

The 2023 SWODXA DXpedition of the Year W8S—Swains Island

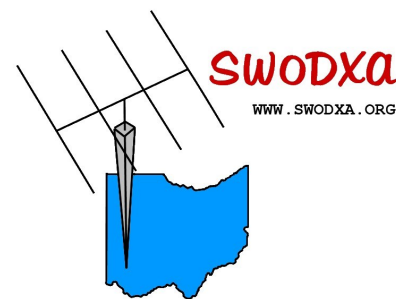




Volume 7, Issue 5

6/2024

the exchange



SouthWest Ohio DX Association

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The Prez says.....

Another DX dinner is in the books. Perhaps the best ever? I have heard that very comment from several people, both at the DX Forum and after the fact via email. In fact, I already have emails from several individuals requesting seats for next year; 43 seats in all! Well done to everyone involved. We will get the final numbers at the June meeting, but all in all, it was a great dinner.

We had some turnover during the last election. Kevin, W8KJ (Vice President), and Mindi, KC8CKW (Secretary), decided not to run again. They have been the glue that has held things together and allowed the club to run smoothly and they will be missed in those roles. They have assured me that they will still be involved! Please pass along your thanks and appreciation for the jobs they have done in the past.

Looking forward, we now have Brian, AD8FD (Vice President), and Ken, KB8KE (Secretary), taking over the reigns in those roles. Please wish them luck and support as we move forward.

As you can see from the front page, W8S was named the DXpedition of the Year. We had a near record number of total votes with W8S as the winner. Great job by the DX Committee; K4YJ, Dwight, K8DV, Dave, and W8GEX, Joe, the chairman.



(cont. on next page)

The Prez Says (cont.)

I have been forwarding along various emails from the W8S team as they have all expressed their appreciation for being given this honor. As we have discussed at our meetings, this award is sought after on a world-wide basis and it is a BIG deal. This award, along with the DX Dinner, separates us from all other DX clubs.

What a job Brian, AD8FD, did with the DX Forum. Great attendance and no one ran over their allotted time. Well Done Brian!

Potpourri

Here are a collection of thoughts for you:

- I hope you have backed up your data and not relied on LoTW as your only logbook. Not sure what the ARRL is dealing with but I am sure that it is serious. If you don't have backups of your PC (logbook, documents, etc.) do it now.
- Over the summer will be sending out a member survey trying to learn more about you along the lines of your equipment, antennas, amplifiers, etc. Our intent is to continue to give you programs, a newsletter, and a club that is doing things that will keep you interested.
- We hope to hold non-business Saturday morning meetings in July and August. Please try to attend, especially if you are not able to attend a regular evening meeting.
- One of the issues that arose during the DXpedition of the Year voting was whether or not a members' dues were paid. We will be adding a webpage where you can determine that in a glance.
- We may even have a special project on the Friday of Hamvention next year. Stay tuned for that!

Stay safe this summer and stay on the air! Use the reflector if you need help, information, or just want to say hello. Plan on getting more involved next year—I'm looking forward to working with you!

73 and Gud DX
AJ8B => Bill

SWODXA 2024—2025 Calendar

May 2024

9 SWODXA Meeting
17 SWODXA DX Dinner
17-19 Dayton Hamvention
25-26 CQWW WPX CW

November 2024

2-4 ARRL SS CW
14 SWODXA Meeting
16-18 ARRL SS SSB

June 2024

8-10 ARRL VHF
13 SWODXA Meeting
15—16 All Asian CW
22-23 ARRL Field Day

December 2024

6-8 ARRL 160M CW
12 SWODXA Meeting
14-15 ARRL 10M
28-29 Stew Perry 160M CW

July 2024

13—14 IARU HF Championship
20-21 CQWW VHF

January 2025

4-5 ARRL RTTY Roundup
9 SWODXA Meeting
18-20 ARRL January VHF
24-26 CQWW 160M CW

August 2024

10—11 WAE DX CW
24 Ohio QSO Party

February 2025

8-9 CQWW WPX RTTY
13 SWODXA Meeting
15-16 ARRL DX CW
21-23 CQWW 160M SSB

September 2024

7-8 All Asian DX SSB Contest
14-16 ARRL Sept. VHF Contest
12 SWODXA Meeting
14-15 WAE DX SSB Contest
28-29 CQWW RTTY

March 2025

1-2 ARRL DX SSB
13 SWODXA Meeting
29-30 CQWW WPX SSB

October 2024

10 SWODXA Meeting
26-27 CQWW DX SSB

April 2025

10 SWODXA Meeting

SWODXA Club News

Upcoming Club Dates and Topics

Meeting Date	Topic
Thursday, June 13th, 2024	Everything You Need to Know for 6 Meter DXing - K5ND - Jim Wilson
Thursday, September 12th, 2024	Improving Your DX Experience - K9ZO - Ralph Bellas



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5 Years Ago in The Exchange

Hooked on 60 Meters

Joe, W8GEX

Update on W8DXCC

Bill, AJ8B

Ozarkcon 2019

Jay, K4ZLE

Tribute to K8WWA—Rick Burdick

Anatomy of a 20M Grayline QSO

Carl, K9LA

NCDXF Beacon Update

Jay, K4ZLE

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DX Dinner Highlights



VE3LYC, Cesar giving, his acceptance speech for his induction into the CQ DX Hall of Fame. CQ HOF awards presented by INDEXA.



W3UR, Bernie, being inducted into the CQ DX Hall of Fame. CQ HOF awards presented by INDEXA.



DX Dinner Highlights

Announced at the DX Dinner by KY7M, Lee, was an upcoming version of WSJT-X, Found/Hound edition. We were honored to be the platform they used to announce this. The details are below.

New WSJT-X SuperFox to debut during N5J DXpedition this summer

The WSJT-X development team announced at the Dayton Hamvention® that “It was only six years ago, in 2018, that the Baker Island DXpedition changed the face of digital QSOs when it debuted the Fox/Hound sub-mode of WSJT-X. K1JT, Joe Taylor, and his dedicated team of software developers and testers have provided hundreds of thousands of DXpedition QSOs in the succeeding years. In many cases this mode has enabled DXers with limited power and antennas to add new ones to their DXCC awards that would not have been otherwise possible. Also, their open-source programming code led to integration into JTDX, MSHV, as well as continuous improvements to WSJT-X.



“Never resting on what was good enough yesterday, Joe Taylor’s team will soon offer a ‘SuperFox’ mode of WSJT-X for making rapid FT8 QSOs. Hounds chasing the SuperFox DX station will transmit normal FT8 signals, as in the already familiar Fox/Hound mode. But rather than sending concurrent streams of up to five FT8 signals, the SuperFox station will transmit a single constant envelope, using a 1.5 KHz-wide waveform, that conveys signal reports or ‘RR73’ acknowledgments to as many as nine different Hounds simultaneously. Most importantly, there will be no signal-strength penalty for simultaneously transmitting to all those Hounds.

“Another very significant improvement will be a digital signature contained in the SuperFox message that will allow the receiving software to verify the legitimate origin of the signal from a validated DXpedition.

“The SuperFox development team will be beta testing the software in coming weeks with the goal to have it rolled out in time to debut during the N5J, Jarvis Island DXpedition later this year.

DX Dinner Highlights



Prize packages lined up before the dinner. Well Done Dwight, K4YJ. The challenge is there for you Dean, W2FQ!



One quarter of the dining room right before kick off!



AJ8B with Mark, WC3W, who represented the DX Marathon program with a table in the tent and a presentation on Sunday morning at the Hamfest.

DX Dinner Highlights

I attended both events and had a great time at both. Got to meet in person a lot of the people I have had contact with over the years. Kudos to the troops who made all the arrangements for the events. – *Ken, KB8KE*



I thought the food was the best in a very long time. The chicken was moist and not over cooked. I thought the CQ DX HoF went a little long, not sure how to keep them more succinct. The rest of the program went smoothly and the prize give away was done well.

– *Tom, NR8Z*

Really enjoyed the food and the program. Most likely will order 3 tables again next year.

– *Chris, VK3FY*

Great time. Thanks. Already thinking about next year. How soon can I reserve 2 tables again? – *Bob, W9AP*



**DXers Have
A Choice**

The Daily DX - is a text DX bulletin that can be sent via email to your home or office Monday through Friday, and includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and much, much more. With a subscription to The Daily DX, you will also receive DX news flashes and other interesting DX tidbits. *Subscriptions are \$49.00 for one year or \$28.00 for 6 mos.*

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DX Dinner Highlights



N9JA, Ray Novak of Icom, presenting the DX Dinner grand prize to W3US, Roger Schlagheck



WB2IDV, Richard, was the winner of the IC-705 at the DX Forum on Saturday. He is receiving the prize from Rob, W8MRL.

Club News

K4YJ Receives the W8OK Award!

From Previous Winner, K8DV, Dave Vest: “The W8OK award is the most prestigious award that can be given to an SWODXA member. Many in this room, as well as myself, have had the honor of being a recipient of this award. As last year’s recipient, Tom, NR8Z, could not be here to present this award. As the next most recent recipient, I was asked to present on Tom’s behalf.

This year’s recipient is no stranger to SWODXA and to put it in Frank Schwab’s own words “CW is an art...be an artist.” This operator has been heard on the air being an artist. He holds himself to being courteous to other operators and holds himself to high ethical standards.

This operator is active on the bands and can be heard almost daily. He is active in many club’s activities and participates (and wins) the clubs yearly DX contest. This operator is currently approaching the DXCC honor roll and is approaching 2000 Challenge points.

Please join me in graduating the most recent recipient of the W8OK Award, Dwight Kelly, K4YJ.

(Details and a List of Previous Recipients can be found at <https://www.swodxa.org/w8ok-award/>)



Club News

W8MRL earns the 5 Band DXCC and then Some!



