



Signals From The Point

Official Newsletter of the Caribbean Contesting Consortium
Editor: W0CG

Volume 19, Number 8

August 15, 2019

Thanks for Donations to Youth Trip

A giant thanks to KB7Q, SM4KYN, N1ZZ, K0MD, K8IP, K8PGJ, and WI9WI who responded to my E-mail plea for help with the costs of supporting the PJ2Y youth trip to Signal Point. These guys collectively donated \$250 of the needed \$575. There's more about the youth trip later in this newsletter.

CCC Membership Renewal Tally

Five members still have dues outstanding.

PJ2T Logistics in Action

On August 9 K8PGJ and my son met near Toledo and handed off this radio cargo (photo) from Pete's Grand Caravan to Adam's Grand Caravan. This is the Heliac from Illinois and Ontario that VE3CX brought to Dayton. Also on board are an A3W-S from WI9WI and Hy-Gain antenna parts from WI9WI and N5OT. Pete stored this stuff at his home near Detroit for the summer, then met Adam part way on the 9th to do the handoff. The next step will occur at my QTH in Ohio on August 23. K8IV and I will meet there and spool the rest of the cable onto this reel, carefully labeling the lengths of each segment to simplify things in Curacao.

Following that, we will get the length of donated Heliac from N0YY in Southern Virginia, details still open, and add that to the reel. I'll then prep everything for the ocean freight shipment to Curacao. This involves building the detailed packing list, labeling all items, and assembling the packet of invoices for Caribbean Cargo Services and customs processing.

Adam will then drive the whole thing to Miami sometime in September for the ocean shipping. He

was licensed as a with-code Novice at age 9 (KB8KIA), but only ever made one QSO, as his interests took him into a performing arts career. He's a superb musician and composer.



Special Thanks to K8ND

Jeff went to the island on June 29 for his usual summer Curacao "fix." In his 13 days on the island he did a tremendous amount of work that benefitted the club. He arrived immediately after the onset of construction at the hotel, and the photos he sent were a huge help in our understanding what was happening and what we would need to do to adapt. Jeff also made numerous drone flights, and those photos were

the key to the decision about how and where to install our new permanent US/JA Beverage on the Ridge.



Jeff also put in a huge effort un-mothballing the station and setting up and testing everything in preparation for the arrival of the Dave Kalter youth group. That's hot, hard work hauling all of the outdoor furniture and then getting out the gear and hooking it up. He worked closely with KB7Q remotely to bring the computers all up to date, and then configured and supported the remote station during his stay. For me, with absolutely no station at home, it was a rare treat to be able to run a few PJ2T contacts remotely on 40 SSB.

K8ND also triaged the mail in the box, found license invoices for PJ2T and my PJ2DX license, and made the long and patience-testing drive to Bureau Telecommunicatie to pay those renewal fees. He also hand-carried VERONA membership renewal dues for all of us and presented them to the club at their July meeting. When the contractors showed up unexpectedly to replace the water line to the house he oversaw their work and sent a series of wonderful photos that helped put my mind at ease that they had done things right and did not wreck our buried coax runs. He replaced the battery in the irrigation system, carefully testing beforehand that the new battery was up to voltage. Jeff also spotted a fallen section of rain gutter and sent photos to me that guided its replacement by DL8OBQ and N4RV.

Signal Point and the PJ2T station are a wonderful fun resource that all of us in CCC share. But it requires that we all pitch in and share the work of keeping them viable, and K8ND sure did do his part in July. Many thanks!

October: CQWW SSB Contest

It's getting close. K8IV, W0CG, ND8L, K8PGJ, KF4DX, CE3CT, K0MD, VE4GV and (hopefully)

N8NR will represent CCC on the air in the big event. There's still room on the PJ2T team for one more SSB operator. The King bedroom at the Moran house is still open. See http://www.pj2t.org/ccc/CQWWSSB2019/operator_schedule.cqww.ssb.2019.htm if you're interested in the operator schedule.

November: CQWW CW Contest

VE3CX, W0CG, KY7M, NA2U, KB7Q, N7IR, N5OT, N7WA, K2PLF, and N0YY will staff the station for CQWW CW. We are waiting to hear if K1YR and/or DF9LJ will also be part of this team. Conditions are lousy and, paradoxically, this is when we have the best chances to finish high in the standings. When North America has difficulty working Europe, stateside beams turn southeast. Here's last year's WW CW crew hard at work on the night shift. All CCC members are welcome at all contests, so if you decide to sign on for this one, lodging will be found for you off-site.



PJ2T Visible in the July/August Issue of "NCJ"

Check out Page 10 of your most recent issue of "NCJ." "A Pictorial Guide to Corrosion-Proofing for Seaside Antenna Systems" may not be the longest article title ever to appear in "NCJ," but it's close. We thank CCC member Dr. Scott Wright, Editor of NCJ, for running this article. It's a very compact compilation of the lessons we suffered mightily to learn over the last 19 years, and helps to further heighten PJ2T's visibility in the contesting community. Hopefully we can help some other contesters avoid the pitfalls of planting steel near salt water. We've already received considerable positive feedback from the contest community on this article.

Others have said that we are nuts, and that nobody else would be willing to work so hard. ☺

A Pictorial Guide to Corrosion-Proofing for Seaside Antenna Systems

Drastic measures are needed to protect towers and antennas within about 100 meters of salt water. Here are workable practical techniques developed from almost 20 years of experience at PJ2T.

