Signals From The Point

Official Newsletter of the Caribbean Contesting Consortium
Editor: W0CG

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Dayton Hamvention CCC Meeting Announcement

The 2024 Annual Meeting of the Caribbean Contesting Consortium (PJ2T) will be held during the Dayton Hamvention on Friday May 17, 3:00 to 5:00 PM. The meeting will be held at the Hope Hotel in the P-51 Mustang Room as in the past two years. The Hope Hotel is adjacent to Wright Patterson Air Force Base.

Mark your calendars, and make plans to attend! (This is one of many reminders to come.)

CCC Annual Meeting
Friday May 17, 2024
3:00 -5:30 PM

Hope Hotel & Conference Center
P-51 Mustang Room
10823 Chidlaw Rd # A, Dayton, OH 4543

Tentative agenda items (not yet finalized):

- *"Keeping PJ2T Alive: A Groupthink." - Led by W0CG*
- *25th Anniversary Contest: 2024 CQWW CW*
- *Generator Project Status*
- *2024 PJ2T Yearbook - K8ND*
- *Real Estate Financial Report - W0CG*
- *Treasurer's Report - W8WTS*
- *Election of Officers for New Two Year Terms*
- *Discussion of Policy for Very Long Term Stays*

73, Jeff PJ2ND K8ND
President, Caribbean Contesting Consortium

WPX SSB Contest Report

We were unable to raise any interest in a large Multi/Multi team effort from Signal Point this year. I've learned that "Field of Dreams" is wrong, and that they will not necessarily come if you build it. Also, it was not a help that it was Easter weekend.

Only WI9WI and his XYL KA9DOC flew south for this contest, partly to escape the Wisconsin cold and partly to celebrate Annette's highly successful shoulder replacement surgery. The WPX contest itself was not their main reason for the trip.

N7NR stepped in as our team leader for the contest and recruited a team of superb remote operators. The bulk of this Multi/Single contest was done by off site operators, including N7NR (CCC), KY7M, NA2U (CCC), KC7V, and W4IPC (CCC). KA9DOC and I also did a bit of on site operating to supplement WI9WI's time in the chair.

Dr. Annette Gendron-Fitzpatrick, KA9DOC, operating on 40 at 4:20 AM local, WPX SSB 2024

Our use of wide area networked logs using the Hamachi VPN introduced to us by KB7Q is now routine, easy, and reliable. All operators everywhere see the same N1MM log in real time. N7NR kicked things off with a two hour shift, logging 347 QSOs on 10 and 15. From there we took turns per Dave's schedule, smoothly transitioning shifts among the remote ops in Arizona, California, Virginia, and the on-site local ops. Here's the result on the next page. While we won't be getting a plaque, it was a superb

first test of an almost 100% large scale multi-operator contest on the remote. All of the equipment performed flawlessly, confirming the great value of our now mature remoting capability. Thanks again to KB7Q for starting us on this path many years ago.

Based on raw scores, we made it into the Top Ten in M/S. Congratulations to the team!

Band	QSOs
160:	0
80:	15
40:	628
20:	942
15:	1519
10:	1705

Total: **4809** Prefixes **1214** Total Score **19,427,642**

If you're interested, the 3830 comments are at https://www.3830scores.com/showrumor.php?arg=RvYizV7Y0JnnnU .

CQWW SSB Contest Plans

Defeated by the heat and climate, Dorothy will not be coming to the October event, so I was hoping to be able to stay in Idaho until early November. But there is high interest in CQWW SSB, so the contest will go forward, and I'll try to make this happen without her.

W3ACO will again be pressing for as much youth participation as possible. This year he will be bringing KI5SXY, Morgan, a YL aerospace engineering student from the Missouri University of Science and Technology. Rich will sponsor her costs, and Rich will be accompanied by his daughters Erica and Melissa (W7MAH). Ace pileup operator VE4GV will return in October, and we welcome contester PC8M who will be joining us from Holland. As in past years, Melissa will be chef, so there is no doubt that we will eat very, very well. We have rented the Moran pool house even though those costs/operator may be high given a small team. VE4GV and W3ACO have indicated that they accept this situation.

