

# Turbo-Charged Contesting—PJ2T Style

## March's Contest Tip of the Month

If, like me, you're into keeping cars for a long time, you perform regular preventative maintenance, right? As you might expect, a well-oiled contest station is no different. When was the last time you considered a "100K mile checkup" for some of your older equipment? Well-used radios are no different than cars; they need to be adjusted and maintained from time to time. Also, if you're like most hams, your laboratory instrumentation is limited. So take some good advice and have another ham or local repair shop give some of that equipment of yours a quick tune-up. It's cheap money when you consider the total investment you have in your hobby, and the returns may be dramatic!

Don't think it's too much of an exaggeration to say that the majority of contest operators have a strong desire to experience contesting from "the other side." In fact, many hams often speak of that lifelong dream of going on a DXpedition and experiencing the excitement of hundreds of stations calling them from around the world.

In my case, until my trip to PJ2T for last year's CQ WW, it had been over ten years since I'd had the thrill of being DX in a contest. While there are literally dozens of guys who do it every contest season, it's still a unique experience for me and probably for the vast majority of you as well.

As it turned out, my trip to Curacao resulted mostly out of an odd combination of unplanned events. This past fall, K1EA decided that he would take the big plunge into home building by starting a new construction project in front of his current house. Unfortunately, that necessitated shutting down his

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Sometimes it takes a little extra "AR" urging to ensure everything is properly tuned on 15 meters.  
(Photo courtesy WC4E)

## Calendar of Events

Feb. 15-16	ARRL CW DX Contest
<b>Feb. 21-23</b>	<b>CQ WW 160M SSB Contest</b>
Feb. 22-23	REF SSB Contest
Feb. 22-23	UBA CW Contest
Feb. 22-23	RSGB 7 MHz CW Contest
Mar. 1-2	ARRL SSB DX Contest
Mar. 9	North American Sprint RTTY Contest
Mar. 9	UBA Spring Contest
Mar. 9-10	Wisconsin QSO Party
Mar. 15-16	Russian DX Contest
Mar. 15-17	BARTG Spring RTTY Contest
Mar. 22-23	Oklahoma QSO Party
<b>Mar. 29-30</b>	<b>CQ WW WPX SSB Contest</b>
Apr. 5-6	MARAC County Hunters SSB Contest
Apr. 5-6	SP DX Contest
Apr. 11-13	Japan International CW DX Contest
Apr. 19-20	YU DX Contest
Apr. 19-20	Michigan QSO Party
Apr. 19-20	Ontario QSO Party

station until the project is completed. Thus, now being a homeless contester, I began looking into other alternatives. Fortunately, there are many opportunities for an experienced contester living in New England. We have the luxury of multi-ops spread out all over the region, and there are always several good stations looking for contesters who want to give single-operating a try. Ironically, on nearly the same day as Ken and I discussed his station's future, I read an e-mail message from Ron, K8NZ, looking for one or two more ops to come to PJ2T for the 2002 CQ WW DX SSB Contest. After a few e-mails back and forth the trip was on!

For those of you who don't know, the PJ2T location is owned by Geoff Howard, W0CG, along with the support of the members of the Caribbean Contest Consortium (CCC), who have pulled together financial and logistical resources to build a world-class contest station at Geoff's Curacao QTH. The station is actually located at the old QTH of John Thompson, W1BIH. Perhaps some of you remember the days of PJ9JT, where John—along with others, including his good friend, W1WEF—worked thousands of QSOs over the years. If you're interested, you can find out more information about the QTH by checking out <<http://asgard.kent.edu/ccc/>>.

As it turns out, heading to the Caribbean, especially Curacao, is extremely easy. It's really not much different from going to Atlanta or any other "normal" airline destination. The weather is warmer and there is more water nearby, but other than that, it's just another plane ride. Last year we were fortunate to pull together a terrific crew of guys that included K8NZ, WC4E, N8BJQ, W1MD, and myself. We knew that we would have a great time regardless of our final score!

The 2002 CQ WW offered a new twist with the addition of the Multi-2 category, much like what exists for the ARRL DX Contest. As it turned out, this category was the perfect complement to our team. We looked at the situation and concluded almost immediately that it would be much more fun



Nothing like a few beams to keep the rate up at PJ2T! (Photo via K8NZ)

for the second station operator to actually work guys as a run station rather than being limited to searching for multipliers as a multi-single, which is tedious even in the Caribbean. Therefore, with an operating crew and strategy in hand, the fun was about to begin.

Fortunately, the CCC has done a tremendous amount of work in building the PJ2T station—inside and out. I think the pictures in this month's column speak for themselves. However, there's always something to do at a contest station to get ready, and we did a bit of antenna work, including putting up a 5-element 15 meter Yagi at 30 feet (yes, 30 feet) that was fixed to the U.S. Amazingly, the antenna turned out to be a "rock crusher," which is a true testament to the magic of operating around salt water.