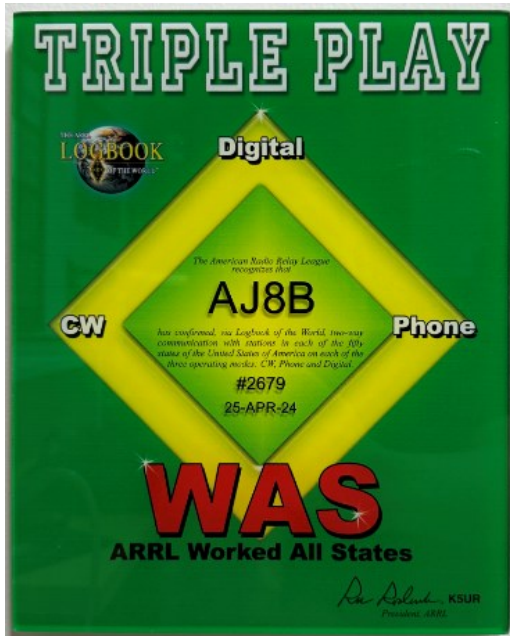
Congratulations to Rob on his 8 Band Total DXCC award!



Club News

AJ8B Earns 8 Band WAS and the Triple Play

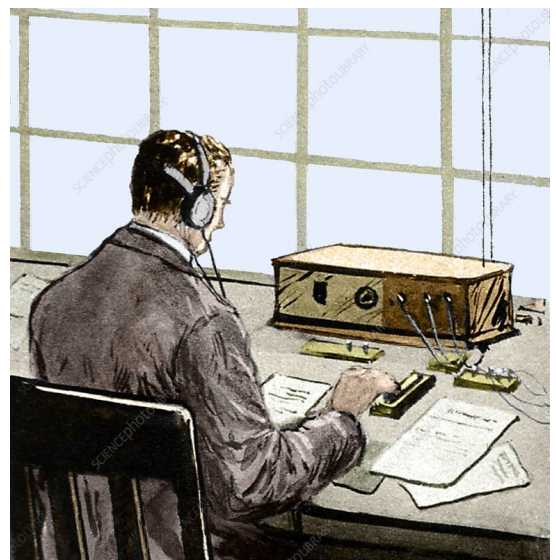
Congratulations to Bill on his 8B WAS and Triple Play



Members Heard in Action!

SWODXA members heard on the air since the last newsletter included:

**N9RC, W8RES, W8EH, AA8WS, K4YJ,
WB8ART, W8GEX, AD8FD, N8DX, K8FL,
AJ8B, NR8Z**



Club News

WE8L Earns Top Honors in the CQ Marathon

Bill,

Quick tidbit for the newsletter: I found out today that I earned a certificate for the 2023 CQ Marathon. 1st place 8 area for 100 watt category. All my contacts were made with my home station (Flex 6400 / IC7300) and wire antennas. It was my first year participating in the Marathon so I'm pretty happy with that modest win.

Jason, WE8L

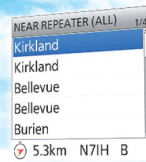
Congrats Jason!!!



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QRP DXing & Contesting

Randy Shirbroun, ND0C

If you have a question or a suggestion for a column, you can email Randy at

Contesting with QRP—Part 2

Welcome back to our exploration of using QRP for DXing and contesting. As promised, this is the second part of our discussion specifically on QRP contesting. Previously we looked at various general aspects of contesting with five watts, why we may want to contest in the first place, and an overview of some of the contests. We also reiterated the fact that contesting is similar to DXing in many respects and contesting can help you build up your DXCC totals as well as zones for WAZ!

As always, please contact me with any questions, or possibly tricks and tips you have found effective when contesting with QRP. If you have given it a try, your experiences can help others and I will pass them along in this column as a “mailbag” section. We are all in this together and we can learn from each other!

Running vs. “search-and-pounce” (S&P)?

This is an age-old question for all contesters and the answer will depend on several factors. First of all, to make sure we’re all on the same page, “running” is when the operator is calling “CQ contest” and answering calls from other stations. If the running (or CQing) station is loud, there may be a lot of callers, resulting in a fast-paced pile-up situation. On the other hand, S&P, short for “search and pounce”, involves methodically tuning up and down the band looking for stations that are running who we will call.

There is a considerable advantage to “running” since the number of stations worked in a given period of time will usually be much greater than using S&P. The reality is that it is more difficult for a QRP station to establish and hold a frequency and try to run, depending on the contest and the conditions. If you are in a rare state or section, or if you are “desirable” because of the contest itself, your odds are better.



Contesting with QRP—Part 2 (cont.)

For example, in the Minnesota QSO Party, everyone is trying to work Minnesota stations, so I, as a station in a relatively rare county (multiplier), can get some decent runs going, even with QRP. But calling CQ and trying to run in a DX contest, especially on 20 meters, for example, is challenging to say the least.

One very important point: if you are running, identify (with your callsign) after every QSO. Don't be "that guy" that makes several QSOs without giving your call! And when you are calling CQ, use short calls. If no one comes back to you after a few seconds, call CQ again. Don't wait for long periods of time without transmitting. If you aren't calling, they won't hear you! (And it helps to minimize the chance of another station taking over the frequency!)

In some contests, depending on the band, it can be difficult to even find an open frequency to call CQ. If you are fortunate enough to get a frequency - after checking to see if it is in use, of course - you may find that other stations often start "moving in" on the sides, causing QRM. Eventually a strong station may just fire up and start calling CQ on your frequency, so your run is over!

Due to propagation, it may difficult to assure there is no one already on your frequency, even if you have found one to call CQ on. There may be another station a few hundred miles from you that you are not hearing due to skip zones. So it is best to wait a few extra seconds to listen for any DX stations calling an unheard (by you) nearby station that is running.

The reality is that in DX contests specifically, it is very difficult for QRP stations to be effective by calling CQ. However, if conditions are very good and you are "feeling loud", it is worth a try. I have had good luck on 10 meters especially running Europeans, if the propagation is in my favor. On the other hand, when conditions are really great, my S&P rate is usually quite good too! In fact, it is when my S&P gives me the sense that I'm "loud" that I may consider finding an open frequency and calling CQ.

So, as a QRP contest station, we are usually using S&P most, if not all the time. If we are having good luck with a decent pace using S&P on a given band, it is usually best to stay there and "make hay while the sun shines" - just going up and down the band. At some point you may seemingly run out of stations to work, or your

Contesting with QRP—Part 2 (cont.)

success rate in getting through to the running stations may drop. In fact, you may experience being “CQ’d in your face”, when the other station doesn’t have any other callers, but doesn’t apparently hear you either! That is definitely frustrating! So... time to change bands!

Where to tune or call?

In general, it is best to focus on the highest band that is open. So if 10 meters is open, that’s where I will spend my time. But I will still occasionally check 15 meters and 20 meters for multipliers. But whatever band you are on, if you are having good success, stay there! I sometimes have to battle my own curiosity, wondering if 15 or 20 is a good option, but reminding myself that if 10 is going great, why change?

Within a given band, I tend to start at the high end and work down when I’m S&P’ing. Usually the higher part of a given band is less congested and QRM won’t be as much of an issue. There is a general sense that the “good” DX sits lower in the band, but often the rare multipliers will be higher, just to get away from the congestion.

The higher part of the band is usually a better place to try and call CQ to get a run going; it is easier to find and keep an open frequency. Those areas of the sub-bands may also result in more callers since lower license class stations (in the U.S.) are restricted to those frequencies.

Contest pile-ups

How long should we spend in a contest pile-up trying to pick up a multiplier? One of the inherent considerations of contests is the time factor. So we need to balance the time we are spending, as a QRP station battling higher powered stations, for a new mult, versus moving on and just working several non-mult stations for the QSO points. I always monitor my logging software to keep track of how much my score will increase when I work a new mult as opposed to a non-mult station.

Contesting with QRP—Part 2 (cont.)

In Sweepstakes, I have only achieved a “clean sweep” (by getting all the possible multipliers) a couple times. But I focus my effort and use my time to score a lot of QSO points by working as many other (non-multiplier stations) as possible. Those points rack up quickly. Certainly, if I come across a new multiplier, I will try to get it. But if the odds seem to be against me due to unfavorable propagation and/or a huge pile-up, I will cut my losses after a few minutes of calling and move on.

If a rare multiplier station has been spotted on the packet cluster sites, obviously that will contribute to big pile-ups. Unless I feel the propagation is in my favor, I will just make a note of the frequency and check back later when the “packet hordes” have thinned out.

In a DX contest, often the “big gun” DX stations will attract a lot of attention and generate large pile-ups, especially early in the contest. They are loud and typically represent a valuable multiplier, so everyone jumps in. My philosophy regarding these stations relates to the understanding that they will be around for the whole contest. If I hear them on the first day, and if they are very loud and the pile-up isn’t totally crazy, I will spend a couple minutes calling and trying to pick them up. If I don’t get them in a short period of time, I will come back later to see if the pile-up has dwindled a bit. But if I don’t get them, I can be confident they will be around on the second day with smaller pile-ups (usually) and should be easier to work – maybe even begging for contacts!

Just as when chasing DX in non-contest situations, if the pile-up is very unruly – often due to the other operator not keeping things under control, I will often skip that pile-up and check back later. Similarly, if the DX station is slow or inefficient, I tend to move on and come back later. If the DX station is not giving his call for several minutes at a time, I will quickly lose patience and move on. It seems like more often than not, it ends up not being a new multiplier, or may be a station I have already worked (which can be very frustrating).

Contesting with QRP—Part 2 (cont.)

What about using “/QRP”?

I don't ever advocate identifying as “/QRP” even for casual DXing, but I think it is completely counterproductive in a contest. Not only does it unnecessarily lengthen your callsign, but the reality is that the contest station you are calling doesn't care if you are QRP or not.