Can you join us? We are hoping to have enough operators to staff a Multi/Multi, and depending on gender mix we have space for three or possibly four more operators. We need your help! Let me know?

Dr. Rob with 453 QSOs in 90 minutes on 20 last fall

TUI Blue Hotel Construction Progress

I was lucky to catch the first concrete pour of the entire project.

The first pour, Wednesday, March 13, 2024

The giant pumper is being fed by a train of mixers pouring huge footers for the first building. Work is progressing rapidly. There will soon be five nearly identical buildings side by side along the oceanfront that will provide a total of 300 guest rooms. Other buildings and infrastructure will soon be under construction also. The speed of progress is extremely impressive.

PJ2T: 25 Year Anniversary

As you know, the CQWW CW contest this coming November will be our 25th anniversary of contesting from Signal Point. W0NB made that first contact, with VA7RR on 10 meters, in November 2000. We are planning a special observance for this contest.

I have rented TWO houses for November, the Moran pool house as usual and also the King house (# 7). This will give us 13 beds available, one of which is a bunk and two of which are small singles. At present our team consists of W9NJY, W0CG, NA2U, K8ND, N7IR, W8WTS, WA7LNW, NG7M, and possibly W1DED. If Kevin confirms, that still leaves space for

four more operators. If he confirms, W1DED will serve as videographer. Kevin will operate a lighter schedule than most team members so he can be free to capture audio and video. If not Kevin, we will find someone else who can capture and produce a professional one hour documentary of the entire event for release on YouTube. Our aims for the video are to 1) celebrate and preserve for history our 25th anniversary event, 2) motivate and explain contesting to new hams and non-contesters, and 3) provide enough background so that the general non-ham public can understand and appreciate what we do in contesting. It may not be the NFL, but this is a large worldwide sport, and I can't help but think that if we publicized ourselves better that we could grow some new participants.

We're still recruiting for the November event. Dorothy will be there. Can you come? This is a year when CQWW CW DOES NOT FAlL ON THANKSGIVING.

End of Month Treasury Balance

The end of March balance in the Station Support fund will appear in the next newsletter. We are in good shape financially.

US/JA Tower Maintenance Update

The annual maintenance on the US/JA tower is complete as of the end of March. I spent many hours working on it through February and March. The short summary is that there are places in the top three sections, where the salt is most intense, that will require structural reinforcement within the next five years. I've worked very aggressively on this tower every year, managing to keep it in service and in reasonable condition, for 23 years.

We will need to add some additional leg splints, move the antennas a foot or so up or down to stronger leg areas, and fabricate and install some splints for the diagonal braces. And, of course, the usual grinding of rusty spots and recoating with two coats of epoxy paint is essential. If there is any good in this, it is that I am now so old that I get a 30% senior discount on two component paint from AVF on the island.

How to do all this maintenance will be one of the topics for discussion at Dayton under the heading of sustaining PJ2T. It is necessary that we find other people to whom I can transfer some of these responsibilities. At age 75 I prefer not to be doing strenuous climbing and heavy in-the-air repairs.

But for now, we are good on this tower because I fixed several serious problems in these past months.

Fixes for Remote Filter System

As you know, we designed and installed a bandpass filter system that resides in between the remote K3 transceiver and the KPA-1500 amp. It was finalized last October and works perfectly, providing excellent protection for the equipment when the local station is operating on other bands. The filter system changes bands automatically, unseen by the remote operators.

But this filter system also introduces many potential failure points (Bandmaster, coax relays, 12 volt power wiring, coax jumpers, the filters themselves), and if any of them go awry, the remote station will be inop. If this happens during the months that the QTH is unmanned, we are out of luck.

Thus as a hedge we designed and installed a bypass capability that will take the entire filter system out of the circuit if needed. Only three of the sysops have the capability to do this. This all now works well after I did a lot more installation rework and troubleshooting than I had expected would be necessary.