Inside the shack there was the usual configuration work to get the station ready for Multi-2 operation. In reality, we had three stations ready to go, with the third available for spotting multipliers and back-up operation (if needed). Geoff and the CCC team have done a tremendous job of putting together this station. The house itself has been completely remodeled, with two bedrooms and full baths. Although there's no air conditioning, the breeze off the water helps keep temperatures manageable. No, it's not "dry heat," as they often say in the desert Southwest.

By the time Friday morning arrived we were essentially ready to operate. We had one equipment failure—an amplifier—that resulted in our using an old

Alpha that only ran about 500 watts, but that really didn't seem to matter. Most of us played radio during the week ahead of the contest—in between other tasks—as PJ2/xxxx. I experienced one of the largest CW pile-ups to Europe I've ever heard during an afternoon run on 20 meters. With all of the operations from PJ2/9 you would think the level of interest in working Curacao would be fairly low. However, everyone still enjoys working a loud station in the Caribbean, if for no other reason than just to say, "Hello and good luck in the contest."

As we neared the beginning of the contest, we had set some pretty lofty goals for ourselves. The previous year's multi-single operation had yielded 8000+ QSOs, so as a Multi-2, it seemed reasonable that we would be well ahead of that total, especially with the antenna improvements that had been implemented by the CCC team over the year.

### The Contest Begins

It's 2359Z and the stations are sitting on 10 and 15 meters (I'm on 15) with huge pile-ups calling. We're ready to go. The anticipation of what's to come is one of ham radio's greatest moments and a big thrill for any contester.

As the bell went off we were rocking with 13 QSOs in the log in the first minute between the two stations. It appeared that all of our preparation paid off as we rocketed out of the starting gate. Then disaster struck! After about 5 minutes of operating, we noticed that the two computers were not synchro-

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The hands never left the keyboards at the PJ2T operating positions. On the left is W1MD; on the right none other than K1AR. (Photo courtesy K8NZ)

nizing. The QSOs from the 15 meter station were not making it into the other computer and vice versa. Although not particularly amusing at the time, you can just imagine what it's like for me to be running guys at a rate of 400 QSOs/hour while simultaneously asking questions about the computers and the network.

Jeff, WC4E, took the liberty of tape-recording "station 1," which has some of contesting's more comedic moments, as you listen to me running guys and pausing to ask, "Did his computer get that one?" As it turned out, we were getting RF into the Ethernet connection between the computers. Yet again, computers became the focus (You may recall my column on that subject a few months ago). After a bit of "floor bonding" by the guys not operating, we successfully swapped out network routers, moved cables around, and engaged in other RF-preventive measures until things finally started to work. Somehow when all was said and done, I had worked 374 guys in the first hour, and Jeff wasn't far behind on the other station.

For the next 10 hours or so it was pretty much standard fare as Caribbean contest operations go. We worked the high bands until they ran out of gas and slowly moved down to the grind of 160-40 for most of the night. It may surprise you, but operating from a station such as PJ2T is not an environment where there are wall-to-wall 300 hours. In fact, those rates are relatively rare,

being limited to the beginning of the contest and peak times with North America in the afternoons. European runs are reasonable, but usually rank only in the mid-200's at their peak. Such was our experience as well.

During the evening operating times, 20 meters becomes a swing band. At times, especially from the equator, you can get some interesting band openings to Asia and other parts of the world. This year was no exception. In fact, it was rare not to find one of our stations operating on 20 meters. However, we did enjoy the popularity of being a unique multiplier on the low bands. At times the pile-up on 40 meters (ah, the beauty of working Europeans transceive) was something at which to marvel, and I can only imagine what rare multipliers we missed in deep Asia and other parts of the world throughout the weekend by not being able to hear as well as we should have. It was both humorous and disconcerting to operate on 80 and 40 meters while having very loud North Americans yell "listen up" into their microphones. (Of course, none of us have ever done that; I'm referring to the other group not reading this article.) Everything you hear and experience from home—the good, the bad, and the ugly—is magnified while operating as we did.

### The Opening Morning

While I had prepared myself emotionally for what followed, it was still sur-

Band	QSOs	Zones	Countries
160	38	7	21
80	520	18	67
40	1650	30	111
20	2820	36	142
15	4432	38	154
10	3707	32	140
<b>Total</b>	<b>13167</b>	<b>161</b>	<b>635</b>
<b>Total Score = 30,983,504</b>			

Table 1—Claimed score from PJ2T for 2002 CQ WW DX SSB Contest.

prising to me how slow the rate can get from the Caribbean. In the early morning before the band opens to Europe there is little to work. Our combined two-station rates were well below 100/hour. Also, I can assure you that when you get used to running at 200-300 QSOs/hour, a 50/hour is like operating on the internet or on packet at 1200 baud.