Each morning our towers in Curacao awake drenched in a moderate coating of intensely salty slime, driven onshore by the trade winds. Only the lower 15 feet are spared. By about 3 PM, the hot sun has dried it out, but the damage has been done. As a result PJ2T's 100-foot Rohn 55 tower turned brown within a few weeks of installation in 2001. Eventually, in spite of aggressive maintenance, large holes developed in the legs, some of the braces broke under the weight of a climber, and the tower was lost. We've learned from this and now have developed good salt protection techniques. The following guidelines may not be scientifically optimal or absolute best practices, but they work for us, and they'll work for you.

Avoid Exposed Steel Tower Sections

Steel towers must be coated prior to installation. We have had excellent success with epoxy, which is sometimes called "two-component paint." It's expensive but completely worth it. Brand names vary, depending upon your locale, but all of these two-component paints come in two containers — the coating in a gallon can, and the hardener in a quart can. You mix them as instructed at somewhere between a 4:1 and 6.5:1 ratio and, once mixed, they have a maximum usable pot life of about 2 hours. This means you have to hustle!

Good surface preparation is essential prior mixing the paint. Even brand-new tower sections must be prepped because of manufacturing and shipping nicks and scratches and areas of powdery imperfections in galvanizing. As soon as your sections arrive on site, they begin to degrade. Just a couple of weeks in the salt environment results in a light corrosive coating that must be removed before applying the epoxy primer.

To prep, wear a mask and use a vibrating sander on the entire surface of a new tower section. Areas that cannot be accessed by the sander must be done by hand. This requires about three hours for a 10-foot section. The result will be a shiny and well-

abraded surface (see Figure 1) that will be highly receptive to the two-component primer. Next, immediately wipe down the entire tower section with a vinegar-soaked rag. This 5% acidic solution will clean and micro-etch the surface.

Let the vinegar dry for about 15 minutes and then, *without delay*, apply the primer coat of two-component paint. Wear gloves, long sleeves, long pants, expendable shoes, and either remove or protect your glasses. Epoxy paint is very unforgiving.

Use a cheap chip brush, because it can't be cleaned afterward. This paint is too thick to spray and too tacky to apply with a paint mitt. One section takes about 90 minutes to coat. Be patient, use the small brush, and coat everything except the ends of the legs that will swage inside the adjoining section. It helps to build a painting table so that the section is at waist height (see Figure 2). Give the primed section about 24 hours to cure, but no more than that or salt will begin to accumulate. Then apply a coat

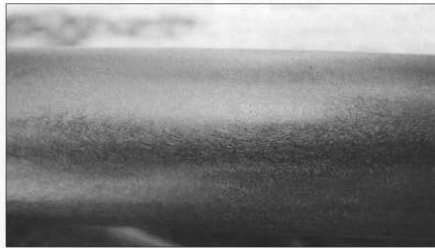


Figure 1 — A close view of a Rohn 55 tower leg after sanding, ready to receive the epoxy primer coat.



Figure 2 — This painting table at PJ2T makes section painting fairly easy.

10 July/August 2019 NCJ

Repeaters on Curacao

Here's a summary from the VERONA web site of the available of repeaters on the island. Thanks K8ND. We're all VERONA members, thus welcome to use these facilities.

- Analog repeater with Echolink (node 127954) in Willemstad, 147.000 100Hz + shift
- D-Star repeater near Santa Catherina 438.825 – 7.6 MHz with full ircddb access
- Analog+C4FM repeater near Westpunt. Callsign PJ2PZ, QRG: 146.700MHz - 600kHz * 100Hz (This repeater has a large footprint, you may reach Aruba P4 and Venezuela YV.)
- DMR/D-Star repeater in Willemstad 438.900 – 7.6 MHz
- APRS is available throughout the island on 145.050 MHz (Some iGates are rx-only, so you will not always receive a receipt on VHF.)

- WX information from the Caribbean region is broadcasted through APRS as well
- PACLINK: 1k2 AFSK Packet access to the Winlink system running on top of APRS. This service is located near Santa Catherina. Connect PJ2A-10.

PJ2T Antenna Stories: 80 Meter Three Element Wire Delta Loop Beam

This three element delta loop beam in the backyard points toward Europe. It's the antenna you get when pushing the "80M EU" button, third down on the left in the photo.



N8VW (Pat) did the design of the antenna and he and KU8E and I installed it in 2001. All three elements hang from a black nylon rope support between the US/JA and Europe towers. The center element is the driven element, which is fed just above the west corner by coax that emerges from a buried conduit nearby. The west corners of the loop are anchored near the perimeter wall. The east corners are tied off on three aluminum poles, about eight feet tall, set in concrete. These were made by recycling six aluminum legacy fence posts that PJ9JT installed, and splicing them together with aluminum channel and stainless steel pile straps. N4RV and I renewed some of this splice hardware a few years ago.

There's a knife switch at the bottom center of each element. Open all three switches to move the array from CW to SSB frequencies. Closing those switches adds a non-terminated wire for CW that looks like a capacitor at that point in the elements. Because the yard was not wide enough to fit in the large reflector element we added some ladder line to make it tune to the desired frequency.

This antenna is probably not an optimum design. K6AM has recommended that we convert it to an inverted vee beam, but there's just not been enough time to do that yet.

You'll find this antenna to be very effective into Europe, but not noticeably more so than the 80M Ridge inverted vee. Because the takeoff angles on 80 are usually at 30 degrees or higher, this antenna is not very directional and will work into the States also. If using this antenna during a multi/multi contest causes too much in-the-shack interference on other bands, you can switch to the 80M Ridge vee.