One exception, though, is that we had high SWR into the KPA-1500 input side on 40 and 20 with the filter panel in bypass. It was in the neighborhood of 4.0:1 or so, depending on which part of the band we were in.

The problem was that our cabling between the radio and filters and filters and amp included some quite long runs, and on 20 and 40 there were weird things happening on those cables because of a combination of their particular lengths and the location of the filters in those lines. I experimented quite a bit with extending those cables until I found the right lengths to add, and now all is OK. I made up the cables from some leftover coax and connectors that were here. They are now permanently installed and dressed out of the way safely (photo next page).

Coils of cable that remedied the bypass SWR problem on 20 and 40, March 21, 2024.

The other key to making the bypass system behave last December was to add a coax transfer relay immediately at the output of the K3 that I built using a leftover work box and relay and some other parts.

It all works fine now, and the unbypassed bandpass filter system has proven to be solid in normal remote contest operation over the course of several contests this season. And now, finally, the emergency bypass system is also bug free.

Ridge Tribander Fixed

As reported in the last newsletter, on February 29 I discovered that half of the west side of the Ridge Skyhawk tribander driven had fallen off. The element was lying in the weeds below the antenna, having flipped 180 degrees on the way down. It was clear that corrosion had eaten through the element at the element spacer block.

Break point in Ridge Tribander 20 driven element

This was a panic because careful checks of the inventory showed that we did not have all of the needed tubing diameters in stock in the spares at the station. Worse, I quickly found that the pieces of the element were welded together by corrosion, thus requiring that almost the entire repair element would need to be fabricated on site.

I studied the manuals and drawings, created a drawing of my own, and hurriedly ordered the needed tubing from DX Engineering ($132). That package arrived the next day at my foster son-in-law's home in Ohio. J and Liz were scheduled to come to Curacao on March 12. J was kind enough to go to the stores in Ohio and buy the PVC tubing and other parts ($55) I described to him to make a shipping container for that tubing. Here they are in Curacao with that tube. American Airlines accepted it as checked baggage in the "Sports Equipment" category, so we got it here for only $35 plus the cost of the materials.

Liz and J Bennett with the tubing

Liz came to live with us when she was in high school when the criminal behavior of her father forced her to leave home permanently. She got a degree at Kent State where I was faculty, married J in 2003 at my home, honeymooned at Signal Point that August, and have both developed successful careers. Their son Kalen will soon be 18. Making and bringing this container of tubing was a large imposition on them, but they saved the day.

I built most of the replacement element at the house over the next couple of days after their arrival (below).

W0CG fabricating the replacement element

These elements are riveted together, so you only get one chance to get it right. I measured and calculated and measured again with extreme care before putting

in the rivets. I also made liberal use of Penetrox anti-oxidant in making this piece.

On March 13, the first day of J's "vacation" he came to the Ridge with me to figure out if we would even be able to get the 20 driven element off the antenna, given corrosion and freezing of hardware. But J is in top physical condition and is a very highly skilled metal worker, and we managed to get what was left of the element down to the ground. Success on the first big step in the repair.

J atop the Ridge tower. You can't see or hear the violent beating, howling wind in the photo.

The photo shows that I have managed to disconnect the driven element straps, and we are preparing to disconnect the element from the boom. The use of Anti-Seize on the feedpoint hardware back in 2013 paid off.

After making a checklist of 23 tool and part items and packing two backpacks, it was time to attempt the fix. As a first step, I left the house walking at 4:15 AM on Friday, March 15 with the new element piece in hand. Walking was the only way to get the part up to the Ridge. I had to do it under cover of darkness because the walking route would take me directly past the hotel construction crews on the way to a place we are not supposed to be, using a route we are not supposed to use, carrying a 17 foot long gleaming piece of new aluminum in the construction spotlights that would raise too many eyebrows among the supervisors at the site.

