has erased the need for future troubleshooting and repair of our feedlines.

K0MD and Inclisiran

Congratulations to our member Dr. R. Scott Wright, KOMD, Mayo Clinic, who has recently received international recognition in connection with inclisiran. He was principal investigator in highly successful clinical trials of the new drug. This is a new RNA blocker that more than halved LDL-cholesterol levels in a population of patients with atherosclerotic cardiovascular disease (ASCVD) and elevated LDL. Scott has recently been involved in presenting results at the European Society of Cardiology and at AHA in Philadelphia in mid-November. His intense involvement in this has prevented his being able to run QSOs at Signal Point, but we hope to seeing him here in the near future. In his spare time (!) he's Editor of the "National Contest Journal."

Signal Point Recent Maintenance

Dorothy has attacked the QTH with energy and imagination and it looks dramatically better. Some of the interior doors were delaminated at the bottom and she patched and glued these, then re-painted and they look great now.



The bookcase pictured below was filthy and stained and critters were living in it. She took everything off the shelves, tossed the junk, organized the remainder, and then sanded and painted it (below).



Mildew was growing on the exterior soffits. Because we put top quality enamel on them years back, they cleaned up pretty well, but this still required effort.



It's little wonder that we get along so well, because when she sees something dirty, broken, or missing she's no more able to sit still than I am. If that's workaholia, then we're both guilty.

The ceiling in the West Bedroom got stained and brown because of roof leaks caused by the 10 meter driven element piercing the roof. Here she is putting on a stain blocker followed later by fresh white enamel.



None of the air conditioners were working well. Dorothy's a big filters person, and she discovered that they were all terribly clogged. Here she is cleaning up after cleaning the filters in the shack airco.



After September's break-in attempt Zoom got lock shields welded onto all four exterior bar locks. This was a nice security improvement, but it left a terrible mess of burned black walls and steel from the welding process. I cleaned it all up and put on two coats of epoxy paint. Here's Dorothy applying the final dress coat. She also worked patiently with many coats of spackling to repair the minor damage to the masonry wall from the bad guys' crowbar.



On arrival here in October the air conditioner in the East Sunroom was working particularly badly. It turned out that the insulating tubing on the refrigerant lines had almost totally disintegrated and crumbled away. I made an emergency order to Amazon, and KB7Q very kindly brought the new tubing down in his carry-on luggage. Dorothy and I worked for a couple of hours and here's the new insulating tubing mostly in place, some 1/4 inch ID and some 3/8. This and cleaning the filters brought this airco back to full efficiency. Thanks Gene!



The kitchen drawers were sticking and the veneer delaminating, so here's Dorothy with weights on the front of one of the drawers after re-gluing, spackling, and then sanding. All of the drawers got this treatment and are now clean, organized, and working smoothly.



We made a stop at Kooyman in connection with a grocery trip and got the 120 grit sanding pads Dorothy wanted for the drawers. What a gal! How many women even know what 120 grit is?!



The wall tile in the West Bathroom burst off the wall this past February, and we made extensive repairs. The same is about to happen in the East Bathroom, so before the contest we removed the shaky tiles before they came off on their own and got broken. Here we are starting that process. The box is to control the course of tiles below so they don't cascade off the wall out of control and break. We'll tackle re-installing these after the CW team departs.



The blue venetian blinds in the shack room had completely failed by the time October rolled around. The support strings were broken in many places and about to disintegrate in others. This thing was custommade for the shack years ago and was very expensive, but it was time for it to go into the trash bin. Dorothy took window measurements and dragged me into the stores where she quickly found some sunshade blinds in stock that were almost the perfect size for the windows. We installed those on contest Friday, and they look great. In the interim, of course, Dorothy sanded and painted the window frame.

When not working on these specific projects, Dorothy was sweeping, scrubbing, laundering drapes, patching torn things, re-lamping light fixtures and a thousand other things. We're all in her debt when we come here and the QTH is in clean and attractive condition.

My New ID Card: YES!