PJ2T's 2019 WPX SSB Team Photo

Thanks to VA7AM we finally obtained a photo from this contest.



This is the mostly-Georgia crew led by our member Jeff, K1ZN. L-R Mac (WT4BT), David (AG4F), Chuck (AE4CW), Dave (VA7AM), Gene (KB7Q), Jeff (K1ZN), Nathan (K4NHW), Bill (KV4UD), and missing from the photo Jimmy (PJ2LJG) and Bob (NF5F). Nathan is the maker of the beautiful precision-cut PJ2T wooden callsign signs that we have enjoyed at the station for years. This was his second visit to the island.

We learned in early August that K1ZN would be leaving the CCC group, indicating that he's found that he is much more a DXer than a contester. Jeff

has been a generous supporter of PJ2T and has organized multiple group trips (as above), and we wish him the very best.

The Dollars and Cents of PJ2T Contest Weeks

One point of tremendous pride for PJ2T is that we have been continuously in operation for nearly 20 years. Other high-profile contest stations rise up, find out how hard it is, and don't last. But we're still standing, strongly, and much of that owes to our business and operational model. Here's a review of the history and rationalization for that model, and of the various charges we impose on ourselves when we contest.

QTH Support Donation When we started in year 2000 we studied the costs of running the Signal Point house and worked backward to determine the needed weekly rent. We calculated that if we were active for all of the nine primary contests each year, we would need about 800 dollars of rent revenue per contest. So we set the member rental rate at \$1100 with the understanding that if the renting member had as much as 300 dues credit on account, then that amount could be applied to reduce the rent to 800. In 2005 the real estate tax on the house was increased by the government from ~\$300/year to about \$2200/year. To cover this sevenfold increase we set the rent for larger (>3) contest groups to \$1200. Those numbers still hold today. Rental for non-members is much higher, but in order to protect our equipment we almost never rent any more to non-members. The member rental rate for other than the nine primary contests is only \$200/week plus reimbursement of metered utilities and station support contributions.

Station Support Contribution Everyone who operates at Signal Point is asked to contribute \$100/operator/week to the station support fund. This is the fund used strictly for the radio station -- not for the real estate. For 19 years that amount was \$75, but it was increased at May's Dayton meeting to help build funds for our new professional climber NR0X. These contributions, plus the annual station support dues, pay for transceivers, amps, computers, antennas, maintenance, and all other things radio.

Utilities Surcharge In 2005 we finally tired of suffering and bought our first air conditioner. That 12,000 BTU unit went into the East Bedroom. It was so popular that the members immediately asked to have one in the West Bedroom. We added that second unit, and with guidance from the CCC Board

decided to impose a \$100/week "utilities surcharge" to help with the extremely high cost of running these two air conditioners. That number was carefully calculated based on only running the air conditioners in the bedrooms at night, and not setting them any lower than 26C.

Outside Maintenance Surcharge For the first few years Geoff and several other members did all of the rust control scraping and painting of the towers. By about 2006 those other climbers had departed the club and I was left on my own to do all this maintenance. At that time we found a professional tower crew on the island and trained and hired them to do the rust work on the Europe tower once per year. I agreed that, with this help, I could handle the US/JA tower on my own. The rate for the climbers was \$60/hour. Doing the calculation, we figured that if we collected \$175/contest for "outside maintenance" that this would mostly fund one repainting of the Europe tower about every 15 months. After doing this a couple of times it was apparent that the professionals were not doing quality work, and that the rust was again getting the best of us. At that same time I had my marriage dissolution and the attendant monster personal financial crisis, and I asked the Board if I could become the paid tower painter at a rate of \$40/hour for the time spent off the ground. That worked for many years, but now that we have hired NROX to do this work, that \$175/contest will go into the fund to help pay Jason.

Prior column: Geoff's typical hand-written summary of contest costs, this from a contest in February, 2012.

Special Callsign Fee Until two years ago we had to make an application for every contest for permission to use "PJ2T," and pay the roughly \$75 processing fee. After over 15 years of political and legal effort, and considerable legal expense, we were finally granted a club license and permanent use of "PJ2T." Thus this special callsign fee is now zero.

Internet Surcharge For our first eight years our Internet connectivity was via a slow telephone dialup for which we were charged \$3/hour. For a 48 hour contest this was \$144, so we imposed a per-contest Internet surcharge of \$144 on ourselves. Finally, DSL technology arrived and the hourly connection rate was replaced by a monthly flat rate. We calculated that if we retained that \$144/contest charge that this would almost precisely cover the DSL bill. While that's not quite the case now, it's still almost enough and thus we have not changed that surcharge.

Other Costs of a Typical Contest Week Lodging is the big one. When we have small teams and everyone can sleep in the Signal Point house, lodging cost is zero. Normally, though, we rent an additional house in the neighborhood. That cost is divided by the total number of sleepers on both houses, except that CCC members get 30% off that amount in recognition of the dues they pay. If both houses are full and someone has to stay in commercial lodging elsewhere, that cost is also added in and divided among the entire team. We also collect a \$60 cleaning gratuity for the rental house ladies. We have to charge each op lodging for a full week, even if they stay for fewer nights, because an empty bed is still a cost to us. I pay all of the rental house costs in full sometimes as long as a year in advance. This has turned out to be simpler than asking for deposits from all of the team members.