And never just call “QRP” in a contest pile-up, or any pile-up for that matter - as we've previously discussed! But I've heard it being done! And please don't call with just your suffix or some other partial version of your call. This is really a universal cardinal rule regardless of how much power you are running, and is true for non-contest pile-ups too. It really just wastes time in the long run. To sum it up, use your whole callsign - nothing more and nothing less - and skip the whole “/QRP” identifier. (After all, it is not part of your callsign - right?)

Multiplier rationale



[This Photo](#) by Unknown Author is

As mentioned, accumulating multipliers is crucial to building a large score, whether we are in a DX contest or a domestic contest. For state QSO parties, that means working as many counties as possible in the target state. And for the ARRL Sweepstakes, that means hunting down various sections. In the DX contests it is a matter of rack-ing up countries (and zones in the CQ WW DX Test). Unfortunately, sometimes the DXer in us may over-ride good con-testing logic as we try to optimize our score. For example, say we are in a DX contest and just broke a pile-up to work an Indonesian (YB) station for a new multiplier. Awesome! But as we continue tun-ing the band we run across another pile-up on another YB station! Those kinds of stations are great catches for a QRP DXer in the cen-tral part of the US and my DX juices start flowing! But is it really worth it to spend 10-15 minutes in a pile-up to get a second YB? It is not a new multiplier and in reality, it is not worth any more than a second Japanese (JA) station. This reality check was promoted dec-ades ago by Don Miller, W9WNV, and it is just as valid today.

Contesting with QRP—Part 2 (cont.)

It is much easier to work a lot of JAs, so I should pass on that big pile-up for the second YB and move on.

One thing to keep in mind is that the major DX contests provide an excellent opportunity to pick up some DXCC entities while running QRP. If you are in a DX contest just to work new band countries, your approach will be different than if you are in it to rack up the best score. In that case you might feel it is worth it to try to break that second pile-up to work another Indonesian station (and increase your chance of getting a QSL card or LoTW confirmation)!

Should I enter as “assisted” or “unassisted”?

If we are primarily using S&P while contesting, what about entering as an “assisted” station, using packet cluster spots to find stations, especially multipliers, to call? As a general rule I don’t feel that using spotting assistance is an advantage for a QRP station in a contest and I never enter as “assisted”. I believe it reduces my efficiency when contesting.

My philosophy is that I usually can’t effectively compete in the pile-ups that result from a cluster spot. I will just waste a lot of time trying to get that multiplier and may never be able to get through. Again, keeping in mind that we are “battling the clock” in a contest, I’d rather use my valuable time to work a bunch of stations, even though they may not be multipliers.

And as I tune the bands, I might just stumble across some multiplier stations that have not been spotted yet. My goal as a QRP tester is to find the multiplier stations before they have been spotted! I can relate many examples of this happening including a recent situation in the 2024 ARRL DX SSB Contest when I found a lonely VR2XAN calling CQ, long-path on 10 meters. 30 seconds later he was in my log! It is so much fun to find and work rare mults when just carefully tuning up and down the band – before they have been spotted!



Contesting with QRP—Part 2 (cont.)

My opinion on the use of spotting for QRP contesting was validated, at least for me, in the most recent 2023 CQWW DX CW Contest. I only had 1 ½ hours to operate after returning from a family trip, so I decided to use spotting assistance to try to pick up some rarer countries in the limited time I had available. This little exercise quickly confirmed my belief that spotting assistance is definitely not a benefit for QRP contesting, at least not for me with my modest antennas. The spots just directed me to where the biggest pile-ups were – not very helpful!

The seemingly lost art of “turning the big knob” – using your fingers and your ears – is just as important when contesting as chasing DX. For these reasons, I much prefer entering as “single-op” (or “unassisted”).

If you elect to enter the “assisted” category, one caveat is to never trust the spots to be accurate. Confirm the callsign of the other station when you work them so you don’t risk losing credit for that hard-earned QSO!

A few more odds and ends for contesting

If you have done quite a bit of CW contesting, you are familiar with “cut numbers”. If not, don’t be surprised if a station sends “5NN” for 599 – it is quicker and easier. And a good practice for you to adopt too! Some will even send “ENN” to make it even shorter.

I recommend always using headphones – you can hear much better. Get a pair that is lightweight and comfortable. Also, for SSB contests, it facilitates using a boom microphone mounted to your headset, which is much better than using a desk microphone, or even worse, a hand microphone. (How do you type with one hand holding a microphone?) And along with the headset boom mic, a foot switch works great!

Contesting with QRP—Part 2 (cont.)

One final tip

A contest station may be unsure if they copied your exchange correctly. For example they may send “MN?” on code, or “was that Mike November?” on SSB. If what they sent is correct, just respond with “R” on code, or a “QSL” or “roger” on SSB. Don’t re-send it if they already have it correct! Re-sending the exchange may lead them to think that they did not copy it correctly OK, and if they didn’t copy all your repeated information, we have unnecessarily confused the situation.

The reality is that as a QRP station we are often weak and the other station is probably battling QSB and QRM – they are not hearing us all that well and may just be getting bits and pieces! We don’t want to unnecessarily add confusion to the mix by repeating information they already have!

That will wrap things up for this discussion on contesting with QRP. As you can see, there are commonalities with the tactics used in contesting and just everyday DXing.

As always, let me know what tactics you have found effective for your QRP operations. Sharing your experiences can help others and I will pass them along in this column as a “mailbag” section. Our mutual experiences can benefit each other!

73,

Randy, NDØC

randysdvm@gmail.com

New Weekly RTTY Contest

<https://radiosport.world/wrt.html>

Reprinted with permission of Kirk, K4R0, from the Tennessee Contest Group Newsletter, January 2024. <http://k4tcg.org/files/2024/01/TCG-January-2024.pdf>

Due to popular demand for a conventional (non Sprint) weekly RTTY Test, we have started a half-hour RTTY contest (Friday Morning UTC) from 0145-0215Z. Rules are similar to the highly successful Wednesday CWT - notably unique callsigns are a multiplier.

This standard format 30 minute RTTY test will allow us to stay on top of our game, test station upgrades in real contest conditions and most importantly keep RTTY alive and well.

We strongly encourage all operators, seasoned or new to RTTY to participate. Special note to new(er) RTTY ops, if you have any questions, comments or issues working the test please make a post on our Facebook page for the Weekly RTTY Test (WRT) Include details of your setup in your post, and we will be happy to assist you or find someone that can. Facebook page: <https://www.facebook.com/groups/861286202404786>

General Rules

- * Held every Thursday night, 0145-0215Z (Friday UTC)
- * Each unique call (once per session) is a multiplier
- * 1 Point per QSO
- * 10, 15, 20, 40, and 80 Meter bands
- * 100 Watt (Low-Power) and 5 Watt (QRP) Categories.

Suggested Frequencies : 3.585-3.590, 7.083-7.090, 14.083-14.090, 21.083-21.090, and 28.083-28.090 MHz

Exchange : W/VE - Name and State * DX - Name and Country Prefix

Logging : N1MM users can use the WRT UDC module available from the WRT home page, <https://radiosport.world/wrt.html>

For other loggers without WRT support, we suggest using the NAQP contest. Ignore the logger's multiplier count; instead manually count unique callsigns for the multiplier.

Claude VE2FK has set up a call history file for the WRT. Go to the "Associated Files" tab when opening a WRT log and hit the "Change" button for Call History Filename to load it. Report your results on 3830scores.com

WRT Organizers: N3QE Tim Shoppa and WV4P Ron Koenig

W8S—An International DXpedition to Swains Island

By Adrian Ciuperca, KO8SCA



“What do you expect to find there? Well, if I knew, I wouldn’t go there!” ~ Jean Jacques Cousteau

On 7 October 2023, a group of 10 international ham operators from Germany, the Netherlands, and USA landed on Swains Island and set up camp for about two weeks for the purpose of activating this rare DX entity with the call sign, W8S.

Island background: Swains Island is an uninhabited coral atoll in the South Pacific Ocean, located about 200 miles north of American Samoa. It is about 0.5 square miles in size and it is a USA territory. The island, about 15 feet high with a circumference of about four miles, is covered by coconut trees and shrubs and has an enclosed lagoon with brackish water.

Jean-Michel Cousteau, the son of the famous French explorer Jacques Cousteau, was enamored with Swains Island and its pristine beauty. In 2014, he created the well-received documentary film entitled: “Swains Island: One of the Last Jewels of the Planet.”

W8S—Swains Island (cont.)

Although the marine areas adjacent to Swains Island have been incorporated into the National Marine Sanctuary of American Samoa (NMSAS) as a sanctuary unit, a lesser-known fact is that Swains is a private island owned by the Jennings family.

The history is a bit hazy, but the story goes like this: An American, Eli Jennings, joined the copra (inside meat of the coconut) farmers on Swains Island with his Samoan wife in 1856.

It is said that he purchased the for 15 shillings per acre, plus a bottle of gin. So, if Swains was calculated to be 373 acres, the total paid would have been 5,595 shillings. That would be about \$40,000 at today's value, plus... a bottle of gin.

Alex Jennings is the current owner of Swains Island, and he provided the logistical support for the W8S DXpedition.

To reach the island, the team flew to Hawaii and onto Pago Pago, American Samoa. From Pago Pago, the team loaded their equipment on board the chartered 138-foot vessel, Manu'atele and sailed for about 48 hours to reach Swains.

Swains and ham radio: Prior to the W8S DXpedition, Swains Island, KH8/S, was number 27 on the Most Wanted Club Log DXCC entity list. At the time of this writing, after the DXpedition had ended, Swains Island is listed at number 51. Swains Island became part of the DXCC program in 2006 when a team led by Kan Mizoguchi, JA1BK, made 16,390 contacts with the call sign KH8SI.

