Signals From The Point

Official Newsletter of the Caribbean Contesting Consortium
Editor: W0CG

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President's Ramblings, by Jeff K8ND / PJ2ND

(Jeff sent this last month and your editor missed it. Sorry! –Ed.)

CONTEST SEASON!

The contest season is upon us again!

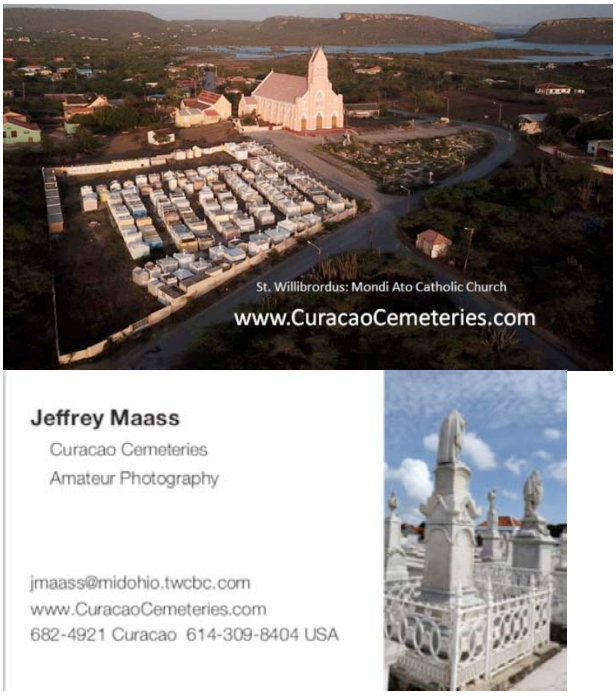
As I write this, the CQWW SSB DX Contest has just completed, and it appears that the PJ2T team has placed 1st or 2nd in the World in the Multi/Multi category by a large margin. All reports are that each member of the team was coolly efficient in filling the log with valid QSOs! The CQWW CW team will start arriving on Curacao on November 22.

MY NEXT TRIP

Having completed my 40th visit to Curacao in September, I have started preparing for the next trip in January for the CQWW 160 CW Contest. Tickets have been purchased (with my overabundance of AA miles this time!) and I will stay from January 9 to February 6 – 29 days in all. Retirement has, at least, the benefit of allowing longer trips without careful use of holidays and weekends to maximize the time away!

CURACAO CEMETERIES PROJECT

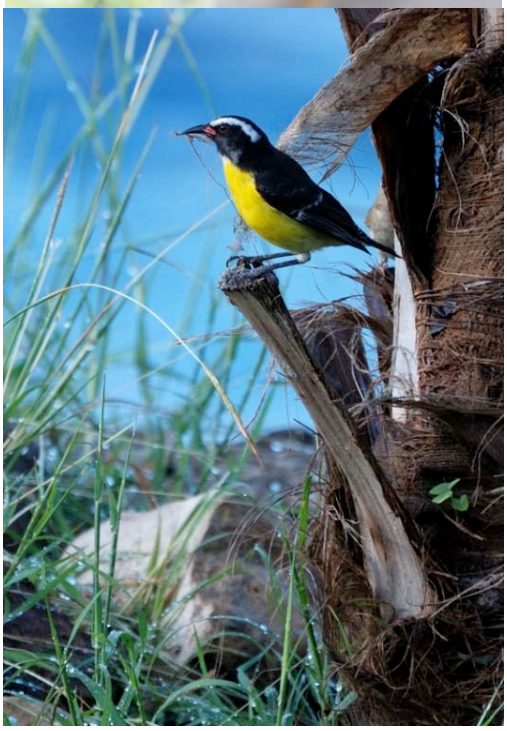
As my health continues to improve, I expect that my stamina in January will allow me to resume my travels around the island exploring cemeteries and burial sites! Walking through and photographing cemeteries on Curacao is hard work in the Caribbean sun, as most cemeteries in Curacao have no shade and no suitable place to sit and rest.



To date, I have visited 28 of the 60 sites I have on my spreadsheet. Some of these remaining are likely gone – single graves from an ancient map now in areas of rampant wabi growth. Some are in locations inaccessible with a rental car. Some are on private property, behind gates and fences. And some I just haven't gotten to yet. Some of those photographed previously have not yet been photographed from air by drone, and I want to complete those. Photos of those I have visited and the complete list is available online at http://www.curacaocemeteries.com/. Click on each to see a photo album of that cemetery if I've photographed it.

CURACAO CRITTERS

One of my projects on the island has been photographing birds, and I long ago established a web site to organize them: http://curacaocritters.com/. It has not been updated for several years, although I have captured new photos over the years. I will update it before my next trip, and make an effort to find more birds on the island!



PJ2T REMOTE 2

In 2017, largely through the efforts of Gene KB7Q, a remote station was established at the Signal Point PJ2T station with a K3 radio, Elecraft KAT500, and Elecraft KPA500 500-watt amplifier, Since that time, I have made 18,861 QSOs as PJ2ND through the remote! Several other CCC members also used the remote station over the years. However, the interface to that station required Remoterig RRC hardware at both ends of the link, and either an Elecraft K3/0, K3, or a PC running TRX-Manager software at the operator-end. However, the RRC hardware has become impossible to buy and the TRX-manager software is no longer available, so no new users could be added.

As has been previously reported, new remote hardware has been installed (lacking just the new Elecraft KPA1500 amplifier), and is now in testing! I'm sure that Geoff and Gene will cover the new remote in some detail elsewhere in this newsletter. The use of this station will not require the use of any "unobtainium" hardware or software, and so should be available to a larger number of CCC members. Gene has been creating a "PJ2T Remote Quick Start Guide' document with the details of getting started using the remote.

In the photo above, the remote hardware is on the new shelf at the upper right.

RECALLED POWER STRIPS

Somewhere (probably Facebook) I saw that the APC SurgeArrest Pro power strip was the subject of a safety recall in effect since 2013! The reason for the recall is summarized by the Consumer Product Safety Commission as "The surge protectors can overheat, smoke and melt, posing a fire hazard."

We purchased a couple of these for PJ2T several years ago, and I purchased one for my own station. We checked their serial numbers, and all three of these met the requirements for recall. APC promptly replaced them with newer products. I will carry down the two new power strips in January.

CQWW CW Contest Report

Here's the team that brought us a great score, 35.777M.