I rent a vehicle normally for about six months from mid-October to mid-April. This is expensive (\$29/day) but still calculates as cheaper than buying a PJ2T car. Many years ago the Board recommended that for the days of a contest operation I should be reimbursed by the team for the vehicle cost. The logic was that the cost of commercial taxis for trips back and forth to the airport (about \$95 each way) greatly exceeded the cost of my rental car. Thus each member of a contest team is asked to kick in a share of the cost of our car for the contest week and a

ARRL SW CW 2012 - Accounting 19 Feb

SHARED STATION EXPENSES
 Rent 800
 License 60
 Station Light 40555 450
 Utilities Surcharge 100
 Outside Maintenance Surcharge 175
 Internet Cost (48 hours) 144
 1725 / 6 ops = 287.50/op

VEHICLE AND FUEL
 Truck lease 7000 = 210
 Fuel 400 214.23; 2/13 800.00; 2/15 420.57; 2/16 822.57 = 816.22
 Airport parking 34.54
 305.99 / 6 ops = 50.99/op

LODGING
 Rental house 22340; 4 CCC members @ 30% premium →
 14614.20 2354.99 each, non-members 640.72

SHARE AIR CONDITIONING
 End room 11 Feb 1276 (air conditioning)
 Start 2x-24x 12 Feb 1172
 99 20.42 @ 50.57 = 49.50 / 6 ops = 8.25 / op

CONTEST GROCERIES AND BEVERAGES

OPERATOR	SHARED STATION	VEHICLE	LODGING	SHARE AIRCON	GROCERIES & BEV DRINKS	TOTAL
KR2PFA/HJ	287.50	50.99	410.57	8.25	218.56	1092.87
NB2V/CH	287.50	50.99	354.67	8.25	269.08	941.18
WB2V/J	287.50	50.99	354.67	8.25	243.80	1026.76
KB2VWD	287.50	50.99	460.73	8.25	53.24	841.45
W2V/B	287.50	50.99	354.67	8.25	175.26	877.17
KP2L	287.50	50.99	354.67	8.25	144.75	846.70

Check payable to: CCC/Contest Group Thanks for supporting PJ2T! @

couple of days prior during the grocery shopping trips. Operators are, of course, free to rent their own vehicles if they want that additional flexibility.

Shack Air Conditioner It was pure misery working contests when the shack temperature was 99 degrees. We did this for years because the cost of air conditioning that big space seemed unreachable. Finally our member K9SG said enough is enough and offered to donate 50% of the cost of an air conditioner for the shack. As the guy who has to pay the electric bill, I assented only on the condition that we meter the actual power consumption of that big contraption and pass the hat at the end of each contest. I was baffled about where to put the air conditioner, however, knowing that a compressor on the ocean side would quickly fail to corrosion. WA9S solved the quandary by suggesting that we mount the unit on the bulkhead over the kitchen sink. This would be a difficult installation because of the long run out back to the compressor, but we made it work. The 36,000 BTU unit was about \$2600 installed. I installed the long condensate line afterward. The metered cost of running that air conditioner for a contest week is only about \$20/operator for a typical large team, and life is now much improved both for the people and for the equipment.

Chef We have tried unsuccessfully for years to hire a local person to do the shopping and cooking for our teams. People are sometimes available, but are very expensive. Thus we began offering a 50% airfare subsidy for anyone willing to take on this work. Divided among our usual contest team size, this has turned out to be affordable at less than \$50/op, and we eat very well.

Groceries and Beverages I post the cash register receipts on the refrigerator wall (photo in the next column) for transparency. We add up the total at the end and then calculate the cost of each individual meal and multiply by the meals-eaten numbers. Ops are asked to reimburse for their actual meal counts.

If a meal is served at the house but you opt to eat out, we do ask that you kick in for that skipped meal.



Once we know the total costs, and a very close number on air conditioner use at or near the end of each contest, I tote up all of our costs. Those are the numbers I post on the refrigerator wall. All of the calculations are shown in detail, to the penny, so that our ops can see that nobody is making a dime on any of this – we're just reimbursing what it costs to keep things going at PJ2T.

Who Is N8NR?



N8NR is one of the most loyal and very long term generous supporters of CCC.

Bob Kuhnle, N8NR, is pictured at the left above. He has been a CCC member continuously since the era of this photo, March 17, 2001. He and I (red hat), KU8E, and W8AV had just finished test-fitting and labeling all of the Rohn 45 and 55 sections that we were about to ship to Curacao. Bob donated quite a few of the tower sections. It was a cold, snowy, mud-sloshy Northeast Ohio afternoon at W8AV's house, and we were glad to have the job done.

That June, Bob and I did the climbing, N8BJQ and my wife and son handled the ropes, and we built both the 100 foot and 80 foot Rohn towers in Curacao. I was not the most experienced climber, and I learned a

lot of technique from Bob. We put up the entire 100 feet of Rohn 55 in a single day, working in ferocious wind.

Bob’s long term CCC membership is remarkable in that he has only been able to come to the island (best guess) three times in these 18 years. He’s “retired” from Corning, but they are still keeping him very busy post-retirement. Not only has he supported CCC in all of that time, but he’s made very generous supplementary cash donations all along that way. He has a beautiful superstation near Palestine, Ohio, but work makes it hard for him to get to spend much time at home. Thanks Bob!

PJ2Y Youth DX Adventure Was a Success

Thanks again to our member Uli, DL8OBQ (next column) for making the trip to Curacao in mid-July to support the youth. Uli reports that they made the most QSOs ever on a Dave Kalter Youth DX Adventure trip. Thanks also to N4RV for going to the island to help with the youth visitors.