You're read in the newsletter about my trials in getting an appointment for the five year renewal of my Curacao ID card, the "sedula." The appointed date finally arrived, and I was at the desk checking in at about 10:40 on November 4 for my 10:45 appointment. At that moment the power dropped. This turned out to be the first island-wide power outage in 13 years, and it nailed me badly on the ID card renewal. Power was out for over 12 hours. I finally got a new appointment for December 12, this time with a better result..

Our "New" 3CX1200A7

In May we bought a lightly used tube from K6AW because he was a known and trusted seller, and we could use another spare for the AL-1200s. The story as told by N5OT was that it was bought new, it was taken out of the box long enough to confirm it worked fine,

and put back in the box to be kept as a spare. That was at HC8N. Years later it takes up residence at PJ. These tubes are scarce on the market. N5OT graciously brought it to the island in November as a carry-on item, raising a TSA eyebrow or two. I put it in the new AL-1200 (7) from Marty on December 4, ran it on filaments only for eight hours, then fired it up. It's good! It makes 1300 watts easily, and confirms good operation of the latest AL-1200. I'll run it for awhile more, then put it into spares.



Happy Birthday Europe Tower

I'm writing this on December 4, the exact one year anniversary of "crane day" when we replaced the old tower with the new in 93 minutes. The photo shows very brave and very capable Tim Jellison, W3YQ, grinding off the mast with a Makita angle grinder. Soon after the photo the crane lowered the 40 meter yagi to the ground after over 17 years of flawless service. Congratulations to all of us for succeeding on this, our club's biggest ever project. A year later that tower and everything on it still look perfect and corrosion free.



Kitchen Painting Project: Complete

Dorothy worked for a week and a half, nearly full time on this. She removed EVERYTHING from the cabinets and pantry, stripped out all the old contact paper, power-sanded inside a dust tent for two days, and painted patiently for four more. The old kitchen looks vastly cleaner and brighter. She also gave us a beautiful blue shelf stack to show off the white dishes, below. This photo also shows the new seventeen buck Chinese wall clock. I had to go to the store three times to get one that worked, but it's good now.





Remote PJ2T Operation Update

I set up the remote station on Wednesday the 30^{th,} and KB7Q and K8ND quickly got into the action, making lots and lots of QSOs using the 500 watt amp on loan from K8ND. This is a fabulous benefit of your membership in CCC. Who will be the next member to

join the remote ops activity? It's very easy to set up using KB7Q's superb documentation. We expect that the remote station will be available until early April. Once KB7Q mothballs the station and returns to Montana the remote will be unavailable because an onsite control operator is required. Now is the time to get in on the fun.



New US/JA Beverage Operational Report

The new US/JA Beverage, 880 feet long, is now in service on the Ridge. It performs well and will be completely safe from the bulldozers and will require much less periodic maintenance than the old one. The N7IR common mode chokes are also installed on both ends of the almost 1200 foot feedline. Because it is not shielded by the hill like the old one, it hears a bit more Europe, but this has not been a major operational problem. KB7Q and K8ND are on 160 almost every night via the remote using this new antenna with good success.

Donated Low Pass Filter from ND8L

Big thanks to our new member Ray, ND8L. He saw in the last newsletter that the Bencher YA-1 at Station 1 had caused our problems in CQWW SSB, donated one he had on hand, quickly shipped it to Gene in Montana, and Gene brought it down here. We had one in spares, but it went to replace the Station 1 filter. Now Ray has renewed our spares inventory, ready to get us out of the next low pass filter mess.



Stuff from K8IV

A big thanks to member K8IV who saw in October that we badly needed some critical tools. He quickly got into action after getting home and bought and donated a parrot beak cutter and coax connector crimp tool. Now we can do solderless coax connector installation on site.

Curacao Must be the Place for Contesting

Dorothy and I stumbled onto this new coffee shop in Zeelandia. 5999 is, of course the CQWW CW contest exchange.



CQWW CW Recorded for Contest Committee

Each year K8ND arranges with Jean-Claude, PJ2BVU, to record the entire CW contest at the PJ2T skimmer site on the island. Jean-Claude is CTO at Curacao Surveillance Systems, the site of the skimmer. He has been a good personal friend for many years. Here's (next page) PJ2BVU handing over the disk drive on December 3. Dorothy will hand-carry it to the States and mail it to N8BJQ.