Prior activations of Swains Island include: W5BOS/KH8, 560 QSOs (1994); KM9D/KH8 (2002); KH8SI [did not count for DXCC] (2005); KH8SI, 16,390 QSOs (2006); N8S, 117,205 QSOs – a world record at the time (2007), and NH8S, 105,455 QSOs (2012).



Equipment boxes ready for shipping from the Netherlands to Pago

In addition to DXCC, Swains is also part of multiple other Amateur Radio programs such as IOTA OC-200 (Islands on the Air), POTA K-9754 (Parks on the Air) and KFF-6575 (World Fauna and Flora).

W8S—Swains Island (cont.)

The W8S project :

After many years of preparations, as well as setbacks – a measles outbreak in American Samoa, a defective vessel that needed extensive repairs, and the COVID



Our ride to Swains Island, the vessel Manu'atele

pandemic – team leader Hans Griessler, DL6JGN, and co-leader Ronald Stuy, PA3EWP, were finally able, in October 2023, to take the team to Swains Island for an adventure of a lifetime.

Unfortunately, after the team arrived in American Samoa, we were told our project would be delayed once more, for at least a week or maybe two, due to the vessel's schedule changes. A large tropical storm had just passed over the area prior to our arrival and so, our vessel, which has the important task of supplying the communities spread over the multiple islands of American Samoa, had to give priority to servicing those communities.

We pleaded our case to the vessel captain, we were interviewed by the local radio station, and we contacted the local government. Soon enough the whole island was aware of our situation and the old adage of “if there is a will, there is a way” applied here and the Port Authority was able to adjust the vessel's schedule to help us reduce the departure delay to only three days.



One ton of equipment was unloaded onto Swains Island.

W8S—Swains Island (cont.)



The landing craft on approach to Swains Island.

Getting set up:

Nearly a ton of equipment was unloaded on Swains Island. Some was shipped to American Samoa by UPS from the Netherlands, some was brought by the team members on their flights to American Samoa, while heavier items (such as steel

masts, hammers, etc.) were purchased by the team in Pago Pago.

The team set up two separate radio camps (named “Red” and “Blue”), about 1,500 feet apart, to allow for simultaneous CW and SSB operation on the same band. The radio camps ran pileups 24/7 using six stations on CW, SSB, RTTY and FT8. A separate camp for sleeping tents and the kitchen area was set up by the support team brought on the island by Alex Jennings.

Swains Island had never been activated on EME and the demand was high. So, the W8S team set up an additional station dedicated for 6M with EME capabilities using a Flex 6700 radio and the popular M2 6M8GJ, an 8-element 6M DXpedition EME antenna with 12dBD gain. We transmitted on 50.190 MHz using the new WSJT Q65-60A pileup mode in the first sequence.

For FT8 we used the latest version of the WSJT-X software and operated only in the Fox-and-Hound mode. The team posted the operating plan on their website (swains2020.1ldxt.eu/operating-plan) prior to the DXpedition.

Equipment:

The team used Elecraft K3S radios, SPE Expert 1.3K-FA amplifiers, and 403A High Power bandpass filters/triplexers – a winning combination that is very popular with the DXpedition teams. DX Engineering, probably the most well-known ham radio store in the world, provided the W8S team with a beam for terrestrial 6M operations, high quality coaxial cable, MIX 31 ferrites, and telescoping masts.

W8S—Swains Island (cont.)



Our Green, Red and Blue camp setup.

The German company RF-KIT provided W8S with two of their popular RF2K-S 2KW amplifiers and those came in handy to the W8S team in their goal of reaching the small pistol stations around the world, who attempted to make an ATNO QSO with a limited setup.

Myriad antennas were installed on the island to cover all the HF bands: VDA antennas

for the 10/12/15/17/20 and 30 Meter bands, Hexbeam for 10/15/20 Meters, phased verticals for 40 Meters, T-loaded vertical for 160 Meters, and a vertical for 80 and 60 Meters. Electricity for the radio shack and the camp was provided by multiple 6kW Generac GP5000 gas-powered generators.

Prior to the DXpedition, the W8S team met in the Netherlands to assemble, test and pack the antennas for the DXpedition to ensure that all components would work well on the island. That approach paid off as the antenna installation on the island took place without any issues.

For the curious readers, detailed station diagrams of the two radio operating camps as well as many antenna pictures are available on our website.

Although the images of the island show a tropical idyllic place, the reality is a bit different. Temperatures hovering around 104°F (40°C) with high humidity and mosquitos, which seem to be the main inhabitants of the island made living conditions on the island particularly difficult. Building the stations required a great deal of effort from the entire team. This is also one of the reasons why the construction of the stations took a little longer than we hoped.

W8S—Swains Island (cont.)

The team set up a StarLink terminal on the island, which provided a good quality high-speed Internet connection and allowed us to make daily uploads to Club Log. In addition, the team was able to broadcast, for the first time ever in a DXpedition, live images from Swains Island and participated in a live YouTube broadcast hosted by DX Engineering. Viewers were able to see an operator's screen and hear the audio signals, which allowed operators around the world to see and hear in real-time, how it feels to run pileups and operate from a DXpedition.

The end result of the W8S DXpedition was a whopping 92,000 QSOs in the log with about 22,000 unique call signs. This was a bit short of our goal of 100,000 QSOs (a result of our delayed arrival). More importantly, due to extensive efforts from the team, the QSOs were equally distributed among the ham radio population around the world, significantly increasing the number of ATNOs (All Time New Ones).

QSO confirmations : For QSL card confirmations, the team chose the well-known QSL manager, Charles, M0OX0 (www.m0oxo.com) to take on the extensive QSL and LoTW managing chores for the W8S operation. If you worked W8S and requested a QSL card, by the time you read this, you should already have the QSL card in your hand.



VDAs, Hexbeam and 8-element 6M beam antennas on the beach.

W8S—Swains Island (cont.)

The W8S team: The 10-member team with extensive DXpeditioning skills was made up of the following operators: Hans, DL6JGN; Ronald, PA3EWP; Heye Harms, DJ9RR; Rainer Schinkmann, DL2AMD; Adrian Ciuperca, K08SCA; Max George, NG7M; Evert Bakker, PA2KW; Martin Jonink, PA4WM; Johannes Hafkenscheid, PA5X, and Gerben Menting, PG5M. Rainer, DL2AMD, was also the team doctor, in charge of the well-being of the team while on the island.

We also had an experienced team of radio pilots who passed messages and feedback to the island radio team from the worldwide ham radio community, in real time, improving the ability of the island team to reach larger parts of the world.

The W8S pilot team was made up of: Alex Hengel, PA1AW; Jan Foerderer, DL7JAN; John Warburton, G4IRN; Steve Hass, N2AJ; Siso Hennessey, HK3W; Champ Muangamphun, E21EIC, and Lee Moyle, VK3GK.

Our thanks:

We would like to thank all the hams, clubs, organizations (especially NCDXF, GDXF, EUDXF and INDEXA) and corporations (especially DX Engineering and RF-KIT) who supported us in this expensive endeavor! The W8S team appreciates your support! The W8S DXpedition website www.swains2023.com as well as the Facebook page and X (Twitter) @Swains2023 contain the latest news and additional details and pictures about this complex project.



W8S team members were interviewed by a local radio station on American Samoa.

W8S—Swains Island (cont.)



Antenna and tent setup at Red radio camp

*W8S radio shack with
Elecraft K3, Expert Amp
and 403A filters.*



*The Green camp served as
our kitchen, bathroom and
sleeping camp.*

QDURE Outgoing QSL Service

Reprinted with permission of Kirk, K4RO, from the Tennessee Contest Group Newsletter, January 2024. <http://k4tcg.org/files/2024/01/TCG-January-2024.pdf>

QSL chores got you down? Spending more time filling out cards than making QSOs? Looking for an alternative to the ARRL Outgoing QSL Bureau? You might want to consider investigating the QDURE outgoing QSL service.

I used to spend literally dozens of hours per year answering bureau QSLs. I spent countless hours printing labels, affixing labels to cards, sorting the cards, then mailing packages of cards to either the ARRL outgoing QSL bureau, or directly to DX bureaus in other countries. It was a task that I grew to dread, and if I waited too long, the job seemed to grow exponentially larger. Bureau cards never sleep.

Over a decade ago, I discovered the “Global QSL” service. Two enterprising 4X hams created the first (that I know of) service that provided a turnkey outgoing QSL bureau service. All that was required was generating an ADIF file of the contacts to QSL, and upload that file to the service. Global QSL handled everything from there. While it cost a little more than manual QSLing, the time savings was phenomenal. The ease and speed of managing QSLs electronically allowed me to clear out a growing backlog of QSL cards, and as of today I am 100% current on bureau card replies. Once I discovered the online QSL service, I never looked back.

Unfortunately, the guys who were running GlobalQSL became silent keys, and their service ended. Luckily, another contester told me about the “QDURE” service, which is run by Spain’s version of the ARRL (URE.) The concept is identical – you simply submit an ADIF file of QSOs to be QSLed, and they handle the rest. The QDURE web site allows you to pick a card design, or upload your own custom design.

I've been using QDURE since 2021, and have been pleased with them ever since. Orders up to 100 cards cost about 12 bucks. It gets cheaper per card with larger quantities. One nice thing is that they put up to 6 QSOs on a single card, resulting in more savings. When generating my ADIF files, I typically stack every band-mode worked on a card with a particular station, in order to reduce future requests. I use my general logging program Logger32 to generate the ADIF file, and it keeps track of which QSOs I have sent to the QSL service. It could not be easier. You may learn more about the QDURE service at the link below: <https://qsl.ure.es/en/como-funciona/>





Special Edition – 2023 DXCC Year End Review – by Joe Reisert, W1JR – January 8, 2023

This 2023 DX Year in Review is reprinted here with the permission of Joe, W1JR, and Bernie, W3UR.