Above: Uli Thielke, DL8OBQ



Above: Bryant, KG5HVO, the primary youth CW operator.

Total Contacts by Band and Mode:					
Band	CW	Phone	Dig	Total	%
80	26	15	0	41	1
40	612	987	0	1,599	24
30	233	0	0	233	4
20	719	2,861	0	3,580	54
17	141	289	0	430	7
15	112	414	0	526	8
12	41	45	0	86	1
10	35	50	0	85	1
Total	1,919	4,663	0	6,582	100



Audrey, KM4BUN.



Jack, KM4ZIA, age 11.

Prior to the arrival of the youth Uli operated in the IARU HF World Championship signing PJ2HQ. He made a relaxed, just-for-fun effort working 16 of the 24 hours of the contest, making 1506 QSOs for a score of 1,250,439 points. Thanks to Uli for keeping our QTH active on the air.

Station Technical Tips

Tip 1: If the Ridge antenna system seems dead, check whether it has been disconnected at the coax entry bulkhead behind and right of Station 1. We sometimes disconnect that coax as a hedge against lightning.

Tip 2: When the bands sound much too quiet and stations are not answering your CQs, be sure that the “High Band” / “Low Band” toggle switch on top of your station’s antenna selector box is set correctly. The system is designed to connect the triplexer to a dummy load if that switch is set incorrectly so that the triplexer will never run unterminated. Some time ago we managed to make a handful of contacts on 10 meters on the dummy load, but things sounded very much better after flipping the toggle switch and hooking up an antenna.

Permanetizing PJ2T’s RX Antenna System

The photo on the next page (K8ND) shows all that remains of our US/JA Beverage antenna: a length of mutilated coax protruding from the ground west of the house.

This will ultimately be a blessing because it forces us to install a more permanent version of this antenna high on the Ridge northwest of the house in a never-trod area of thick sticker brush. In doing that, our goals are 1) an antenna that is much less susceptible to vandalism, and 2) the installation of a new infrastructure that will support more RX antennas in the future. This is a hefty project that we’ll do phase by phase.

The first phase, creating the RX antenna infrastructure, will begin in early November. I’ll install four RG-6 feedlines from the shack to a new junction box across the road. This is high quality direct-burial flooded RG-6. The cable lengths will be very long, but on the low bands the losses will be of no consequence. The planned junction box will be

close to the grey vertical telephone junction box at the left edge of the second photo below.

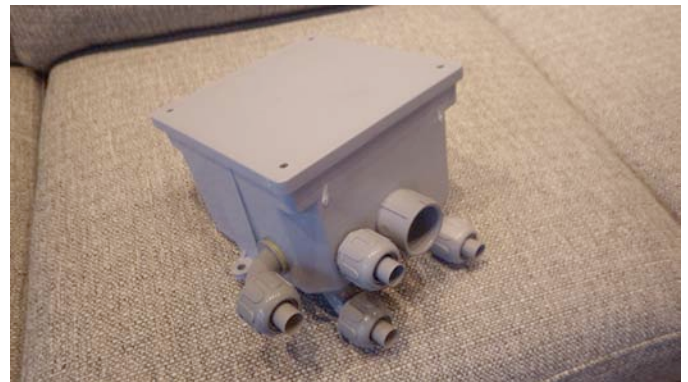


This is a perfect location because this is the site of multiple utility line terminations and valves straddling a lot line, and thus will never be disturbed or built upon. We'll set a four foot piece of leftover aluminum mast in concrete in the area of these utility

boxes and put the big Carlon junction box pictured below on top. I made up this box in Idaho August 8.

The four coaxes will run from the shack to the Europe tower in the overhead bundle, then under the "driveway" in two flex conduits, fairly deep, and then under the road through our existing buried conduit, arriving at this new J box below. This box will be the launching point for many interesting RX antenna projects.

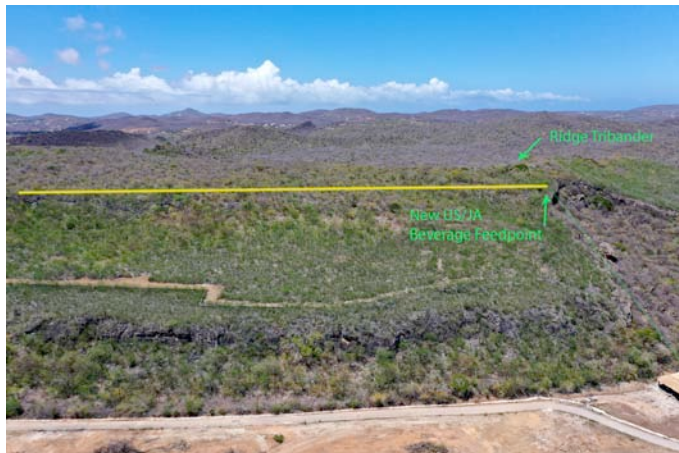
The four lines from the shack will enter the grey box across the road from underground via hard PVC conduit at the large fitting on the bottom. Each RG-6 line up to the Ridge will exit the box into conduit via one of the four flextite fittings. I'll even put some official-looking numbers on the box and standpipe, and thus it will look for all the world like it belongs there. The electric company guy will think it's for phones, and the phone guy will think it's for electricity.