An hour and twenty minutes later I made it back to the house, scratched up and soaked in sweat but happy to have prepositioned the piece on the Ridge. After breakfast J and I took the kit and the DeWalt battery-powered drill to the Ridge tower. Dorothy drove us part way up there on the upper road, thus escaping the attention of the workers.

It took us about two hours to mate the new element to the existing 20 driven element. I fabricated a 24 inch reinforced inner splice piece and used four carefully placed rivets to get this done, all with proper use of anti-oxidant grease and Anti-Seize. The photo shows part of the action, installing rivets. This required very careful measuring, hacksawing, and drilling because we had only one chance to get this precisely correct.

W0CG drilling holes for rivets

Once the full length (37 feet) of the element was ready to be installed we went back up the tower. This was an awkward operation that would have been impossible for one person. With two of us it was fairly easy. Regrettably, in the final step of connecting the RF feed straps, one of the straps broke in two, even with very deft handling, because of the corrosion. I managed to improvise a patch in place on the tower. I'll custom fabricate replacement pieces of these in Ohio and put them on the antenna this fall. Here's J after the successful repair.

J Bennett, happy with the outcome

Note the W9NJY box on the base of the tower, happily functional after Andy's repair. I'm very grateful to J for the help, as this job requires two people in top physical condition to survive in the extreme heat, and also requires a set of good skills. CCC bought him a case of Polar beer in appreciation (next page).

Heading home with some "nourishment."

The other side of the 20 driven element is likely to break in the near future, so I bought two of everything and those parts are on site. I also made careful notes and drawings about this repair to eliminate the learning curve next time. We were extremely pinched for time, so could not do that second repair this trip.

The extremely severe climate is tough on antennas. This is the tip of the 20 meter driven element after I removed the plastic tip cover. That cap was tight and snug, but the salt still got in and rotted out the aluminum. This is what we're up against every day at PJ2T.

Tip of Ridge 20 meter driven element

VERONA Annual Meeting

I attended the annual meeting as CCC's representative.

VERONA Annual Meeting, March 13, 2024

President PJ2BR presiding, with Treasurer Castro (PJ2CFM) at Brett's right. That's Joop, PJ2JW at the right, still going strong as a CW op at 83.

Rusty Deadend Replaced on US Tower

You may find this to be possibly the most boring story in the history of this newsletter, but I want to give you a sense of the time consumed by the mostly unseen maintenance work alluded to earlier.

Over time nearly all of the legacy 2001 guy wire deadends have been replaced as rust gets to them, threatening failures. The last one that still looked bad was the middle northwest Phillystran guy grip at the tower end. It was showing out of control surface rust (photo). My experience has been that when the exterior of these begin to blister as in the photo, the rust progresses very rapidly and failure is only a few months away. If a deadend fails, there is a good chance that the tower will collapse.

Removed middle guy from US/JA tower, March 20, 2024

The procedure for doing this replacement is more labor intensive than you might think.

- Day 1 (March 19): I dug our 600 foot coil of ¼ inch steel cable out of storage, rolled out 100 feet, attached a deadend to the tower end, went

up the tower, and attached it 16 inches above the parent guy.

- Back on the ground I then attached another deadend and used a come-along hand winch to pull the temp guy tight. Once the parent guy begins to sag a bit, you know that the temp guy has taken over the tension.

- Day 2: Once I have full confidence in the temp guy, the next step is to remove the two clamps on the safety guys, unthread those guys from the turnbuckle jaws, and open the turnbuckle all the way to minimize tension on the parent guy. It took 90 minutes to get the clamps off the safety loops, even though there was liberal Anti-Seize on the threads.

- The next step is to go back up the tower to disconnect the parent guy. This is very time consuming because that attachment is encased in a huge wad of waterproofing tape and putty that was installed in 2001. It takes patience. The hardware that was inside the putty was in 100% new condition after 23 years.

- Once that weatherproofing material is all removed, the big 14 inch crescent wrenches take over, enabling loosening of the 7/8 inch safety and primary nuts. I applied liberal Anti-Seize in 2001 when I built all of this, but it's still a physical challenge to work with that heavy duty hardware.