2023 DXCC Year End Review by Joe Reisert, W1JR

Radio propagation with the rise of Solar Cycle (SC) 25 greatly improved DX. Conditions on the upper HF bands and even some F2 6 Meter openings occurred. Many DXpeditions were activated especially near the end of the year. Most of them experienced better propagation but increased costs. The rise in use of WSJT-X by many DXers was obvious. Overall, it was a great year for DXers with many things happening so let's get started.

2023 in Review: 287 DXCC entities were activated during 2023, at least 20 more than in 2022. Three on the Club Log "DXCC Most Wanted List" top 20 were activated: 3Y0J (Bouvet), FT8WW and PR0T. Unfortunately, the 3Y0J operation from Bouvet experienced landing and extreme severe weather difficulties and made just over 18,000 QSOs, a big disappointment for many. For three months FT8WW made over 51,000 QSOs as a single operator. The PR0T team operated over a long weekend making over 18,000 QSOs.



The 3Y0J team on Bouvet Island in February 2023.

Those active in the top 50 list included: 1S, 70, H40, JD/M, KH8/S, T31, XZ and ZD9. Other semi-rare stations such as 3B9FR, 3D2AG (42KQ), W1SA, 9N7AA (65K), S01WS and VK9DX (45K) were active most of the year. FT8 DX activity except during major DX contests averaged 50-75% of the stations active on the bands during the year.

Many DX gatherings and conferences have now resumed although Covid is still out there. HamVention in Xenia, OH is ready to go joined with the ARRL National Convention. The International DX Convention in Visalia in April is

2023 DX Year in Review (cont.)

He was a member of the Maxim Society, Director of the Yasme Foundation, FOC, CQ Contest Hall of Fame, and W3 QSL Bureau manager to name a few. A great helper, friend to many and generous anonymous donor to many Ham Radio projects worldwide. Fred will be sorely missed.

Ham Radio and the Internet: There is no doubt that the internet has had a profound influence on DXing. The DX Spotting Networks on the internet consist of multiple DX Cluster nodes worldwide. Many DX Cluster related sites such as DX Summit, DXHeat, VE7CC, RBN (Reverse Beacon Network), PSK Reporter etc. are great resources for timely DX spotting activity and DX info.

When spotting DX on a DX Spotting Network, make sure to show the exact frequency and mode of operation such as CW, SSB, FT8, FT8/FH especially when the frequency spotted is not in the expected spectrum. Please don't spot stations that you either aren't hearing or not sure of the call sign. Also don't ask for skeds or brag about your QSO etc. Most expeditions aren't watching a DX Spotting Network and many users don't appreciate these interruptions.

Radio Propagation: A recent report from NOAA Space Weather Prediction Center (SWPC) dated October 25, 2023 predicted that Solar Cycle 25 may reach solar maximum by October 2024, about a year earlier than their previous predictions. Recent evidence such as an increasingly strong solar flares and CMEs and the impending reversal of the solar polar magnetic fields lend support to SWPCs recent prediction.

A recent QST article by Frank, W3LPL (ref. 1) and a talk by Carl, K9LA (ref. 2) are also of interest. Remember that Frank, W3LPL is still reporting up to date HF propagation information daily on The Daily DX mailing list based on the latest NOAA/SWPC web pages.

Also check SWPCs Cycle Prediction. Watch for long path propagation to improve. We'll just have to wait and see. It remains to be seen if a link can be proven between the four Jovial planets Jupiter, Saturn, Neptune and Uranus and the long term solar cycle as theorized by some scientists. Also check out QSO Today which has been interviewing many prominent and interesting people in ham radio who talk about the hobby, radio propagation, DXpeditions etc.

2023 started with a bang when monthly average solar flux reached 182 and daily flux exceeded 200 for 12 days in a row in mid-January, the highest recorded values so far during Solar Cycle 25. Monthly average solar flux declined to 172 in February and to between 145 and 162 through June until it reached its second highest value of 178 in July when solar flux has much less effect on HF propagation in the northern hemisphere.

2023 DX Year in Review (cont.)

Monthly average solar flux declined to between 154 and 159 through December except that it reached its lowest 2023 value of 142 in October, normally the best month for HF propagation. Daily solar flux remained below 155 during most of December except for eight days in a row from December 18-25 when daily flux was between 164 and 195. Daily and monthly solar flux values are updated every day at: <https://spaceweather.gc.ca/forecast-prevision/value-solaire/solarflux/sx-5-em.php>.

Here are some useful propagation guidelines. Propagation is usually best on the upper HF bands when the A index is <15, the K index is <4, the solar wind is < 400 km/sec and the hourly solar flux is above 125. Solar flux persisting above 200 for at least eight days is usually required before 6-meter F2 which occurs reliably from October through February.

Band by Band DX Activity in 2023 (Frequencies in MHz):

160 Meters: DX activity has been low to moderate especially on CW except when DXpeditions are present or during contests when activity fills the band. The cancellation of many planned DXpeditions really hurt 160 DX. However, the recent 4W8X operation gave many of the top band leaders a new one. FT8 activity has increased between 1.836 and 1.840. Try to avoid using frequencies on 160 meters that are divisible by 5 (e.g., 1.820, 1.825, 1.830 etc.) since broadcast birdies in the USA are often present.

75/80 Meters: DX activity has been low to moderate on these bands except during contests and DXpeditions. CW is usually on the low end of the band and SSB DX near 3.795. FT8 activity has really increased around 3.573.

60 Meters: Many new entities have received permission to operate on this band albeit they may be limited to 15 watts and a dipole antenna. Over the years well over 250 DXCC entities have been active on 60 meters. FT8 activity is now concentrated around channel 3 at 5.357. The FCC has released a Notice of Proposed Rule Making (NPRM) for non-channelized operation near channel 3 for USA stations. The ARRL Awards program does not recognize 60 meter contacts. USA operation on 60 Meters is limited to 100 watts output power and a dipole antenna. Use of gain antennas requires reducing transmitter power.

40 Meters: 40 meters is still the workhorse band during local night time September through May. CW and SSB DX activity is especially high during contests. Otherwise most activity has shifted to the FT8 mode around 7.074. **USA stations cannot operate SSB below 7.125 so it is best to stay above 7.128 for safety.**

2023 DX Year in Review (cont.)

30 Meters: 30 meters is still very popular for DXing especially for low power stations. This band usually opens a few hours before sunset until well after sunrise but during winter it can remain open all day except within a few hours of local noon. There is lots of FT8 activity between 10.136 and 10.140. The USA power limit is still 200 watts transmitter output power.

20 Meters: It is still the go-to DX band especially during local daylight hours except during midday in the summer. Lately much of the DX activity on CW has decreased except for expeditions but SSB activity remains fairly high. FT8 near 14.073 and 14.080 and the nearby F/H (Fox and Hound) modes are very active. As radio propagation is expected to improve as we approach solar maximum some of this activity may move to the higher HF bands.

17 Meters: The 17 meter band often opens shortly after 20 meters. All modes seem to be doing well on this band. There is lots of FT8 activity around 18.100.

15 meters: With increasing sunspots 15 meter DX is open longer hours. FT8 activity near 21.074 is high as are the nearby F/H modes.

10 and 12 Meters: Both bands are now doing well. FT8 activity is high near 28.074 and 24.915. Vigilant DXers are also taking advantage of the improved radio propagation especially during local mornings and evenings. There is DX activity mostly during June and July when F2 propagation maximum useable frequencies are lower but this is usually sporadic E propagation.

6 Meters and above: In recent years most of the DX activity has gone digital. MSK144 is popular all year around 50.260 while FT8 activity is most common at 50.313 and 50.323 during band openings. There is no doubt that the increased sensitivity of FT8 over CW (typically about 10 dB) opens the band earlier than expected. The ON4KST chat page shows recent activity.

F2 propagation has returned with increased sunspots in SC 25. TEP (Trans-Equatorial Propagation) and other related F2 propagation associated with the equatorial ionization anomaly are also increasing. K6MI0's report on TEP explains its mechanisms (ref. 3).

EME (Earth Moon Earth) DX using digital modes such as Q65 is becoming very popular on 6 Meters especially during local moon rise and set and during expeditions. About 75 stations contacted 3B9GJ on a recent W7GJ 6 Meter EME expedition. The top 6-meter DXer has confirmed 283 entities but so far officially only about five North American stations have achieved the very difficult 200 level.

2023 DX Year in Review (cont.)

2023 Month by Month DX Activity Sample: Here are just some of the rare to medium-rare DX stations that were active during the designated months.

January: January was very productive for DX with over 210 entities active as the solar flux increased. Notably rare to semi-rare stations included FT8WW (until March 50 K), TN8K (165K), 3C3CA (Most of the year-190K), ZC4GR, 9N7AA (>65K), ET3AA (11.5K) and J5JUA to name a few.

February: This month was also very active with 3Y0J (Bouvet 18K), 5V22FF, 9U5R and 9U4WX (28K), HD8M, 3B7M, XZ2B, YJ0A, J52EC and HV0A. As usual, there was lots of activity during DX contests.

March: Conditions were still great with VU4T (3K), 9X5RU (167K) and CY0S (84K).

April: VU7W, T30UN, ZD9BV and V63WJR.

May: DX0NE (Spratly Islands), HK0/PY8WW, 5UA99WS (7K), 9X2AW and CE0Y/EA5KA.

June: T31TT (83K), VU7W, FH4VVK, VP6D (62K) and FP/KV1J.

July: FJ/K3TRM, 3D2BJ (Rotuma), 9Q1ZZ and 9Q1AA, K7K (NA070) and 1A0C (80K).