Phase 2 (mid-November) will be to install one run of RG-6 on the surface from that J box up to area of the present Ridge tribander. Since RG-6 coax is so cheap, about \$85/1000 feet, we'll simply lay the feedline on the surface and see how it survives. It will take a different route to the Ridge than the 7/8 Heliac so as to not call attention to that expensive transmission line. If that feedline run proves unreliable over time, we'll put in a replacement run, this time taking care to encase it in conduit and bury it where possible.

In Phase 3 I'll install an 840 foot US/JA Beverage wire and its accompanying transformer, termination, and crow's foot radial grounding systems. We'll take care to keep this wire a healthy distance away from the 80 meter Ridge inverted vee. The goal will be to run this wire through the thickest possible vegetation in the hope that nobody will ever be in there to damage it. The K8ND drone photo shows the planned

approximate location of the Beverage (yellow) relative to the Ridge tribander, and a thin green line approximately where the feedline will go. I hope to have this done in time for CQWW CW.



At that point we will sit tight, probably for a year. If the vandals and Mother Nature leave us alone, and the feedline and antenna wire survive unscathed, next will come Phase 4. In this phase we'll replace the single wire Beverage with a two wire bidirectional system, and add a second coax feedline, thus giving us RX coverage of South America. Because the ladder line and transformers for a bi-directional Beverage are so expensive, difficult to install, and very difficult to repair if damaged, we wanted to start with a single wire antenna as proof of concept.

Phase 5 is presently unspecified. But we will have two free RG-6 feedlines in the box across the street, waiting to service two more innovative RX antenna systems on the Ridge. What we will do there is limited only by our imagination and our engineering skill.

Superb Photos and Video from K8ND

If you missed the link from Jeff in the E-mail, here's the URL for his July photos and airborne videos. Great photography and great piloting. Don't panic: both the neighborhood and the station are going to be even better after all of this construction.

http://www.k8nd.com/Radio/SWBR_Demolition_July2019/index.html

W0CG On What Wins Contests at PJ2T

It's the operators. I've experienced over a hundred contests at PJ2T spanning nearly two full sunspot cycles. In that time I've learned very clearly that

operators, not hardware, win contests. PJ2T wins because we have great people in the chairs.

Qualifier: My comments here apply only to multi-op efforts from stations generally in the Caribbean and the northern third of South America. When several approximately comparable stations in that region go head to head, it's the station with the best ops that will win. Bigger antennas, more watts, narrower RX filters, panadapters on radios, and more sophisticated station automation won't enable our competitors to beat us if we have the better operators.

What's that mean, "better operators?"

1. Perfect cognition in "the critical second." In that first second after an over we have an opportunity to mentally grab a callsign out of the aural muck. That right there is the crux of contest success. That moment. Get a callsign immediately, enter it correctly, and come back to him within a couple of seconds, and we're winners. If we don't get that callsign like lightning, then we have to wait for the pileup to calm a bit, for the guys to drop in their calls once again, or heaven forbid send a "?". Then we've lost our edge. If two seconds stretch to six or eight or ten, then rate crashes. Calculate with me. If we are running 160/hour on a band and our competitor is running 165/hour, he logs 240 more over 48 hours. Multiply that by five bands and that guy in Surinam beats us by 1200 Qs for the weekend. That's a bit of a simplification, but you have the idea: a small edge of a second or so during each QSO translates to huge differences at the end of the weekend. I'm personally not nearly as good at this as I would like, but I do know that the kind of Morse Runner practice that many of us do prior to a contest is of definite help.

2. Mine multipliers. All that rate (above) does us little good if at the end of CQWW we have 610 mults and our next door competitor has 805. It has happened, just like that, many times at PJ2T. Top ops harvest mults in two ways: on the fly, and using "mult minutes." The sharpest ops will watch the spots while running, see something workable, use the software to jump to that freq, work him, and jump right back into the run. That is *hard* because it takes the courage to leave a hot run freq, even momentarily, to think about how to make the software do what you need, and to do it in a big hurry. Mental strength matters in this moment. Contesting is as much a mental game as is golf. But that's part of how 610 mults become 805. I've watched in amazement as W4PA successfully grabbed on the fly mults at PJ2T during very busy

runs, keeping his “needed mults” window empty almost all the time.



Multmaster Scott, W4PA, owner of Vibroplex

“Mult minutes” are when the rate slows just enough that it makes sense to spend a few minutes suspending the run and pouncing around working mults. The spotting networks have eliminated the “search” part of search and pounce. We just pounce. You do this when your rate has sagged by maybe a third, when the available mults window is brimming with juicy workable mults, or when you are about to go to another band and want to clean up missed mults before changing. Not all of the mults in your window will be there, and some will have ridiculous pileups, but the software makes it easy to click around and work a good proportion of them. N5OT is one of many at PJ2T who does this very well, and I’m sure Mark would be happy to coach the rest of us. Finally, waiting until “later” in the contest to chase mults is fallacious. Get ‘em now.



Above: N5OT relentlessly chasing mults on 15 meters at Station 6, the kitchen table, November 28, 2014.

3. Minimize verbiage. As we established in Point 1, rate is critical. On SSB great rate translates not only

to getting the callsign in that critical second, but also requires efficient verbiage and fast talking. If you’re sure you have his call right, come back with letters and not phonetics. Never use the word “station.” (They’re ALL stations!) Don’t say “please copy.” Don’t say “Thanks for Mississippi,” or “Good luck in the contest” or give explanations like “there are a lot of you calling” or “I have bad local noise” or “hold on my computer is slow.” Just be crisp and fast, and the guy on the other side will respect you for that. And TALK FAST. Voice contesting is not a time for normal discourse. It’s a Formula 1 race, and every partial second counts. Turn up your speech speedometer. K1AR once made 417 SSB QSOs in a single hour at PJ2T. I have had the rate meter over 600/hour when SSB conditions are just right. K6AM is also a good one to emulate for speedy SSB technique. Now and then I see one of our ops who is using absolutely perfect SSB operating technique and minimal verbiage, but is talking at normal speed. Normal does not do it – go fast.