- With the parent guy off the tower, I lowered it to the ground using a pulley and messenger rope arrangement.

- Now on the ground the old rusty deadend is removed from the Phillystran (photo preceding). Then the rust is cleaned off the Philly using sandpaper, a scraper, and finally rubbing alcohol to get all of the rust residue off the Kevlar.

- Once cleaned, Dorothy and I put on the new Phillystran Big Grip and a new stainless steel cable thimble. This is definitely a job requiring two people. The photo shows that new grip on the guy, hanging in a tree ready to paint. We now have eight Big Grips remaining in inventory.

New Big Grip on the Phillystran, ready for primer, March 20

Stainless steel thimble

- Later that day I mixed a large quantity of epoxy primer and primed the new guy grip. After priming the guy I spent almost three hours on the tower with the power grinder and the balance of the epoxy primer cleaning and coating rusty areas.

- Day 3: Mix a large quantity of white epoxy finish paint, coat the new deadend in the tree, then go up the tower for another three hours to paint the primed areas. At the end of that session I put a second coat of white epoxy on the deadend.

- Day 4: Climb up the tower and reattach the guy to the guy bracket using a new stainless steel bolt, washer, and nut set. Go back down, apply liberal Anti-Seize to the turnbuckle

threads, and use the turnbuckle to bring this guy to about 80% tension. Let it settle overnight.

- Day 5: Now confident in the new guy hardware, I fully tensioned the parent guy with the new deadend (670 pounds is the spec), tightening the turnbuckle until the temp guy begins to sag a bit. Leave that to settle overnight.

- Day 6: Fully loosen the temp guy on the ground and detach it. Go up the tower, remove the temp, and lower it to the ground using the messenger rope. Painstakingly reinstall the putty after cleaning it on the ground, removing bad areas and paint and metal flakes. The old waterproofing worked perfectly, so I decided to reinstall the guy using this technique. This takes about two hours on the tower, finishing up by double-taping the final product.

- Day 7: Align the turnbuckle jaws on the ground, reinstall the double safety guy loops and clamps, and treat all threads with a final coat of Anti-Seize. Reinstall waterproofing putty at the safety loops on the ground to keep water out of those joints.

I elected to leave this newly installed deadend exposed to the salt air. When we built the new Europe tower, we purposely left some of the guy grips exposed, taped and puttied some, left some guy bracket attachment points exposed, and puttied others. This was an empirical experiment to learn more about the corrosion processes and the value of epoxy paint when applied to new hardware. So far all look acceptable, and I repaint the exposed parts periodically as well as open up the puttied parts for inspection.

With the replacement of this Big Grip in late March, all 60 of the deadends have now been replaced since original installation.

There's a lot of pretty much invisible maintenance going on continually so that we are able to get on the air and give out 59K to so many callers.

It's Not Just the Antennas

Antennas are not the only things that have trouble surviving the severe salt air on Curacao. Here (next column) is a concrete seating bench at Ascencion Boca Park. It has suffered what SpaceX so delicately refers to as Rapid Unplanned Disassembly. This thing collapsed all on its own in place where it had been installed.

Concrete bench, a victim of salty sea spray, dead where it fell

Why? Because it was built using conventional rebar, which eventually fails even when imbedded deeply in concrete, as shown below.

Failed rebar and fasteners in the former bench, March 18, 2024

Work List Revisited

There was considerable favorable commentary on inclusion of the overall work list in last month's newsletter. Thus, here is an update with new items added and completed items greyed out.

- Finish rust scraping and priming and epoxy painting the US/JA tower.

- Replace middle guy tower end northwest Phillystran grip.

- Paint the very few and small isolated spots of early rust on the Europe tower.

- Take down the 12/17 beam and rehabilitate the traps, or replace it with a trapless antenna.