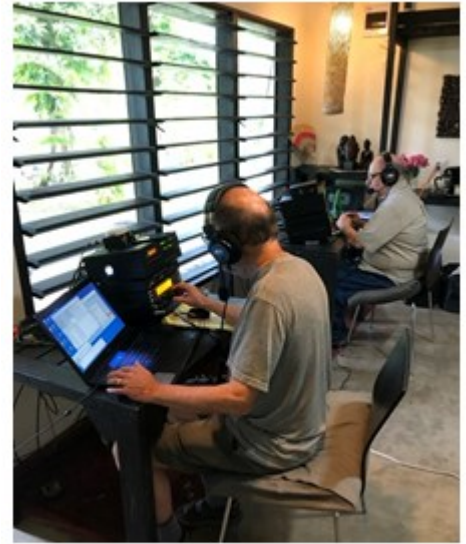
August: C21TS, 0J0JR, 9Q2WX, E51D (57K) and T88RR.

September: ZL7IO, T2T (102K), VK9LAA (24K), ZD9W (70K) and 5X3K.

October: W8S (Swain's I. 92K), T2C, E6AM, XT2AW, E51JAN (N. Cook), A52AA, 3G0Y and PY0FR (FN).

November: At the start of this month 4W8X (163K), 708AD/AE (57K), 7073T (43K), A25R (146K), TJ9MD and TX7L (FO/M 55K) medium-rare expeditions were all active at the same time with minimum QRM between them. They were followed by FW2CW, H40RH (7K), H44WA (60.5K), PR0T (Trinidad 18.7K), 9L5M (20K), VK9CY (25K), VK9Q0 (CC-7.4K), ZL7A and VK9XY (35K),

December: This is YOTA (Youth-On-The-Air) month with many special YOTA call signs everywhere from dozens of countries. Also active were VU7A (52K), T09W (FS-28K), T32TT (>190K), VP2VMM, V6EU, XT2AW, VU4N (25K), KL7RRC (NA-028-5.7K), C21TS (36K), 0F9X (20K) and A31DJ.



W7Yaq (L) and K7AR (R) at VK9LAA on Lord Howe Island.



The W8S Swains Island Team in October 2023.

2023 DX Year in Review (cont.)

Unauthorized Operations: As usual many unlicensed or pirate stations were active during the year. Many expeditions were pirated and spotted before, during and even after the operation. This explains why many expeditions don't release their call signs before commencing operation. Check your QSO using on-line logs if available.

Some call signs reported on the DX Spotting Network were possibly incorrectly copied or listed. These bogus spots affect many DXers. When spotting a station on the DX Spotting Network accuracy is extremely important. If you are not sure of a call sign, don't spot it until you are sure it is correct since it can cause bells to ring worldwide and increase anxiety.

The CQ Marathon website maintains a list of incorrectly spotted or invalid call signs. Mark, WC3W is now maintaining this website and states that the DX Marathon Program will remain viable with or without CQ Magazine.

DXpeditions: Expeditions are increasing now that Covid is mostly contained and are the lifeblood to working rare or semi-rare DX entities. They usually face many obstacles since they often go to remote locations making travel difficult. Permission to operate from these locations can sometime be difficult to obtain and travel can be very costly.

This past year was no exception with many delays, interruptions and cancellations. High winds sometimes damaged antennas. Temperatures above 35C (95F), high humidity as well as critters were sometimes a big problem. Medical issues also occurred. Power outages and local RFI often made it difficult to copy weak signals in some locations.

Despite these difficulties several expeditions TN8K, 9X5RU, 4W8X, A25R, T32TT and maybe others exceeded 100 K QSOs. Many single-operator expeditions (e.g. FT8WW, 3C3CA, 9N7AA, 70 etc.) exceeded 50K. EME expeditions also took place from semi-rare location this past year.

Support for DXpeditions has never been more important as costs are skyrocketing. While you are operating from your comfortable shack, they are not always as lucky. Please support their efforts so they can continue to activate rare entities. NCDXF (Northern California DX Foundation), INDEXA (International DX Association), GDXF (German DX Foundation) and CDXC (Chiltern DX Club) are just a few that are significant supporters of many DXpeditions. These foundations do a great job at funding and vetting upcoming requests.



F6CUK operating FT8WW on Crozet Island from December 2022 until March 2023.

2023 DX Year in Review (cont.)

Operating techniques: Needless to say the RST report 599 on CW and 59 on SSB are now almost universal! The DX Code of Conduct is a great operating guide. Deliberate QRM is always disliked. The old adage still applies, viz. always Listen, Listen and Listen before you start to transmit!

Don't call stations unless you are copying them and don't tune up your transmitter on the common DX frequencies. Keep tuning time to a minimum and frequently change frequency. DXpeditions and rare to semi-rare stations almost always operate split frequency. Unfortunately many stations still call right top of the DX station or tune up on same which causes panic.

Finally, don't spot rare DX on the DX Spotting Network unless you are sure it's legit, know the proper call sign and surely don't spot rare DX call signs for test purposes. It causes lots of bells to ring worldwide and unnecessary anguish. Also don't post rare call signs to thank someone for a QSO or for receiving a QSL etc. Those watching the DX Spotting Network do not appreciate this type of boasting.

Digital Operations: Nowadays WSJT-X digital modes such as FT8 are often the dominant DX mode. WSJT-X is managed by K1JT and his development team. It can often decode signals that are barely audible. FT8 sensitivity is up to 10 dB better than CW. The developers of WSJT-X recently released software version 2.7 and more updates are expected soon.

FT8 can be a band opener especially during times of poor propagation. It also allows smaller stations to participate in DXing. The use of a panadapter is highly recommended and assists in observing where the activity is concentrated and where to call. The Q65 mode is highly recommended for EME, ionospheric scatter, and other weak signal work on VHF, UHF and the microwave bands.

Expeditions use the F/H (Fox and Hound) or MSHV (Multi Stream software by LZ2HV) modes. Both require special operating procedures. These stations operate above or below the normal FT8 channels. Always call at least 1 KHz above the DX station. Make sure to call in the proper time sequence. Never call if you are not copying the station since if the station should reply it slows down the operation.

Using the F/H or MSHV modes has a learning curve. Operating or calling CQ on these F/H frequencies is not recommended since it causes QRM. According to Club Log (outside of contests) 50-80% of all DX activity now takes place using FT8. It's estimated that about 300 DX entities have been active on FT8. It's fun to see many well-known DXers now operating FT8. RTTY hasn't gone away but activity on this mode is now primarily during RTTY Contests. Finally the FCC has now removed symbol rate and replaced it with bandwidth limits.

2023 DX Year in Review (cont.)

DX Contesting: DX contests as usual were everywhere this year and lit up the sometimes quiet bands using CW, SSB and digital modes. There was a noticeable increase of activity on 10 Meters. The WA7BNM Contest Calendar is a great source of contest activity. Also, the ARRL Contest Update bi-weekly newsletter that often has interesting tidbits on upcoming contests and operating etc. Remember that contesters should stay healthy so you can operate long continuous hours during contests. The next Contest University (CTU) is scheduled during the Hamvention in May 2024.

ARRL and DXCC Matters: The ARRL has many bulletins that are of interest to DXers. Some new books were published in addition to updates on existing books including major updates to the ARRL Handbook and the ARRL Antenna Book. The ARRL Outgoing QSL Service is another service for league members, the ARRL incoming bureau is a free service to all radio amateurs. An important service is the LOTW (Logbook of the World) which is great for DXCC updates. It has over 1.8 billion QSOs on file.

About 1800 DXers have qualified for the top of the ARRL DXCC Honor Roll. Over 260 persons reached the ARRL DXCC Challenge 3,000 level and for the first time the 3300 level was reached by EA8AK. Check out the latest ARRL DXCC Standings.

ARRL may soon be changing QST distribution. Many members no longer require QST in printed form but prefer it on-line. Participants in ARRL contests using the low power category will now be limited to 100 Watts (instead of 150 Watts).

Finally, reports in the news media tell us that Bougainville, an autonomous region in Papua New Guinea (P29), has voted to become an independent nation in 2027. If this happens, it could be added to the active DXCC list. The VP8 prefix for the Falkland Islands still stands but the VP0 prefix is being used for the remaining South Atlantic Islands.

QSLing: The use and need for paper QSLs is rapidly decreasing and becoming a lost art form. Postage costs and shipping costs have gone through the roof and will increase in the USA in mid-January. Many expeditions are now requesting up to \$5.00 for a paper QSL confirmation. A few countries are still not accepting mail.

If desired, QSLs can often be ordered either direct or via OQRS (Online QSL Requests Service). LOTW is available for many of those operators who don't require a paper QSL. The ARRL out-going QSL service estimates it will handle less than 250,000 QSLs this year versus almost one million a few years ago.

2023 DX Year in Review (cont.)

QRZ.com: This is still a great place for information and is very up to date. Distance, bearings and email addresses are readily available. Sometimes there are some interesting biographies, stories and photos.

Club Log: This is an important source of information for DXers. Many DXers and expeditions often post their logs in a timely manner on Club Log so it is a good place to verify QSOs. It is also a source for OQRS.

The new Club Log DX Report is now published daily on the internet. It daily lists solar activity, active expeditions, most active modes etc. This gives you a good overall view of daily activity.

Technology: As usual rig improvements are increasing such as better filtering, noise elimination, signal-handling and software updates etc. Solid state high power amplifiers are increasing. Likewise antennas, especially smaller ones, are being developed for people with limited space.

Accessories are a necessary part of operating. Nowadays building is often being replaced by buying. Many commercial sources are available. Remote operation is now becoming common practice especially where antenna structures are limited. End fed antennas are also becoming popular. Used gear is readily available at electronic flea markets and ham fests and websites such as qth.com and ebay.com which are a great source of inexpensive equipment and accessories. Of course software is constantly being updated especially for logging, contesting etc.