4. Persist. In the 0900Z hour on Sunday it’s a struggle to care about much of anything when the rates are ~40/hour, all bands combined. But our competitors are facing the same challenge, so this is not the time to get lazy or go for a nap. In the ARRL CW contest winning margins have sometimes been less than 1%, and persevering in those tough times might just be the winning difference. The same is said for bad conditions. Low band atmospheric noise, rotten sunspots, high A and K indices, deep QSB, all of these frustrations are about the same for our competitors. The winner will be the tougher crew that persists when things are rough.

In our geographical region and our categories of competition, then, my experience is that strong teams will beat strong stations. That’s not to say that we shouldn’t keep getting the best radios, equipping them well, and trying to hone our outside plant. But I’m sure that adding a fractional dB of transmit antenna gain here and there, or another 100 watts of output, or one more roofing filter will not give us nearly the winning edge that we get from our good, well-prepared, experienced operators.

I’ll close with some random comments about PJ2T’s competitiveness. Site matters much more than watts and antennas. PJ4G has a near-perfect site where the terrain slopes down gradually to the ocean in all of the important directions. Our much larger antennas won’t overcome that, but our better operators can. PJ4K is rebuilding a MONSTER station on the

historic site of PJ1B, and they too have more of everything than we do. But if we can out-operate them, we can still win. HK1NA spent a fortune to build a much better station than ours, but their organizational model has not worked out very well, and they seem to be falling away. And, of course, beyond our Caribbean/northern S.A. region it's a totally different contest. Comparable stations in Zone 33 will always beat us because of their proximity to station-rich and multiplier-rich Europe, but that's a topic for another article. Similarly, deep South America always will have an unbeatable geographical edge in the ARRL 10 Meter Contest. And there's always the occasional weekend of bad luck: persistent lightning storms nearby, power outages, or spotlight rotten propagation. When that happens we do our best, and resolve to win the next one after Murphy has departed.

And, finally, it's important to remember after all this talk about fractional-second cognition and blazing rates of speech that we do this for FUN. We established PJ2T in order to be able to forget the stresses of real life, spending time together in a beautiful, warm place with good friends. This is a hobby. PJ2T is our club's collective fun toy. Winning, however, really does juice up an already fun time.

Surely this article will stir up some discussion and disagreements. Let's have at it. It's healthy communication. Send me your material to publish in a newsletter...?

Remoting Decision

In early May we were approached by Steve Narducci, W9SN, about making PJ2T a commercial remote site in his new company. He and WW4LL, both of whom have operated from PJ2T, have started BeLoud.US to compete with Remote Ham Radio and others for a piece of the remote operation market.

They have already contracted with several stations, including our neighbor PJ4G on Bonaire, and wanted to add PJ2T to their portfolio. The projected revenue to CCC from such an operation could be substantial.

CCC's officers convened a study committee involving several of us who regularly operate PJ2T remotely. After discussion we decided not to affiliate with BeLoud for several reasons. Primary among them is that CCC members pay dues for access (including remote access) to PJ2T, and we did not

want to diminish members' access. Also, unattended remote operation is not yet explicitly permitted by Bureau Telecommunicatie, and what we can do informally with a control operator on site might not yet be sensible as an unattended commercial operation. Third, instituting a revenue-seeking operation at Signal Point could greatly complicate my tax situation both in Curacao and in the U.S., and probably would not be welcomed by the neighborhood association in Coral Cliff. Finally, we're skeptical that we'd be able to keep the commercial remoting technology running at a level of reliability consistent with the quality image that PJ2T strives to present to the amateur radio world.

We told W9SN that if conditions changed we would certainly be willing to re-open this line of discussion.

Member Spotlight

Marty Green, K2PLF

“What Got Me Interested in Ham Radio”

One night in 1955 I heard radio talk coming from our basement, so I went down to investigate and I found my father building a 2-meter receiver. I asked him what those guys were talking about on an old navy receiver. Dad wasn't licensed at that time, but he explained to me what Ham radio was.

I was interested in the fact that you could talk with people all over the world on a radio in your basement.

After this I wanted to find out more about Ham radio so I went to the library and got some old QST magazines and used them to learn about code and electronics and what you would need to pass a license test.

Then I began to search to see if there were any local hams in my town. This led me to the Watchung Valley Radio club. The club was mainly made up of engineers from Bell Lab in Murray Hill NJ. I was the first 15-year-old kid to approach them about joining their club. My request to join the club caused great consternation and discussion about letting a 15-year-old kid join their club. Fortunately 80 % of the membership was ok with letting me in.

Once I was a member of the club I volunteered as an operator for the local civil defense. But in order to do this I needed to first get my license. One of the

members Tom McGill, K2DN took me under his wing and gave me the novice exam which I passed. The radios at that time were 2-meter Gonset radios. I still remember watching the "Green Eye". I remember Tom operating 20 meters and talking to people all over the world.

Then the hard part came - waiting for the license to arrive in the mail. So for six weeks I drove my mother nuts every day when I got home for school, wanting to know if the license had arrived.