Quick Lunch with PJ2BR and PJ2ZZ

The photo shows us with Brett Ruiz, PJ2BR, President of VERONA. We met Brett and his XYL PJ2ZZ for lunch at the Cubana Beach Hotel in early December. Brett re-expressed his appreciation that all of our CCC members are concurrently dues-paying members of VERONA.



Bulkhead Renovation

The "All Heliax" project forced renovation of the cable entry bulkhead because the entry position of nearly all cables had to be changed. In connection with this I took everything apart and cleaned, relubricated all connectors and adapters with conductive grease, put on entirely new printed labels, removed extraneous cables, and neatened up everything. Here's the result, a much more orderly entry panel. The coax coiled on the floor is numerous tuned coax stubs to help control interstation interference. You can see some of the new RX cabling system boxes at the top left in this photo. A thing of beauty, but only to a contester.



Welcome Two New Members

We're very excited that K9DR and N7WA have joined CCC effective December 1. Look for much more about these two great guys in the January newsletter.

Member Spotlight: Uli Thielke, DL8OBQ

When I was about 16 years old, a friend took me on a trip to a nearby hill. Some people had set up an antenna and sat on the back of a truck. They participated in a VHF contest. I was immediately fascinated by this hobby and soon had my first callsign DG10AG.

For the big license you needed Morse knowledge and it took a while until I received DL8OBQ in 1990. During this time I did many VHF contests and expanded the station equipment for 144Mhz. We were mostly under DF0RI qrv and also had many guest operators. So there I met Carsten-DL6LAU and Heiko-DK3DM. At the best of our times we had 8x9el tonna (all vertically stacked) and two or three "smaller" groups. The 8x9 group could be rotated by Armstrong rotor. In 1992 we twice won the DL-VHF Contest. In May with over 1000 QSOs.

From 1990 I was also on HF qrv and in 1991 I had the opportunity to participate in an M/M operation at 4U1VIC in Vienna. In the CQWWDX contest 4U1VIC counts as a DXCC and the pile-ups were neat. We had also packed something good because the existing antenna system consisted of only one GP. For 20m we have built a 4el Beam on the roof of the 130m high building. In 1993 I was again at 4U1VIC as M/S. Incidentally, I did not see anything of the very interesting city of Vienna during my three visits. Through these expeditions I got to know many other hams and there were new possibilities. In 1995 I was with Mario-DL4MFM and Bernd-DK7ZH at EX2M for another CQWWDX SSB. This was also an interesting experience. The station is located in the TianChan mountains.

1997 I was in the Caribbean for the first time. Together with Carsten-DL6LAU and Rolf-DL3LAR we were active for two weeks under J75T. We participated in both ARRL Contests and the 160m SSB Contest. For 160m we had a very low dipole. My Titanex V160 broke during construction and only had a height of 20m. So it worked very well on 80m, big pileup to EU! I also had a great experience in the 160m SSB Contest. At the beginning of the contest not much was workable and we gave up quickly. None of us had experience at 160m. I tried it again at night. I heard ON4UN very loud and tried to call him. He had a decent pile-up that I could not break. Then, other stations from the pile-up heard my call and tried to work me. That's how I took over the pileup of ON4UN.

In the summer of 1997 I went again with Carsten. Together with Heiko-DK3DM, Falk-DK7YY and Gunther-DJ6TN we went to OJ0AU for 10 days, including IOTA Contest. On the return trip, the engine of my car broke. Presumably, the trailer and the equipment taken was a bit too much. We had two generators, a lot of diesel, KT34A, Titanex, Alpha 77DX, TL922 and other equipment with us. The other OMs participated in the repair.

At the end of 1998, I was traveling for a pure DXpedition under 3D2DK and T22FW. This time with Falk-DK7YY, Dietmar-DL3DXX, Tom-DL2OAP und Manfred-DK1BT. Especially Tuvalu was very interesting.