A recent technology innovation is RIB (Rig in a Box). It is now being tested and upgraded by AA7JV (C6AGU) at rare DX locations. This is a small remote station that can be left on land when there are environmental restrictions. It can be operated remotely from a boat or via the internet. The most recent RIB operations were at VP6A (Ducie I.) and E51D (Penrhyn Atoll, North Cooks). Recently a talk about RIB was conducted by K3LR (ref. 4).

RFI is still a huge problem especially from power lines and switching power supplies used on solar power arrays. Some manufacturers are addressing this problem, but others are not yet on board. ScienceNews reports that a powerful laser can redirect lightning strikes.



KN4EEI, Mike, with the E51D RIB on Penrhyn Atoll in the North Cook Islands in September 2023.

2023 DX Year in Review (cont.)

IOTA World (Islands on the Air): This year improved radio propagation and the decrease of Covid increased operations from rare and semi-rare IOTA groups such as K7K (NA-070), MM0UKI (Rockall I. EU-189) and KL7RRC (NA-028). VE3LYC activated OC155 (2.6K) and OC299 (new 6.4K) but experienced many travel delays, difficult living conditions and medical difficulties. VU4W was active from AS-105.

The IREF which helped fund IOTA operations has now been disbanded. The IOTA program now has some accreditation restrictions especially when working remote operations.

YOTA (Youngsters on the Air): December is designated YOTA month and many stations from around the world were sporting special call signs, some with YOTA as the suffix. Several scholarships are now available for youth under 25 years of age such as WWROF, NCDXF, ARRL Foundation Scholarship Program and W2PV. Many YOTA operators are newly licensed or not yet licensed but supervised by licensed operators. These operators are very important for the future of our hobby. Some licensed operators are allowing youth to operate from their own station especially during the SSB contests, on the digital modes such as FT8 and some even on cw. Please give these stations a call to incentivize the operators. YOTA camp is scheduled for July 7- 12, 2024 in Halifax, Nova Scotia, Canada.

Several groups are conducting CW training such as CWops with CW Academy, the Long Island CW Club and the K1USN Radio Club that regularly transmit slow speed CW for practice.

Safety: This can never be stressed enough. During the past year there were at least two fatal DXer accidents. K5NA was electrocuted when a power line struck an antenna he was helping a friend remove. DL6RAI died in Aruba when a tower collapsed while he was in the air. We can never be safe enough when working with towers and antennas. Proper safety belts are required. Even some certified professional climbers occasionally have problems but are still the best choice for many of us.



The CY0S team on Sable Island in March 2023.

2023 DX Year in Review (cont.)

Silent Keys (SK): This was a dreadful year for DXers and those supporting Amateur Radio. The number of persons on the QST SK list, The Daily DX and elsewhere have increased dramatically during this year.

The following is a partial list of SK DXers and others that contributed to our hobby. They are generally listed in the order as they have departed us during this past year: K3ZO, C02KK, VK6LC, WA60, WZ8D, AC8G, K5CVS, 8P6CC, EA30T, K6EVR, VK5NC, W3HVV, K5NA, GW3YDX, C31LU, W5SG, DL6RAI, K5OVC, K7LA, K2EK, WB2D (ex KB1N), K5GA, UY5XE, K5RJ, VE3OSZ, K9FD, K9QVB, G3RWL, XE2AA, KX7YT, 6Y5IC, W5QLF, EY8AA, K8EJ, ZS1HF, YN4SU, K4WMS, K7MB, G3SVK, N7RD, 7X5AV, V01MP, K2JMY, G3K0J, 3B8CF, WB9EEE, ZS1AU, CE1EW, W8UVZ, W9VA, KE7EQ (ex WA6SB0), VE1BC plus over 50 Ukraine ops during their war.

And now the Drum Roll: DX activity increased over 2022. There were approximately 54 entities that were NOT believed to have been active during 2023*.

Africa (13): 3C0, 5T, E3, FT/G, FT/J, FT/T, FT/X, FT/Z, S9, VK0/H, VQ9, ZD8 and ZS8.

Antarctica (1): 3Y0/P.

Asia (7): BS7H, BV9P, E4, EZ, P5, T6, and YK.

Europe (3): JX, R1F and SV/A.

North America (7): CY9, F0/C, KP1, KP5, TI9, XF4 and YV0.

Oceania (15): 3D2C, FK/C, F0/A, KH1, KH3, KH4, KH5, KH7K, KH9, T33, VK0M, VK9M, ZK3, ZL8 and ZL9.

South America (7): CE0/X, CE0Z, HK0/M, PY0/S, VP0 (S. Ga.), VP0 (S. Ork.), and VP0 (S. Sand.).

*Please note that some rare entities may not be on this list for 2023 because operations were short, set up schedules or only on VHF, EME (Earth-Moon-Earth) etc.

Those DXCC entities that are not believed to have been activated in ten (10) or more years have increased and now include: 3Y/P, BQ9P, BS7H, CE0X, EZ, FT/G, HK0M, KH3, KH7K, KP5, YK, YV0 and ZL8. This means that an avid DXer working hard at DXCC may take well over 13 years to make it to the DXCC Honor Roll. This list also serves as a guide to those planning expeditions to rare entities. As for me, the top of my need list for the DX Challenge has not changed in many years and not surprisingly goes to P5, BS7H and BQ9P in that order.

2023 DX Year in Review (cont.)

Looking ahead to 2024 and Beyond: Solar Cycle 25 is forecast to achieve solar maximum in 2024. HF radio conditions on the higher HF bands are improving. DX has really changed in the last few years with FT8.

Some DXers chase the ARRL DXCC Honor Roll, the ARRL DXCC Challenge, and/or the DX Marathon. Then there are the never ending DX Contests and IOTA chasing. There are lots of things to do. Don't let the airways slow down for lack of activity.

Some rare to semi-rare expeditions such as TX5S (Clipperton) and CB0ZA (Juan Fernandez) are scheduled for early in 2024 followed by CY0 (Sable I.) in the summer. There is a chance the Rebel DX Group will activate 3Y0I, Bouvet Island with the dates yet to be announced. 3Y0K from Bouvet by a Norwegian group headed by LA7GAI is scheduled for January 2025 followed by 3Y0L (Peter 1) in February 2026. Many other operations are also promised during 2024 so it should be another exciting year for DX. Remember to stay tuned and check [The Daily DX](#) for future operations.

Try to stay active and join the fun. It's time to improve or repair if necessary your 6 and 10 thru 15 meter antennas as well as keeping your 80 and 160 meter antennas working. Don't forget to support the various DX Foundations around the world that help make expeditions possible.

Finally: We hope this review has been informative especially for historical purposes. With all the activity this past year, I hope I haven't missed anything important. Any suggestions are appreciated. Most prior year editions can be viewed on the "[K8CX Ham Gallery](#)."

Once again, I am honored to be asked by Bernie, W3UR, to write this review for the 19th consecutive year and for his valuable assistance and help. Thanks especially to Frank, W3LPL, for his many helpful comments and input. Also thanks to my son Jim, AD1C, for his computer help and many others who helped put together this year's review.

Happy New Year and best of DX in 2024.

73, Joe Reisert, W1JR

1. "Experience the Wonders of Solar Cycle 25 Solar Maximum" by W3LPL in QST, May 2023, pg.59 is a SC25 update.
2. Carl, K9LA has an interesting presentation at the Madison DX Club entitled "[Solar Cycle 25](#)."
3. "F-Region Propagation and the Equatorial Ionospheric Anomaly" by K6MIO (on the [Internet](#)).
4. Watch K3LR [interview about RIB](#) on the internet.

Revised January 9, 2023

The WPX Program Needs Your Help!

Jonathan Cunitz, W1CU (w1cu@juno.com)

As you are aware, CQ Magazine stopped publishing after September 2023 for financial reasons. Sadly, this extraordinary publication that has brought technical articles, news and support of the worldwide amateur radio community since 1945 may have come to an end.

The CQ World Wide WPX Contest now is administered by the World Wide Radio Operators Foundation (WWROF) but the WPX Program is in limbo. The WPX Honor Roll no longer can be listed in CQ Magazine. The WPX Program Manager (N8BJQ) appears to be seeking to end his administration of the WPX Program after many years of time-consuming and thoughtful efforts.

I have been active in the WPX Program for over 50 years, similar to many other stations. My correspondence with over 75 Honor Roll stations shows a strong interest in maintaining the program after their years of time and funds spent working and confirming new prefixes. The rule for deleting unused prefixes after ten years became overwhelming to apply to each station on an annual basis as many of those prefixes became active again. My survey in 2023 of the top Honor Roll stations showed 100% support for deleting this rule.

In order to maintain the continuity of the WPX Program, I have created a short-term solution until such a time that a new organization and WPX Program Manager takes over. The Honor Roll Listing has been set up on the W1CU QRZ.com page for all modes. To simplify the Program, stations need to only send me their all-time confirmed totals in each mode, without any deletions. The totals are updated on a real-time basis. I am not able to offer any certificates or plaques.

I have attempted to send emails to every station listed on the Honor Roll in September 2023 and more than 75 have responded with their prefix totals. My only source of email addresses is QRZ.com. Some email addresses no longer are active and some of my emails may have gone to spam folders. I would appreciate your assistance by including this information in your organization's publication and with any other publicity that you can provide. This would alert existing Honor Roll members to the site where they can continue to view all of the Honor Roll information. Further, it would encourage others to join and support the continuation of the WPX Program. Thank you in advance for your help.

102 countries in 12 months using an indoor antenna

By Gordon Hudson GM4SVM

This article originally appeared in the Journal of The Radio Amateur Old Timers' Association, Spring 2024. It is reprinted here with the permission of the editor, John, G4GCL, and the author.