L-R: Vlad (VE3JM), Vlad's XYL Marija, Lee (KY7M), Tom (VE3CX), Robert (K5PI), Nick (VE3EY), Gary (N7IR), VE3EY XYL Svetlana, Dorothy (W0CG YL), Dan (K9DR), Geoff (W0CG/PJ2DX), Fred (NA2U), Andy (W9NJY)

Band	QSOs	Zones	Countries
160:	589	18	67
80:	1493	30	97
40:	3309	33	121
20:	3193	38	127
15:	3578	37	127
10:	2284	33	111
Total:	**14446**	**189**	**650**

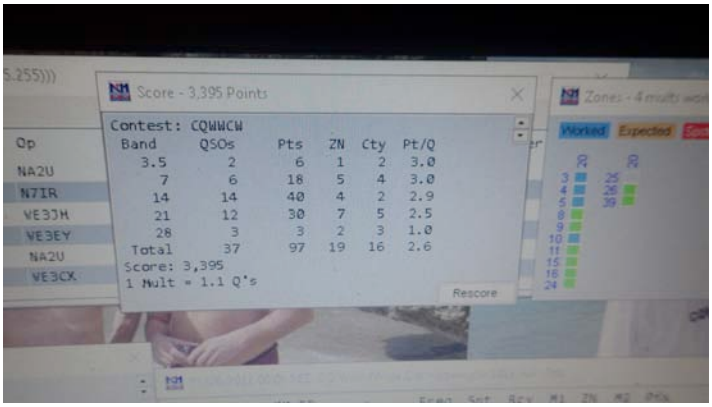
Total Score **35,776,638**

See https://www.3830scores.com/currecscores.php?arg=RUcfy5z1sycy6 for the complete 3830 writeup.

Based on claimed scores this puts us 3rd world behind superb scores from CN3A and CR3W. We know that we can never beat these Africa stations, so being at the top of the listings save for them is a major accomplishment of which all the ops and CCC members can be very proud.

We were fortunate to build a power team for this event. Arizonans KY7M (*NCJ* Editor), NA2U, and K9DR returned after a long time away forced by COVID and various medical crises. N7IR made the trek here from Arizona the second time in 2022. So did Tom, VE3CX, who invited his friends VE3JM and VE3EY, both absolute top ops. W9NJY returned for what we hope will be the beginning of a long string of Curacao trips for him, and we were lucky to recruit Robert Brandon, K5PI, on short notice. Robert is a superb op, technician, and ex-IBM software guy who taught us a lot, and we hope he will return. This team braved the rainy week and the failed refrigerator at the rental house, had a ton of fun, and posted an excellent score.

One of my most exciting and gratifying moments is the first couple minutes of a contest. If we get a clean start this is when I can relax, start to breathe again, and my stress meter drops from 10 to about 3. As you see in the photo, we got out of the gate nicely with 37 QSOs in the first two minutes (next page).



37 QSOs in the first two minutes

We did a five station M/M, with 10 and 160 sharing time at Station 1. The Commander HF-2500 served well on both bands. As usual, we did 15 at Station 2, 40 at Station 3, and 80 at Station 4. 20 was at Station 5, the N0YY foldout desk extension. Here's the gang at the start. If you've never been to PJ2T for one of the WW contests, the BIG ones, you're really missing max fun factor. The QSO rates and diversity of contacts all over the globe practically make one's head spin with delight. This is what we do.


L-R: N7IR (10/160), VE3JM (15), NA2U (40), VE3CX (80), VE3EY (20). K5PI and W9NJY look on

In the week prior to the contest we devoted considerable energy to tinkering, fretting, tinkering some more, worrying, and eating turkey. Dorothy produced a full featured Thanksgiving dinner for 13 people (!), and here (next column) are some of us loading our plates for action.


Fred, Dan, Tom, and Vlad staffing their Thanksgiving Day plates


Fred, NA2U


Svetlana, Marija, and Dorothy, our international ladies who treated us much better than we deserved all week.

VE3JM and VE3EY gamely offered to accompany me to the Ridge to set up the 80 Inv Vee for CW and do some light maintenance on the US/JA Beverage.

Vlad (VE3JM) and Nick (VE3EY) at the US/JA Beverage feedpoint, high on the Ridge above the station. Note the boxes on the tree trunk.

More pre-contest activity. Here's the tinkering and fretting part as K5PI explains nuances of the N1MM F-key definitions he configured.


K5PI in teaching mode

On Friday afternoon before the contest we chowed down at Sol Food in Westpunt, and PJ2BR and his XYL PJ2ZZ joined us there.

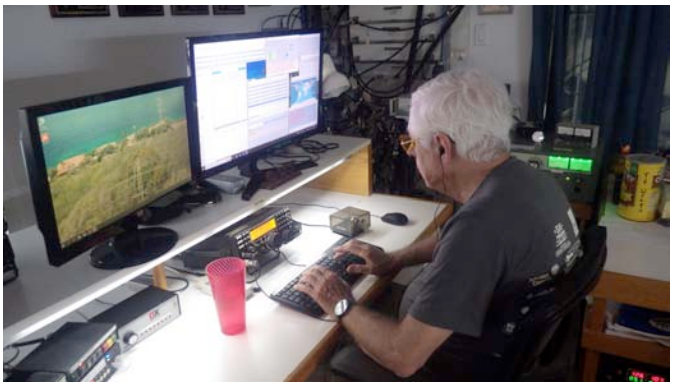
Here's Andy (next column) with a liquid gift from Brett in appreciation of the gift of a 220 MHz amplifier Andy brought for PJ2BR.


W9NJY, PJ2BR after their exchange of gifts

Finally the hour arrived, and we kicked off with K3MD the first in the log on 20. Here's K9DR in the wee hours on Saturday morning running on 80, which was incredibly productive both nights.

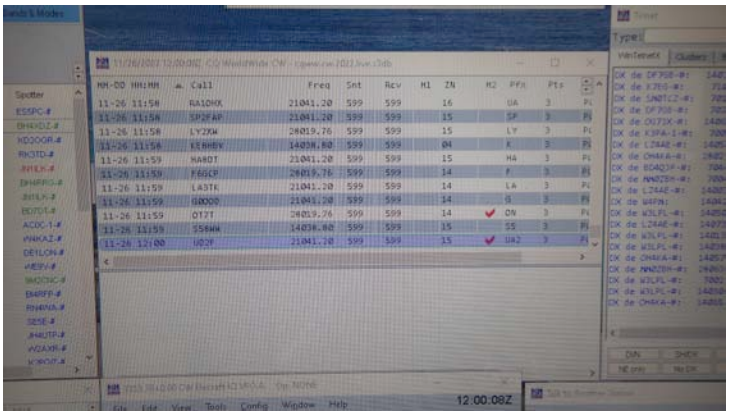

80 meters at 2:30 AM local: Dan (K9DR)

The first night was fantastic, ending up with an incredible 4756 contacts after the first 12 hours. Then came even bigger fun, as 20, 15, then 10 opened to Europe early and in rapid succession. Here's W9NJY running Europe on 10 early Saturday morning.

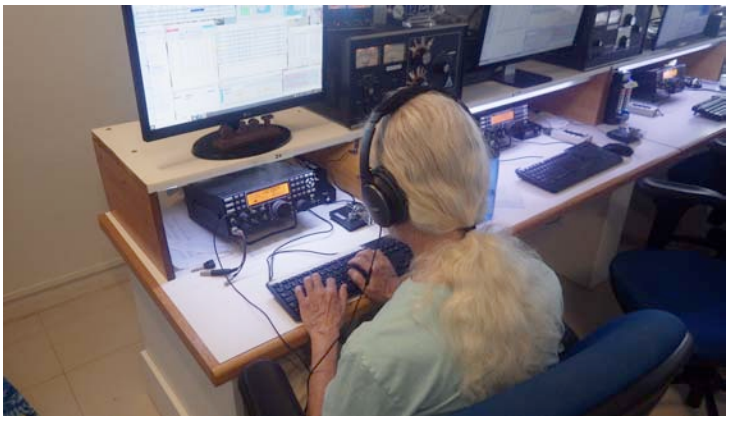

W9NJY, 10 meters to Europe

This Saturday morning scenario in a high sunspot year is where our triplexer system really pays off. All three bands running on the same feedline to the Ridge, all

using the Bencher Skyhawk concurrently. Here's a segment of that activity at 7:59 AM local time.