- HF-2500 amp is overheating and also folds power back at random times. Amp is unusable. This needs to be diagnosed and fixed.
- Titan III amp only makes 400 watts of output. Diagnose and fix.
- Titan 425 amp makes smooth full power, but from time to time the output drops to 150 watts. Dirty or bad T/R relay?
- South side house soffits need to be replaced with lauan and 1x3 trim pieces, then painted.
- Plants behind West Bedroom need to be removed to stop root intrusion into septic tank. Then cover with geotextile and decorative gravel and desert plants.
- Set up Station 1 so that RTTY can be run with minimal to zero setup and troubleshooting time.
- Replace rotor in Europe tower and send the bad one north for repair.
- Replace rotor in WARC tower and send the bad one for repair.
- Apply full coat epoxy white to US/JA tower.
- Apply full coat epoxy white to Europe tower.
- 160 TX antenna radials need to be tested, renewed, and some replaced, then install a new 2:1 unun transformer.
- Solve SWR problem on 20 and 40 when the remote station bandpass filter system is in bypass mode.
- Tape over bad roof tape seals with Eternabond (on site) roofer tape.
- Dig up and locate then repair broken yellow radial connection adjacent to fiber conduit.
- Repair sagging east overhead boom truss on 80 meter US/JA wire beam.
- Trim all tree branches back from all guy wires.
- Spot cover bad areas on all security bars using epoxy paint.
- Grind off rust on top of bars for picture window, then prime and epoxy paint.
- Replace and epoxy paint bad conduit straps in Ocean Pavilion.
- Install bottom fill and bracing piece on rotting laundry room door.
- Scrub then varnish inside portion of pavilion ceiling. (Outside portion was done in late 2023.)
- Find a source for the T/R relay for Titan 425 amplifier.
- Order and transport three additional Deltrol replacement relays from RS electronics for W9NJY box.
- Determine how to buy and then program remote controllers for Signal Point front gate motor.
- Install switchable light in Radio Closet.
- Patch/replace concrete balustrade posts that are failing.
- Remortar concrete pillars that have large amount of flaked and failed concrete.
- Manufacture two sets of driven element straps for Bencher Skyhawk, and install one set on Ridge tribander.
- Fabricate several AL-1200 T/R boards from reverse engineered notes (W8WTS)
- Apply concrete caulk to leaks above Step Closet that were identified in December.
- Install new nylon rope and color markers on property line with hotel to keep the construction activity away from our cables. (This has already been done atop the Ridge.)
- Repair broken 20 meter driven element on Ridge tribander.

We will talk about arranging work trips to tackle the above problems. Stand by for E-mails about this after the Hamvention.

CCC Needs a Plaque Manager

We suffer from the attractive problem that we win a lot of plaques. Unfortunately, these are not being carefully managed or stored. Would someone have an interest in taking on this job that involves the following activities?

- Right away, solicit all our members for a list of the plaques they have in their possession. We have never had a comprehensive list of these. This will be the beginning of our plaque "catalog." I have piles of plaques here in Ohio, in Idaho, at the QTH in stacks, and also on the walls at Signal Point.

- After every contest in which PJ2T participates contact the person who submitted the log and extrct a promise that he will let you know when any plaque we may win arrives. Track these and keep bugging him. These are usually, but not always, sent to the log submitter, and this can take over a year.

- When that plaque arrives, photograph it and catalog it, then mail it to a central repository, probably at W0CG/Ohio, for long-term preservation.

- Also when each plaque arrives, E-mail all of the members of that team to ask if they would like to purchase a duplicate plaque. Collect that money and coordinate with contest manager (ARRL, for example) to place the order for additional plaques. Arrange for the duplicates to be sent directly to each individual operator.

Does anyone have the time and energy to take on this chore?

Check out the photo following. There's a plaque in its mailing box in the foreground. I wonder where that plaque is now??

Dinner, February 17, 2006. L-R: Keith (WA9S, SK), Tom (W8TK), Steve (N8LGP), Cindy (obscured by the floral centerpiece), Dan (N1ZZ), Goose (W8AV), Noel (W9EFL SK), Mal (NP2L SK).

We have made, and lost, many wonderful friends in this quarter century of operation at PJ2T.

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