Christmas came early that year as the license arrived in May. Now it was time to get on the air. My Dad and I put up an 80-meter dipole in the back yard. It was fed with some kind of 2 lead wire definitely not coax. For the station I used the old Navy RAL-7 receiver and then I built my first transmitter. It was made on a wooden chassis with 2 coils that you moved up and down for maximum brightness on a 15-watt bulb.

The big day was finally here when I finished the transmitter. I was ready to power up and work the world. I had my ARRL logbook and entered my first CQ. The next thing was my mother yelling down the basement stairs "you are blowing up all the TV's and the neighbors are calling".

I was disappointed that all my neighbors within 2 blocks didn't appreciate what I was getting into. This led to me developing an operating schedule that was late at night, after channel 2 went off the air at midnight.

Despite the angry phone calls I persevered and a few of my buddies and I went into New York City to the FCC to take the test for the General License. I remember vividly the grouchy old man giving the test to a bunch of kids. You had to pass 13 words per minute which is 65 characters in a row. He was very disappointed when I had 65 in a row because he enjoyed having the kids fail.

After the test we celebrated by going to the famous Radio Row in NYC. There I made my first big purchase of Ham radio equipment. I bought an ARC 5 receiver for \$5. It was still in its original packing and had never been opened.

In order to quiet the disgruntled neighbors my Dad purchased a Heathkit AT-1. I thought I died and went to heaven. We built an antenna and fed it with coax and the complaints stopped. Now I could operate whenever I felt like it.

I started working DX and caught the bug that still excites me today.

During the period when I was working to get my general license my Dad was quietly working on his novice license. One evening after dinner he proudly showed me his novice license with the call of KN2TEO. Subsequently my dad went into NYC and got his general license. For the past 23 years I have funded through the ARRL Foundation a scholarship in his honor.

After I got married and moved to Maryland in 1972 the rule in our household was no one answered the phone on the first ring. This was a code that my dad and I had set up to let the other one know to meet on a particular frequency, so we could talk for free. Over the years I have had many stations in the various states we have lived in. I have traveled to many interesting places and made great friendships. I have been lucky enough to operate in places such as the Great Wall of China, Puerto Rico, Australia, Hong Kong, Germany, Hawaii, Costa Rica and my favorite place of all Curacao.

This July I will celebrate my 80th birthday and 65 years as an amateur radio operator. To this day I still enjoy the thrill of working rare DX and operating with good friends.

73 - Marty, K2PLF

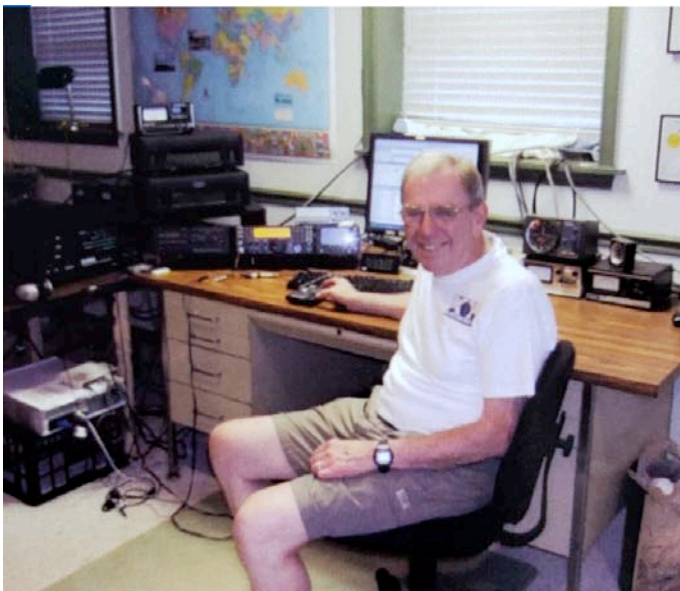
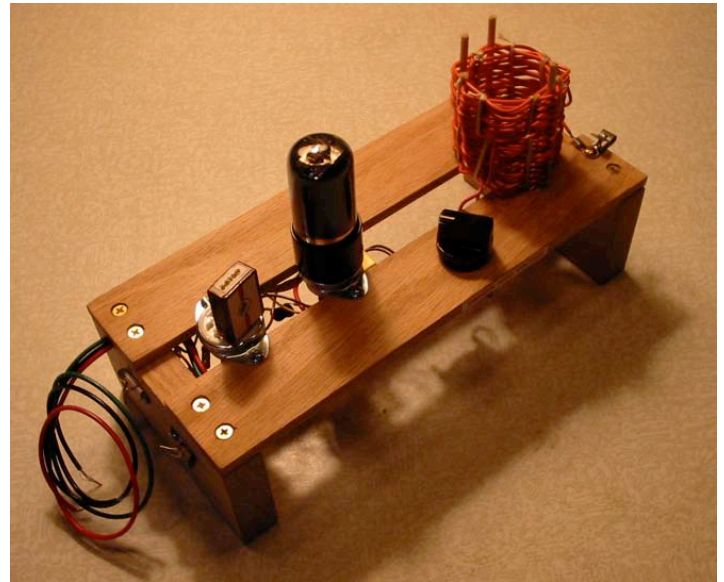


Above: My first station as a high school student in 1955, Westfield NJ. Notice the Gonset communicator in the upper left.



Above: My station in Maryland 1976-82.

Below: This is what my first transmitter on a wooden chassis with 2 coils that you moved up and down for maximum brightness on a 15 watt bulb looked like.



Above: My current station.