Log segment at 11:59Z Saturday



N7IR, a physically narrow person, at the physically narrow 20 meter position, a perfect match

Saturday continued with great productivity and the gradual shift to North America and, late in the afternoon, to include some juicy and fun Pacific contacts, where the Pacific tribander earned its keep. The usual W0CG contest chili was ready to eat at 5:00 PM, and here are NA2U, W9NJY, and VE3CX fueling up on chili.

Fred, Andy, Tom and the contest chili

Maybe that chili did not sit well with Nick (VE3EY) below as he holds his stomach while running 40?

VE3EY in possible gastric distress on 40

At the halfway point we had 9920 Qs in the log with the 10,000th contact, DK3GI, coming on 40 at 00:17. This is why we come to the DX side. The biggest, most auspicious station in the north country can't even dream of these numbers.

Below, an ever smiling VE3CX at the 20 meter position.

Happy Tom, VE3CX. He's smiling because the band and the weather are hot, both in contrast to the wilderness of Western Ontario.

Tom is fun to watch at the radio because he's perpetually relaxed, focuses intensely but with apparent ease, and churns out contacts at high rates effortlessly.

Second night doldrums (next page), yet Andy (W9NJY) at the 80 position still found plenty of juicy callsigns, pictured here at 5:15 AM local, the worst hour of the weekend


W9NJY in a slow hour on 80

Here below is the venerable 40 meter linear, underappreciated and unnoticed because it quietly makes 7 MHz RF for us year after year, now some 40 years old. KB7Q and I did significant rework on this amp a few years back, and it continues to amaze us. Note the SWR in the photo: this is normal because the antenna is tuned for 7.150 MHz.

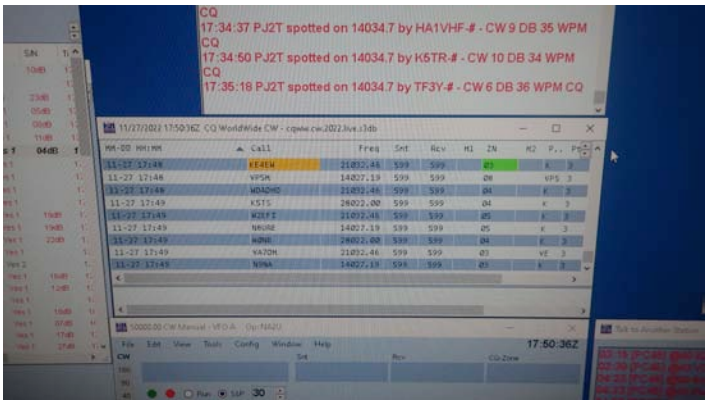

LK-800 quietly making lots of watts and drawing minimal grid current

At one point the rates were so slow on Sunday morning that we turned 40 over to Tom, TA1KEY, for an hour shift. Thanks KY7M for bringing Tom to the team.


TA1KEY running on 40

At the 75% complete point we had logged 11,965 and were looking forward to another big morning run on 20, 15, and 10. Unfortunately 10 never seemed to open, and we discovered at mid-morning that an entire 10 meter shift had been run using the 160 TX antenna. That station made some Qs, but we could have done better. One of the best on 10 that morning was 5R8CG, both a great prefix and a great suffix. Once the switch was thrown to the proper antenna, 10 burst to life. This is no one person's fault, as several of us passed by that station and never noticed the antenna selection error. The Low Band/High Band toggle switch at the top of the Station 1 box was still in Low Band. Even elite world class operators get sleepy. We had a good laugh about this, and a good learn, and won't make that error again.

We set up PC #6 at the love seat side table so we would have a monitoring point for the contest and to provide a hot swap backup in case of a failure. I happened to be sitting there watching when QSO 13,000 went into the log and smiled ear to ear to see that it was W0NB, Jim Livengood. Jim was a long time stalwart member of CCC from the beginning, and there is no way I could have pulled any of this off without him. See his QSO in the photo below, made with invisible wires in a very small backyard in Chagrin Falls, Ohio. Jim and Mary were also provided me and my XYL generous support and encouragement in the five months we were his neighbors in year 2000 on St. John, U.S.V.I. He was KP2L and I KP2F.



CCCer W0NB, QSO 13,000

Soon we were at an end, and my stress dropped even further because we had again squeaked through the weekend without a power outage. (It was down about 7.5 hours the next day, Monday.)

The beer salute at the end: Dan (K9DR), Andy (W9NJY), Fred (NA2U_), Vlad (VE3JM), Robert (K5PI), Nick (VE3EY), Tom (VE3CX), Gary (N7IR), Lee (KY7M).

After the contest I received this delightful message from OO7Z.

Hi PJ2T crew,

Sometimes the unexpected happens !

And that is the case today. I have worked PJ2T with only 1 watt and a dipole antenna. I used an old Heathkit HW9 (see photo). QSO on 14 MHz about 11:38 utc. RST 599. Please email QSL confirmation from you. This is not an everyday QSO for me. I wish you good luck in the CQ WW DX CW.

Sincerely, 73, Peter OO7Z.

Always CW, Always QRP.

Our good ears operator at the time was K9DR, and I sent Peter a photo of Dan at the radio. What fun.

Another contest in the books. Routine? NO WAY.

We do this so regularly at PJ2T that it might be easy to become jaded. But stop and think about it. Only three stations on the planet scored higher than we did. We were three countries short of 5BDXCC in a weekend. The skimmers, RBN, and packet systems were screaming nonstop PJ2T spots all 48 hours. We were significantly present on all the bands. Our operating technique was professional, world class. We made the November cover of *QST*! This is as good as it gets in our sport, and we can all be proud and count ourselves very, very fortunate to be able to do this year in and year out. Thank you to all our CCC members who provide the resources that help make these achievements possible, and a shout out and a loving memory to our silent keys who helped lift us to this level: W9EFL, W9JUV, N9AG, K2PLF, K8LEE, WA9S, and NP2L. I think of all of them daily.

ARRL 160 Contest Report

This is fundamentally a contest for the U.S., possessions, and VE. DX stations are not allowed to work each other – we're confined to US, possessions, and VE. U.S. possessions such as the Virgin Islands can work everybody, US, VE, each other, and DX. So it's an exercise in self-sacrifice to work this one from the DX side.

K8ND made that sacrifice, running the entire contest with great patience. Conditions were so-so the first night, and utterly horrible the second night. Here is the result.