Finally the high bands (10 and 15 meters) came to life, and it was apparent that our strategic operating plan of operating below the U.S. band was going to pay off. Although we didn't operate below 28300 kHz until later in the morning, even that move improved our rate for a while. Some of my seasoned Caribbean traveling friends advised me to consider this operating technique. Their view is that you can work North America later in the day. Take advantage of quieter frequencies by operating around 21150. Boy, were those frequencies quiet. I could hear a pin drop on my frequency, and the rates rose as a result. For hours on end we worked European after European. And while nearly everything counts as a 3-point QSO in Curacao, our multiplier and non-USA totals certainly were well served by the strategy. It also was amazing how well we could maintain decent rates while signing our callsigns nearly every time and passing QSOs from one station to the other. Literally hundreds of QSOs were made by announcing the transmit frequency of our other transmitter and working the same station on two bands within minutes of one another. Again, being at PJ2T didn't hurt, although I've seen great success with this operating technique at USA multi-op stations as well.

### Here Comes the Rate Again

As the European runs retreated by early afternoon on Saturday, nature's signal told us to crank up the rate to North America. Short of the beginning of the contest, this is the next best thing, as the 300+ QSOs/hour rates re-emerge.



Okay, so the location is "Pretty" good! (Photo via WC4E)

The rates were actually neck and neck between 10 and 15 meters with combined rates exceeding 1000 QSOs/hour on the computer screen. Operating in that mode almost becomes mechanical. The signals are loud, with the interesting result of being in a sort of robotic state that resembles a contesting pendulum. You simply work one guy, say your call, work another, and the next thing you know an hour has passed and you've done it 350 times.

### Late Afternoon Brings More Change

While there seemed to be an endless supply of stations calling, we eventually had to do other things, and that included swinging our beams toward JA/Asia and checking out Europe on 20 meters. This is one aspect of Caribbean contesting where bigger antennas do indeed matter.

I'm sure many of you have heard that often said plea from Asia, "CQ Caribbean Sea, CQ Caribbean Sea." It's a propagation path that is rather difficult for most stations, and when we fired up our big mono-banders in the direction of Japan, we certainly got their attention. The challenge, of course, was that signals were not particularly loud in most cases, and I was constantly considering the trade-offs of working JA's versus doing other more productive things. In the end, you have to resist the temptation to be a DXer and focus on maximizing your score. For the JA's we missed, there will be another day!

### Day 2 Begins

As it turned out, Day 2 was much like the first day. We were blessed with good conditions in the Caribbean (although they

were hardly acceptable in more northern latitudes, but better than Saturday) and the rates just continued. As we operated, we began doing more and more "forecasting" of our final score, thinking that 25 million points would perhaps be within reach, or perhaps 11,000 QSOs. It seemed that during the day on Sunday we spent a good deal of time revising our targets upward, much like what a good day on Wall Street might have done a few years ago.

Although the rates were slower on the second day (as they are for everyone), we still managed to work well over 5000 QSOs, or 200+ QSOs/hour between the two stations. There was no let-up on passing QSOs, multipliers, and anything else that was breathing on the bands. Even in the last 15 minutes of the contest, we were feverishly working needed multipliers and sending them to needed bands. At the very end of the contest on 20 meters, I still vividly remember a pile-up 10 or 20 deep calling me. In fact, immediately after the contest ended, I had one station begging me for a QSO, as he needed PJ2 for a new country. PJ2/K1AR made it into his log!

### The Final Results

When all the dust had settled, our crew at PJ2T managed to produce a claimed score of nearly 31M and an apparent world victory (see Table I). To say that it was nothing short of an amazing experience would be one of life's great understatements. The job of putting together one of contesting's great world-class stations that the crew of CCC and Geoff, W0CG, in particular, have done is incredible. To pull it off on a tiny Caribbean island is even more impressive. I know that there are really only two words that adequately express our gratitude for the 2002 WW SSB experience we all enjoyed. Thus, on behalf of all the operating team, I simply say, "Thank you!"

### Final Comments

Although it wasn't nearly as exciting as the real event, recalling and writing about my experiences from PJ2T was well worth the time. Operating a contest from "the other side" is not as hard as it may seem, nor as expensive. Hopefully you've been motivated to check it out after reading about my experience. A quick tune around the bands before a DX contest certainly will show that the appeal of being DX is high and lots of guys are taking action. Why don't you consider joining the action this fall?

73, John, K1AR

### Corrections

Correcting the corrections listed in the November 2002 column, in the CQ WW DX CW 2001, ZK1CG operated from the North Cooks (not the South Cooks) in the Multi-Multi category.

In the results of the 2002 CQ 160 Meter CW Contest, published in the December 2002 issue of CQ, the list of ops for Multi-Multi station W2GD was incomplete. The ops were K2TW, N2NC, N2NU, N2OO, W1GD, W2CG, W2GD, W2NO, and W2RQ.

In the 2002 WPX SSB Contest results, published in the January 2003 issue, K5ZD should have been listed in the U.S. 1st call area.