In 1999, I did the CQWWDX SSB at J3A. The station is not constantly built. All masts and antennas are in the storage and must be set up before the contest.

Then I did some CQWWDX contests on V26B. This station is permanently built. Before the competition, however, many repairs were always necessary. I've been to Antigua five times, most recently in 2011. I remember specifically 2002, with three guys (Brian-N3OC and Ed, N2ED) we did M/2. The 11000Qs were fun.

In 2003 I did ZA1A together with Carsten. We have made the IARU HF as HQ station and some contacts on HF and 6m.

Since 1997 I have been working as a software engineer for global engineering companies. Unfortunately, our

customers are mostly in areas that are not very interesting for amateur radio. But in 2003 I had to go to Malaysia and was able to visit 9M6A. It happened to be the WAE SSB weekend. I won Oceania. In 2006 I was there again. This time from the Eagle Plateau. This is a kind of small resort created by Alfred 9M6MU. It is completely self-supported on a hill in the middle of the jungle. I did the WAE again with LP. The conditions to EU were very poor. But again 1st place in Oceania.



Uli, DL8OBQ at Sol Food October 20, 2019

2004 I was the first time on Curacao. Carsten had previously been there for a RTTY contest and had met Geoff. We were there from Friday to Monday and made the WAE under PJ2P. Unfortunately, we did not know much about the station. On the first day we used the fake-beverage cable and we wondered that it works so bad. At that time there was no antenna on the Ridge. But it was a nice trip and I can still remember it well. Especially that Carsten told me that you would do not need a voice keyer at PJ2T (harhar).

In 2005 I was together with Heiko at CT9L. This is a station built by Walter DJ6QT. The antennas were not famous but the location is great. We also had very good operators. We won M/2 worldwide. (PJ2T with N4RV and others were behind us).

After that, I was many times on Curacao. First often for the WAE SSB or IARU HF. In 2005, together with Heiko and several other DLs, we won the WPX M2 worldwide. In 2014 I was able to do the CQWW SSB at PJ2T for the first time. Five us (Heiko, Geoff-W0CG, Kei-KG2A, Rich-W3ACO and myself) participated as M/S and we won SA. It was one of my best contests. A few people and optimal result. In 2016, we even won M/M worldwide. But that year was no competition from zone 33 or 34.

PJ2T is a very good station. It is a great achievement to keep this station running for nearly 20 years. That would not be possible without Geoff. He did and does a great job! Many other big stations came and disappeared during this time. Unfortunately the location of PJ2T is not optimal. I'll never understand why they chose this place. Sure, PJ2T won the ARRL many times. But always in the M/M class. There is almost no serious competition. I do not think that you have a chance to win in M2. This is even more true for the CQWW. There is no chance against stations from Africa.

I am now active at PJ4K. Jack-N4RV has known Walt-WA3LRO for a long time. Last year in October we just put up antennas and participated in the CQWW for only a few hours. The first serious contest was made by Rich-N6KT in the WPX SSB. He made more QSOs in 36h than PJ2T in 48h (4981/4643). Now in October we had additionally a 2er stack for 15m (fixed EU) and a 4el 80m wire-beam fixed EU. But we still had several problems. The first night only 2 stations were up and Saturday morning 2h no electricity. In addition, you could only turn the 20m antenna together with the 15m. This has immense disadvantages in the afternoon. We solved this in the week after the contest: putting more antennas to the tower.

At home in DL I had some years a tribander on the roof of my house. But I live in the middle of a town so I could not really do what I want. I took it down when I started to run a good station in the countryside together with Heiko. We had 2 towers (24 and 30m). You could do a lot with that. We were first active under DP4K and later as DA2C in many contests. Heiko has some DL WAG and CQWW records. In 2017 we took our stuff to DK3EE and set up the two towers there.

A Closing CQWW CW Photo from Geoff

In closing, here is a cool shot into the shack from outside in the wee hours Sunday morning of CQWW CW. KB7Q is clearly visible at the 40 meter position through the blinds. Our shack was an island of light and activity in an otherwise dark and featureless, dead quiet neighborhood at the end of nowhere. That's the allure of PJ2T.



73, Uli