Call: PJ2T
Operator(s): K8ND
Station: PJ2T

Class: Single Op HP
QTH: Curacao
Operating Time (hrs): 24.2
Location: South America

Total: QSOs 589 Sections 74 Countries 0
Total Score 87,172

As frustrating as this seems, he now stands as the top score for true DX. Unfortunately, ARRL never pays much attention to this DX group in the magazine write-up.

Oh yes, one last point. Jeff ran the entire contest via the enhanced remote station, our first contest outing with that hardware. We closely monitored the KPA-1500 operating temperature both nights, and Jeff managed the fan speeds well. At 1 KW output on the

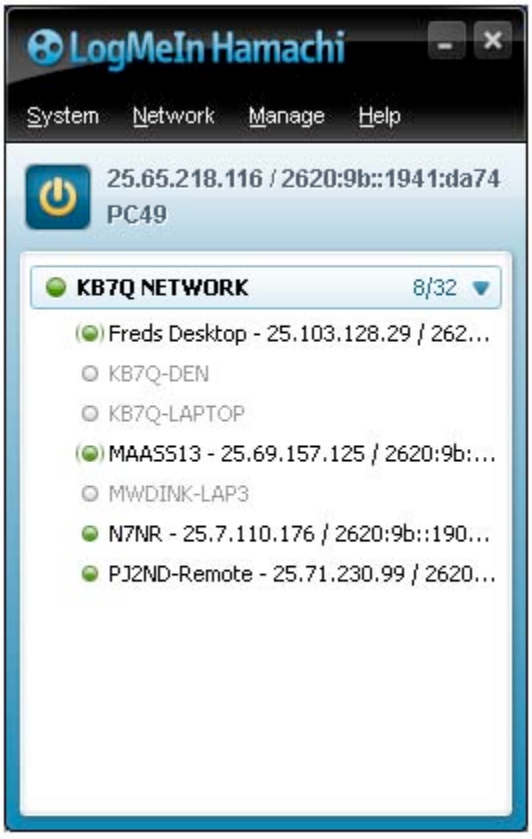
second night it was necessary to go to Fan Speed 3, but the amp performed solidly. We're in business.

ARRL 10 Meter Contest Report

We were unable to generate any interest in an on-site team for this contest in spite of the super conditions on 10. This is a far cry from days gone by when we had full teams at the QTH for the ARRL 10 meter event year after year.

Thus arose a golden opportunity to do a hybrid remote/on-site multi-single contest. I would operate at Station 1 from Signal Point and N7NR, W8WTS, KB7Q, N7WA, and K8ND via the enhanced remote.

The N1MM log was networked for this contest, and it looked EXACTLY as it would have if all the ops had been in one shack here. We did this using a VPN implementation. This is a widely used technique wherein clients with IP address anywhere can form a private group, and once that's done it looks for all the world (ie. *virtually*) as if we are on our own private in-house network. The graphic shows what the VPN looks like at each of our stations.

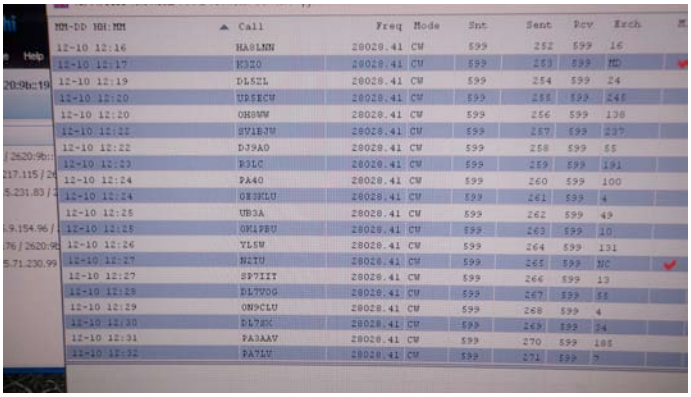


Hamachi VPN for the 10 Meter Contest (Geoff's window at Signal Point)

This is done easily. One member of the group downloads VPN software and becomes the master of the group. That's KB7Q. The rest of us download a little piece of VPN client software and then join that same group. We turn on networking in N1MM and magically all the users and all the QSOs appear in that one log. We're using the Hamachi VPN product, although many others are available. I saw a presentation on it in August at a conference together with N7WA, and Gene found it independently and set it up for us.

Connecting to the remote is equally easy. Use PC Anywhere to connect to our remote PC in Curacao, turn on the power to the station, click on an antenna, start the RCFORBS client software, turn on the KPA-1500, hit the tune button, and then off you go making contacts.

The six of us negotiated an operating schedule for the entire weekend. We started the contest about 20 minutes late because we all are wearing climbing spikes: climbing our way up the learning curve on the technology. But little was lost because the evening hours are very unproductive, with just a handful, around 80, South Americans workable. But Saturday morning did not disappoint. K8ND was positioned early and caught the 10 meter opening immediately. He took off like a rocket logging Europeans, running the Ridge Tribander from his little personal ridge in Powell, Ohio. See the log segment below.



K8ND remotely running Europe Saturday morning

Four hours later KB7Q took over and continued that Europe run, then riding the transition to US conditions Here he is (next page) at work in a condo in Lake Havasu City, AZ. Note that Gene is remoting bare bones – just a mouse and laptop and a virtual radio on the screen. He sat there at the kitchen island and worked the world at great rates via the Signal Point remote.

KB7Q running 10 meter Europe pileups, 10 December, Lake Havasu City, AZ

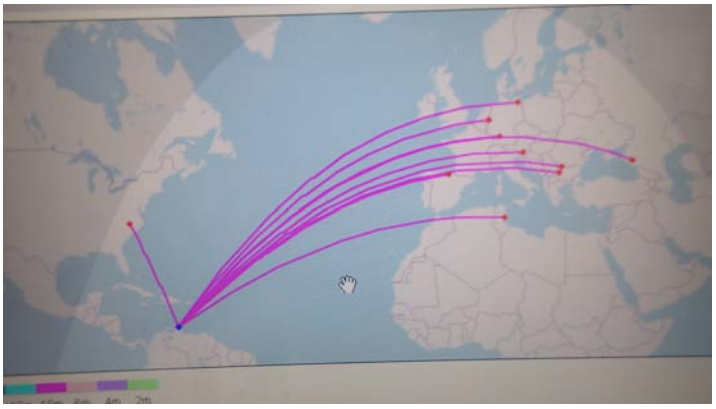
N7NR was our mainstay SSB op – Dave is not a CW racist like the rest of us, so having no bias he was able to do a superb job in his shifts, many times logging four or five per minute as the log excerpt below shows.

MM-DD HH:MM	Call	Freq	Mode	Snt	Rcvd
12-10 18:29	W5KY	28542.50	USB	59	878
12-10 18:29	K4VDX	28542.50	USB	59	879
12-10 18:30	W1AST	28542.50	USB	59	880
12-10 18:30	K4CGY	28542.50	USB	59	881
12-10 18:30	N3WD	28542.50	USB	59	882
12-10 18:30	K4JKB	28542.50	USB	59	883
12-10 18:30	NF3R	28542.50	USB	59	884
12-10 18:31	VA2LGQ	28542.50	USB	59	885
12-10 18:31	WA1HEW	28542.50	USB	59	886
12-10 18:31	W6YI	28542.50	USB	59	887
12-10 18:32	NW8U	28542.50	USB	59	888
12-10 18:32	VE7JO	28542.50	USB	59	889
12-10 18:32	KK9M	28542.50	USB	59	890
12-10 18:32	W6RYI	28542.50	USB	59	891
12-10 18:33	WJ4HCP	28542.50	USB	59	892
12-10 18:33	W5LO	28542.50	USB	59	893
12-10 18:33	NE3F	28542.50	USB	59	894
12-10 18:33	N3MMQ	28542.50	USB	59	895
12-10 18:34	KB5BGC	28542.50	USB	59	896

Good rates on SSB, N7NR op

We got goofed up on the schedule Saturday afternoon when one of the guys misread and did not show up on time, and then I fouled it up worse by running the wrong hour. After some patient reorganization via E-mail and Slack, we got back on a steady keel. Rates were great through the daylight hours, and we pretty easily worked all of the easily available mults on both modes.

It was also fun to see the remote antenna selection perform so well. While running on the Ridge Tribander, RBN looked as one would want (next column).



RBN depiction of the directionaliy of the Ridge tribander during K8ND CW run Saturday morning

Jeff made good use of the available antennas, easily selectable using Uli's beautiful software front end. When Jeff selected the US/JA stack, all the purple lines in the above map swung into North America. Click the Pacific tribander, and a minute or so later the vectors were out to KH6, New Caledonia, and ZL. We never had this kind of operational flexibility with the old remote system. This mass of DC control cables (below) give the remote operator the ability to select among many antennas (also below).

DC antenna selection lines to select from…

… from these.

I took advantage of this contest to study the thermal behavior of the KPA-1500. Saturday afternoon we closed up the house and turned off the ceiling fans and watched the amplifier's temperature. The amp handled this with no problem. As a result of my observations Saturday afternoon and night, we learned 1) that the external muffin fans buy us about a 2 degree C reduction in the heat sink temperature on the amp, 2) that external fans on the side of the linear do not impair its internal temperature control system, 3) that SSB runs a good 6 degrees C cooler than CW at the same power levels, 4) that Min Fan speed 2 handles cooling chores perfectly well, and 5) we should be able to run within temperature limits with no problem when the house is closed. We ran the KPA at 1 KW output all weekend. Here's the RF deck (below) with the dual muffin fans at the right.

KPA-1500 with supplementary cooling blowing right to left in the photo

This contest was a good test of all aspects of the enhanced remote system, and everything held up very well. We all need to learn more about how to configure our remote-end equipment. Some have K3/0s and some do not. Those configurations are different and highly customizable. And there are multiple ways to control keying and PTT. Soon we will all have settled into equipment and setups and configurations that work best for us, and will be able to operate remotely with ease, free of glitches.

This ARRL 10 Meter Contest was a very valuable validation of the operability of multi-op single transmitter remote contesting at PJ2T. We will be seeing more and more of this kind of activity in CCC. Also, it is easy to envision that in the ARRL CW contest that one of our bands, perhaps 160, will be manned entirely by a remote operator. All we would need to do is put a bandpass filter in theremote's rig-amp line, set up the VPN for the log, and go to town. In that way the remote station here would serve as Station 6 for a big mult-multi operation, except that its operators(s) would be on another continent. Neat, eh?

Here's the final tally from this weekend.

Call: PJ2T
Operator(s): KB7Q W0CG K8ND N7NR N7WA W8WTS
Station: PJ2T

Class: M/S HP
QTH: Curacao
Operating Time (hrs): 34
Remote Operation

Summary:

Band	QSOs	Mults
CW:	1536	132
SSB:	1132	104
Total:	2668	236

Total Score = 1,984,288

Again, we thank KB7Q, Father of Remote Operation at PJ2T for his parentage and patience. Gene's writeup on the remote follows. Thanks again to Dave (N7NR) for providing most of the resources we needed to reach this point, and I thank Dorothy for hanging in here with me through this contest when she would much prefer to have gone back to Idaho.

The Signal Point Remote v2.0 has Arrived in Time for Christmas, Gene Shea, KB7Q

Several of us started designing, building, and testing a better remote station last summer - it's December now and guess what? We've achieved a well-documented and tested KW remote station with full selection of the PJ2T antenna farm to take advantage of the current solar cycle's upswing. Nothing is more fun than running the pile-up on 10 Meters and working a TZ4 one minute and a YB the next while off-island. So how'd did we do that?!

In August I set up a test remote station on a dummy load here in Montana and evaluated the RCForb client/server software package to see if it could meet our needs. I was looking to move beyond the cost and availability limitations of the Remoterig hardware boxes. Given the Internet connect cure at Signal Point RCForb seemed to work well enough to move forward. One goal was to preserve folk's investment and utility in their K3/0 Mini control heads. The RCForb Client allows for that. Yippee!

Geoff (W0CG/PJ2DX) pondered the antenna switching scheme and came up with a way to capture each, and

every one of our antennas for the remote via a series of relays … lots of relays. He cobbled together some off-the-rack relay boards from Amazon and with crude but functional software was able to breadboard a proof-of-concept lash-up. Geoff then knocked out 19 sets of relay switch boxes, a 1x18 remote-controlled high power coax switch, the USB relay support box, modified the ridge switching regime to work with the remote, and carted the whole pile of gear to Curacao. During construction Dave, N7NR supplied the financial grease to keep the UPS man coming to Geoff's Ohio house with all the bits and pieces. Along the way we discovered that Uli (DL8OBQ) is a programmer. In less than a week he created a lovely piece of antenna control software that is crisp, clear, and just works. We've started calling him, "No drama Uli"!

Knowing how well Elecraft K3 transceivers integrate with their line of amplifiers we chose to use one of our K3 radios for the remote. It turned out to be a superb choice, especially as the rig we're using has the USB interface upgrade installed, which makes running the CAT commands and audio through the server computer trivial.

We had an early Christmas when Dave, N7NR gifted us with the use of an Elecraft KPA1500 amplifier. Not only does this beast give us QRO capability - it sports a built-in antenna tuner. Elecraft even has a free, polished piece of remote-control software for it. Boy, have we lucked out!

I want to thank Jeff (K8ND/PJ2ND) for letting us use his KPA500 amp and KAT500 tuner on the version 1 remote for the last many years. It was a very generous thing to park several K-dollars of gear on island for our playtime.

I've written a manual for the care and feeding of our creation. The input from beta testers K8ND, W0CG, DL8OBQ, N7NR, and SM4KYN has been invaluable in refining it. The manual is required reading, but the basic concept is that you turn the station on and select an antenna by going to the remote computer's desktop in Curacao. After that rig control, amp control, and logging are by design to be done from your home computer.

Your remote design team only asks that you read the manual, ask questions as needed, and learn to operate the remote station safely and with high skill so that we always sound great on the air. Have fun!

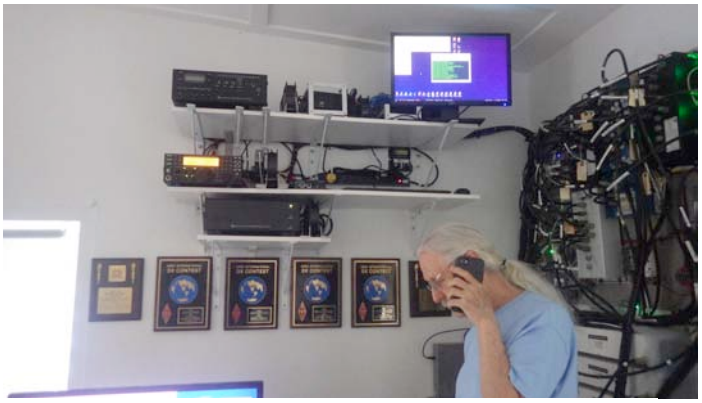
The enhanced remote station in action in the 160 contest, December 2 (- Ed. photo)

Arrival of the KPA-1500

On November 22 the most significant, modern, and exciting piece of equipment in our history arrived at Signal Point. CCC member N7NR provided us this magnificent amplifier on long term loan. KY7M and NA2U bag-dragged the amplifier and its power supply in two separate pieces of luggage, and customs at the airport was no bother. Here's the arrival photo.

KY7M as the amp came out of his luggage, November 22

Prior to the arrival of this amp I had installed an additional wall shelf for the power supply, cabled in a 220 volt service for it, installed a very beefy ground connection to our station master ground, and pre-wired the K3 cables and connections for the amp. With that advance preparation, less than two hours after it came out of the bag, KB7Q was making remote CW QSOs with the amp running cool at about 700 watts output. The remote control capability of the amplifier worked perfectly, as did the integration with the K3, and we at that moment entered a new era of remote operation at PJ2T. The following day N7IR installed a different K3, the permanent one for the remote, and did some debugging with KB7Q to get that transceiver behaving. Here's Gary (next page) on the phone with Gene in Bozeman.



N7IR setting up the remote K3 with KB7Q in the radio remotely

Thanks NA2U for Gift

I extend a special thanks to NA2U. Fred included a generous extra gift along with his reimbursement amount for CQWW CW expenses. This is in addition to the Astron power supply he bought that is now providing the 12 VDC needed by the new remote station. As inflation goes up and dues do not, these extra gifts are a huge help to keep the QTH above water. (The real estate dues of $300/year are unchanged since we began in year 2000.)

W8WTS Wins Field Day!

December *QST* is out and as always, it contains the Field Day results. W3USA operated by AF8A, W8WTS et al took the win. W3USA is score #1 in 1A. We bested the #2 entry AB9YC by 175 QSOs.

This marks three W3USA #1 wins in the last four years. From Jim:

We thank you for the QSOs and look forward to more fun in June 2023.

Be safe and 73,

Jim, W8WTS

Hotel Construction Site Update

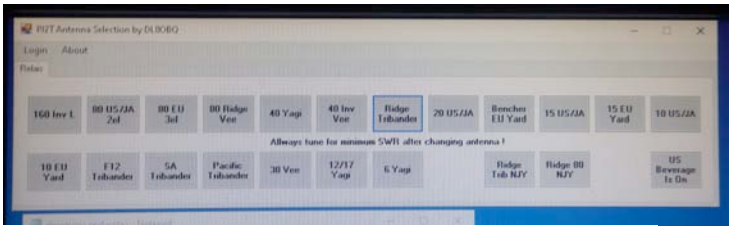
Still nothing. Dead quiet.

DL8OBQ Custom Remote Software

When I designed and built the antenna switching system for the enhanced remote station, I grabbed free software out of cyberspace to control the USB relays. That software worked fine, and we used it for a couple of months with no big problem. But it was clunky and required too much procedure by the remote op.

In the week before CQWW SSB Uli (DL8OBQ) and I were chatting about the remote system, and I told him of my hope that in some months we might be able to find someone who could write elegant, custom control software for our remote antenna selection system. Uli looked at the floor, thought for a moment, and said "I think I can do that." Wow!

So he took two of our spare USB relay boards back to Germany with him, and soon after I made up a set of programming specifications in a PowerPoint and sent them to him. In lightning speed he produced a program to my specs and installed it on the remote station server from Germany. After a couple of small tweaks it was DONE and working perfectly (below).



The DL8OBQ antenna selection window in the top right corner of the enhanced remote PC screen.

The program presents 18 buttons for each of our 18 transmit antennas. When you select an antenna, that button turns green. At the bottom right is a button that toggles the Beverages from US/JA to Europe. The bottom row also has two buttons that cause the W9NJY Ridge antenna selector box to select either the tribander or the 80 vee, although those are pressed automatically by the software when either of those antennas is selected in the top row.

Uli's C# software does several things for our remote users. For one, it eliminates the need for us to manually start the relay control software and designate and connect to COM ports. That happens automatically. Second, it provides a compact, easy to use, easy to understand interface. The operator need only push a button on screen for the selected antenna, that button turns green, and presto that antenna is connected to the remote station. In addition, when the remote op selects either the Ridge Tribander or the Ridge 80 Vee, his software automatically presses the second of two buttons required, so that the W9NJY antenna selection box functions automatically. Uli has also included a maintenance capability and plans to expand that further. This is a superb feature of our enhanced remote station, most prominent by its unobtrusiveness. It is simple for the user and just works. It was not so simple for Uli because the two

relay boards had very different architectures that he had to figure out. Thanks Uli, this is brilliant.

Unprecedented: CCC Collection Problem

In our 22 years nothing like this has ever happened. One of the ops (not a CCC member) on the CQWW SSB team has not, seven weeks out, paid his $1K expenses amount. This leaves me and Dorothy hanging, having paid for all the groceries, beer, and the rental house up front. We have made contact many times, but still no go on the payment. We know that he is "OK" and active because he's posting nearly daily on an E-mail stream that I receive. CCC's officers are trying to figure out what to do about this. I'm confident the dollars will eventually show up, but this is an egregious discourtesy. So this is a sideways way for us to say THANK YOU to all of our members who always, always ante up in a very timely manner.

Some PJ2T Equipment Glitches

We celebrated prematurely at the end of CQWW SSB, when absolutely nothing had failed here.

Since then, two of the Astron 12 VDC switching power supplies have gone inop because of cooling fan failures. We have now bought six of these replacement fans (cheap @ $8) and will make the replacements in January. The AA-54 antenna analyzer went inop, but N7IR fixed that already and it will return to the QTH early next year. AL-1200 (1), our 1999 vintage amp, went intermittent in RX during CQWW CW. N7IR used some of the contact-cleaner impregnated pads left here by W8WTS and cleared up that problem quickly. Now we are searching for the Magnecraft 12 VDC 3PDT 30 amp open frame relay to have on hand as a replacement. All of our other AL-1200s use a separate board and closed relays for T/R switching, and several of those are on hand here.

PJ2T Station Equipment Lead N7IR working on the failed AL-1200 (1)

Our original K3, donated by K8WDN (SK) and obtained for us by W9NJY failed badly prior to the contest, and wizard N7IR took that radio back to Arizona for assessment and hopefully a repair. And in old news, K8ND identified a failed Fluke multimeter in September, sent it to N7IR (thanks Jeff), and Gary brought it back working in November.

And as you will see next in this newsletter, lots of outside maintenance was accomplished in November and December to keep our antennas and towers serving us well.

US/JA Tower Maintenance Report

The Europe tower is in superb condition, having been replaced four years ago this week. The laborious careful prep of the sections before putting them up, exclusive use of stainless and aluminum components, applications of our lessons learned about salt environments, and this year's recoating top to bottom have drastically reduced maintenance load on this tower.

The WARC tower is also in great condition since we installed the concrete sarcophagus base.

Therefore I turned my attention to the US/JA tower this Fall season. It was definitely time for aggressive maintenance, as there were rust blooms visible here and there from top to bottom. The worst was in the top 14 feet. So I went to work with our carefully crafted maintenance procedure, perfected after many years of many various trials.

The photo (next page) shows the getup just prior to going to the top to continue this maintenance process. The procedure is to take an AC extension cord, a Makita angle grinder, and a bucket of freshly mixed epoxy primer paint up with you on the belt. The paint bucket hangs from my right loop, and the Makita the left. It's necessary to wear long pants and sleeves and two layers of sweatshirts to protect from the paint and abrasions from the harness. (I don't use our new Sala harness for painting because this would quickly ruin it, but we use it for all other climbing. The harness in the photo is 100% safe and 100% paint-soaked….)

December 4: An unsmiling Geoff ready to go up for a 2.5 hour maintenance session at 80 feet

Wherever there is a rust bloom visible through the old layers of epoxy, it is quickly cleaned to bare metal with the angle grinder (using safety glasses) and a twisted wire 5 inch wheel. I only ever clean the area of rust – there's no reason to remove paint where there is no serious rust underneath. Then I immediately coat that area with the epoxy primer paint and move on to the next. This is not unlike what your dental hygienist does, and it requires care and patience. Maneuvering around all the antenna booms and wire antenna attachments and other components on our busy US/JA tower requires some tricky body contortions. It takes about 2.5 hours on the tower to do about one section. Some are much harder than others.

The next day I return to the same area of the tower with a bucket of freshly mixed epoxy finish paint and cover all of the primed parts from the day before. Experience has shown that rust areas maintained in this manner will not need work again for about 18 months. One will never stop rust formation in this climate, but our tried and true process drastically retards rust accretion, and as a result the US/JA tower should serve us for years to come. (This epoxy paint is about $145/gallon – there's where some of your Station Support dues go.)

This is obviously miserable work. In days gone by WB9Z worked with me in the painting process. Also, years ago, we tried using a commercial tower contractor from the island. They did a "fair" job, but not up to our needed standards, rust was getting out of hand, and they were very expensive, so we reverted back to my doing this work. Believe it or not, this does require considerable skill and experience. Don't feel too sorry for my having to do this work, because as I've reminded you many times before in this newsletter I am being paid for this tower painting work. The logic is that I do a much better job than the professionals, and am much cheaper. Tower professionals are on the order of $100/hour, and I am being paid $40/hour, solely for the time my boots are on the tower, excluding the prep time before and the cleanup time after. This helps stock my ham radio fund with a bit of money for a toy now and then, and CCC is getting high quality work. The annual CCC budget for tower painting is $1500, and we have not spent anything close to that in any past year. I put in 11.75 hours on the tower this Fall season, and totally completed the needed painting and grinding work, top to bottom, on the US/JA tower.

All other non-painting work on the towers is my donated time. I noted in my maintenance notes April 2021 that one of the deadend guy grips at the middle guy set on the US/JA tower was showing some rust through the tape. By November 2022 it was really bad. The day after the CQWW CW team departed I put on a temp guy and brought the rusty culprit to the ground. The photo (next page) shows one of several areas on that guy that were near failure.

Guy grip about 75% failed on the US/JA tower

The deadend came off in pieces, and much of it crumbled in my hand. This pile of scrap metal (below) was what was left from a 48 inch Phillystran Big Grip deadend. The good news is that it served for 20 years. Had it failed, the tower would not have collapsed, but it was certainly cause for alarm.

Remains of a Phillystran Big Grip deadend

We're careful to stock critical parts on site. There were eight of these Big Grips at the QTH, so I grabbed one and a new stainless steel thimble, and Dorothy helped me install it on the Phillystran. Here's the look of that prior to coating.

New Big Grip and thimble, awaiting paint

The next step was to put on a coat of epoxy primer, wait a day, and then add a coat of epoxy finish paint. Once that paint had dried we reattached it to the tower, tensioned it to spec, and slightly relaxed the temp guy, leaving it in place for two more days as a conservative safety measure.

New stainless steel guy bracket bolt

Now the temp guy is removed and the turnbuckle at the ground is re-sealed against the salt. I opted to leave the guy attachment, which is now sporting the new stainless bolt, and the painted deadend bare to the elements. I'll have a look in seven weeks and make a judgement about how much salt-proofing will be prudent. Covering epoxy paint with electrical tape is a bad practice because it traps moisture and accelerates rusting, so careful observation will guide this decision. There are three other suspect deadends on this tower that will need the same procedure in the future, but none are nearly as bad as was this one.

I couldn't find the elevator button so I had to take the steps to the top of the tower. With the harness, paint bucket, and angle grinder that's an extra 35 pounds.

In the very good news department, the photo on the next page shows the turnbuckle on this guy after I removed the putty and tape weatherproofing and de-tensioned the guy. You can clearly see that the anti-seize that I put on the deadend at installation is still

perfect. Our weatherproofing techniques work. Thanks N8NR for teaching me about anti-seize.

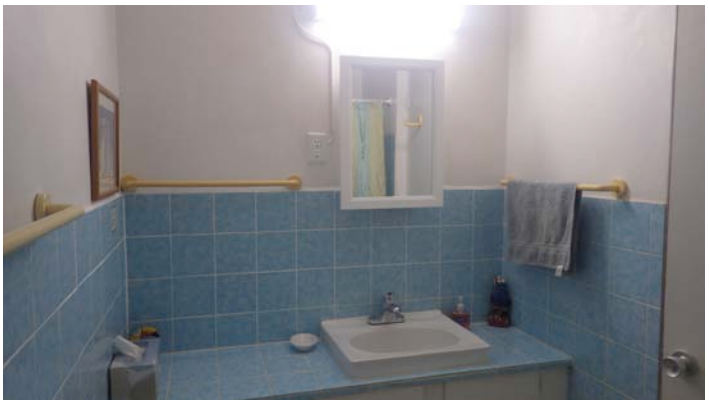
Threads on turnbuckle in perfect condition underneath our putty/tape weather seal.

VERONA Membership Cards

As you now know, all CCC members are simultaneously members of Curacao's ham radio club VERONA.$28.57 of your $550 annual CCC dues are diverted to the Curacao club dues, which they discount at 50% for us. Each year they generate membership cards for us. Those went out on November 18. PJ2CFM sent them to me and I forwarded each. Please let Geoff know if you did not receive yours.

W9VA's VERONA membership card

New Fixtures in West Bathroom



New cabinet, light, and outlet in West Bathroom

The photo shows a new medicine cabinet and light fixture in the West Bathroom. An unknown good Samaritan had tried to replace the light bulbs in the old cabinet and broke the plastic light lens. That cabinet was not very functional anyway, so we went to Kooyman and found a replacement and added a bright LED light above. And if you look closely there is now a convenience outlet for your razor or hair dryer. The outlet only works when the light is on, but that will seldom cause a problem.

Thanks to Dorothy (photo) who did the grout repair, masonry work, and painting after we installed this new cabinet.

Grout repair

VE3CX and K5PI were the inaugural users of this improvement, and it got high marks from them.

OE3VEL Visits Signal Point

Wolf E-mailed me last week that he was on the island vacationing with his XYL after his M/2 effort in CQWW CW from Aruba**.** He and Gerda visited on Sunday, December 4. Wolf is a well-known contester and WRTC participant, has operated all over the

world, has them all except North Korea, and is very active with contest station OE2S.

Wolfgang Klier, OE2VEL, December 4, 2022

In real life Wolf operates a commercial electronics company in Austria, from which he is trying to disengage so he can retire. We spent a very enjoyable couple of hours with him and Gerda, and he expressed that he was extremely impressed with the organization and top-notch maintenance of our club station.

Dorothy with Gerda and Wolf Klier, OE2VEL

As always, it was a special thrill to meet like-minded amateurs, and to welcome than with multiple cold Amstel Brights.

End of Month Balance

At the end of November the balance in the Station Support fund was $6674.42. Revenue from CQWW CW is not yet posted into that balance.

New Dell Monitor Bought October 31

We finally ran out of good monitors. I contacted the CCC officers and got their authorization to buy a new monitor locally. The result of that shopping trip was a Dell P2422H 23.8 " monitor with VGA, HDMI, and DP ports. I got it at a store called Better Deals, total tab $457.11. Believe it or not that was a fair price in the island economy. Hopefully this beautiful new monitor will serve us for years to come.

Long Term Strategic Thoughts

Right after a big contest operation is the freshest time to consider where we are and what is needed in the future. Here are some quick bullet thoughts, in no order of precedence.

- Backup power. Unreliable commercial power is by far our biggest vulnerability. I am a nervous wreck during each contest, hoping that the power will stay up and not disappoint the team. A decent diesel generator and housing for it is the obvious solution.
- Transfer switch. Short of a better generator, we would benefit from a manually operated AC transfer switch. There is no real reason it needs to be automatic. This would greatly speed getting up on our old 5KW camping generator very quickly. We have people in CCC who could design and execute this blindfolded, and it is in my thoughts.
- Another K3. We permanently pilfered one of the PJ2T contest radios for the enhanced remote. Those of us who use the remote need to “pay back” the non-remote PJ2T station by acquiring another K3. With good sunspots we need all of our transceivers available.
- 3CX1200A7 tubes. We badly need to find two or three more spare tubes for the mainstay AL-1200 amps.
- Reserve for the airco. The shack air conditioner has survived longer than expected. But when it fails we will need to grab about $4K out of the station fund for its replacement. We have that much on hand now and need to sequester it for that air conditioner.
- Future transceivers? Are we good for the next six or so years with the K3s? They are starting to fail. Thankfully, N7IR can do most of the repairs, and many good K3s are available on the used market that have not been in a salt environment. But what is next? Should we be bringing a different vendor’s transceiver here for evaluation in an upcoming contest? What should it be?

Signal Point Terrestrial Phone Now Working

It took me over four months of very frustrating wrangling, but the local telecomm company, Flow, finally activated the VoIP phone service to the house.

Once again, you can call Signal Point at 864.2903, the number here for over 50 years.

Photo Strays

Spotted in Punda last weekend. These are heavy duty AC circuits and one Ethernet cable. What is the point of the conduit??! Where's NEMA when you need them?

Important PJ2T cabling in the wilderness

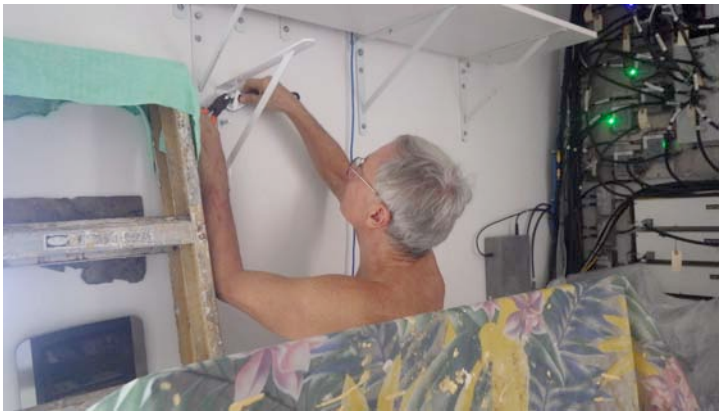
It doesn't look like much, but this is part of our connection to the world. This is in a difficult to access area at the foot of the cliff across the road from the house. Left to right, what you see are the 50 pair telephone cable that formerly fed our neighborhood, the slightly smaller new fiber trunk to the neighborhood, a conduit shielding the W8WTS splice body in the Heliax to the Ridge, and two RG-6 runs for the US/JA and Europe Beverages.

From this point all five of these cables go about 35 feet straight up to the cliff top, then onward in various directions (photo next column). I installed mechanical sheaths on all of these cables at the top where they change direction, and also put belay lines on them that are attached to stout trees at the top.

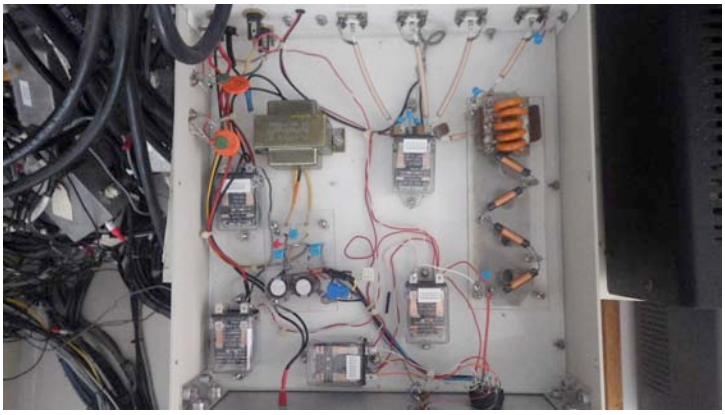
Cables going straight up

Co-locating our radio feedlines with the utility feed to the neighborhood helps protect our cabling. I worked with the utility company crews last March to install their cables in this way.

W9NJY running tabletop QRP CW on 12and 17, November 24



Installing masonry anchors for the KPA-1500 power supply shelf



W9NJY Ridge remote coax switch (shack box) as Geoff modified it for remote operation by adding four relays and additional rewiring and cable ports

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