The Challenge

At the beginning of 2023 I challenged myself to try and work 100 countries on HF by the end of the year in spite of my antenna restrictions. By December 31st I had managed to work 102 countries. I achieved this with indoor antennas and 10-50w of power. I hope this article gives some encouragement to people with antenna restrictions.

Background

A few years ago I moved into a bungalow which is cut into the bottom of a hill. This means that a wire from the chimney to the back garden would be quite low to the ground unless I had quite a substantial antenna support. The logical solution is a vertical but we spent the whole Covid period trying to get an extension built so I could not run feeders across the garden. That temporary difficulty forced me to experiment with antennas in the loft space, and it is those antennas that enabled me to communicate with 102 countries.



Our house. The antenna feed point is behind the chimney inside the Loft. The elements extend downwards into the right side of the Loft space.

Indoor Antenna (cont.)

Experimentation

The house has a pyramidal roof with a peak about 4.5m above ground level at the front of the house and 3.5m at the back (due to it being cut into the hillside).

I ran a length of good quality (Webro branded) RG58 from a ceiling hole above the operating position to the highest point of the loft. From here I added a dipole center and bent a 20M dipole around the loft. After a while I added a 15M dipole element to make it a fan dipole. I made the elements from surplus 30 amp 12v red and black cable, some spare coax cable and some 32/0.2 multistranded wire. The ends of the elements on the lower bands end about a meter above the house gutters.

This aerial worked to some extent but there were two drawbacks:

- ♦ Receive noise level of S7-9
- ♦ Poor DX performance as it was too close to the ground



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Indoor Antenna (cont.)



The end of one of the dipole elements tied onto a cup hook screwed into one of the roof timbers.

Reducing my receive noise level

I decided to work through the RF noise problem first. I used a Medium Wave radio tuned to around 600 KHz to track down all the items in the house that were emitting an RF buzz. Most of this was plug-in power supplies and chargers. I removed all phone chargers and replaced them with larger capacity, multiple output ones. I can't recommend any particular brand of charger as the designs seem to change all the time. I bought four and found two were quite noisy and two quite quiet.

I added clip on ferrite cores to all leads coming out of the chargers. I then went round every electrical appliance like TVs and the broadband router and added ferrites to every signal and DC power lead going in and out of them. This reduced my noise level to S5-7. The other big source of noise was Philips 12v LED lights in the Kitchen. I have never fully resolved this, so I just keep them switched off when I am operating.

I then read G3SEK's article about cleaning up your shack. I built his filter, but I have to say it didn't make the massive difference I was expecting. It did change the characteristics of the noise (it was less buzzy) but the strength was much the same. I concluded, based on G3SEK's article, that the interference must be getting picked up on the outer of the coax so I added a 1:1 balun at the feed point and a line isolator at the radio end. This was made from 15 ferrite beads that are as tight fit on RG58 coaxial cable, covered in heat shrink and used as a patch lead.

Indoor Antenna (cont.)

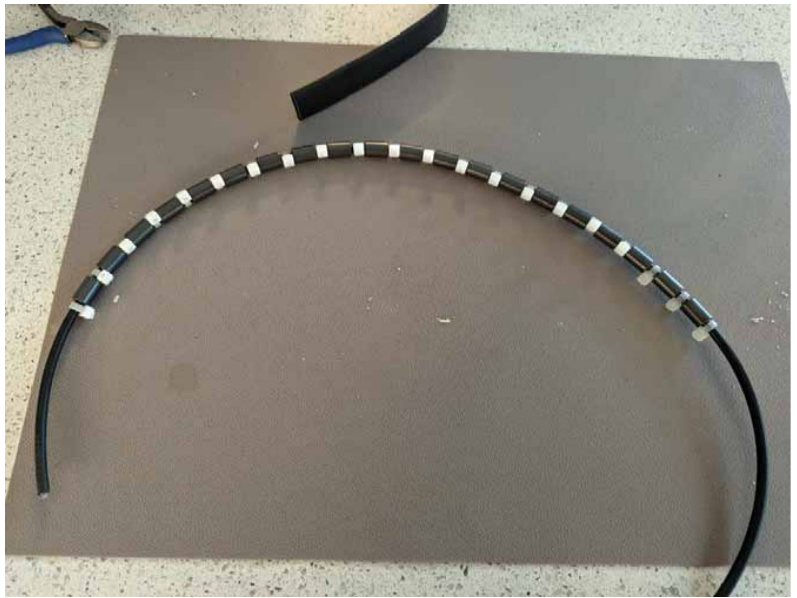
My receive noise reduced to S1-3. It's S3 on 14 and 17 MHz, but S1 on bands above, and below, that. Previously I could barely hear anything on 10MHz as the noise was S9. This morning I worked the US on that band with 10w!

Improving DX performance

I realized with the feed point being so low that I would need to concentrate on the higher bands, where it might be high enough up for the inverted V configuration to have a lower angle of radiation.

I changed the elements to dipoles for 17M, 12M and 10M because most of my operating is done at weekends and I wanted to avoid contests on the WARC bands.

This was not entirely successful. The 10M element would not tune. I initially thought it was because the 12M one was too close in frequency, but it seems to have been a problem with the balun or the length of the coaxial cable.



The line isolator was made from ferrite beads that are a tight fit on RG58, separated by cable ties and then covered with heat shrink.

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Indoor Antenna (cont.)



One of my loading coils. I had run out of end insulators by this point! The brickwork is the chimney seen in the previous photo.

Loaded dipole calculator:

<https://www.66pacific.com/calculators/coil-shortened-dipole-antenna-calculator.aspx>

Inductance calculator

<https://www.66pacific.com/calculators/coil-inductance-calculator.aspx>

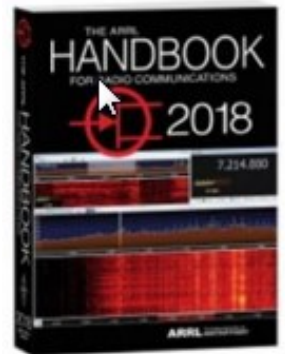
I decided that the best option was to extend the 10M element for 20M, but use loading coils so it didn't have to drop down to the bottom of the eaves or bend it around the loft space.

I had somehow avoided making loading coils for the past 40+ years on the air so I had to read up on the best options for loading a dipole and got some help from online calculators.

ARRL OH Section Updates

From our ARRL Section Manager,
Tom Sly, WB8LCD

Hey Gang, Do you get updates from your ARRL Ohio Section Manager via email? If not, go to: <http://arrl-ohio.org/handbook.html> and get registered.



What's the catch? I want to get everyone checking in to the Ohio Section website as often as possible, and in order to register each month, you have to visit the website often! There's nothing else to it. I pay all expenses, and from time to time, I Give Away more than just a Handbook. And, you'll never know just what months will be those special times that I will have more than just a Handbook to Give Away!!

Did you see the ad from ARRL recently? Well, they liked my idea so much that they've copied it. Yup, they were giving away a Handbook too!

Many of you ask me just how do I know when the drawing is on? Well, that's easy all you need to do is check in on the Ohio Section Website on a regular basis and watch for the big RED Arrow that will appear on the left side of the page. This is the sign that the drawing is on and you need to get registered. So, keep a sharp eye out on the website and check in often! <http://arrl-ohio.org>

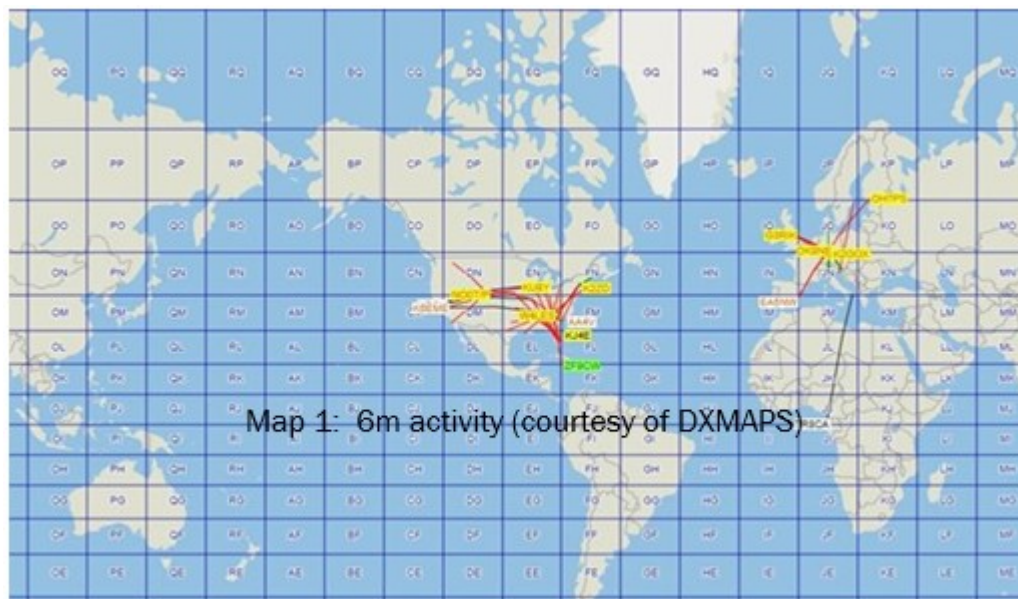
Six Meter QSOs, “You Must Be Present to Win”

By Bruce Smith, AC4G

This article originally appeared in the Northern Alabama DX Association Newsletter. It is reprinted here with the permission of Bruce Smith, AC4G.

If you have been an amateur radio operator for a few years, no doubt you have heard that the six-meter (6M) band is also called the “magic band” by 6M enthusiasts. If you are unaware of this terminology, perhaps you are a newly licensed ham or simply, you may have never been active on this band to understand what this means. The bottom-line up front (BLUF) and challenge is to find when 6M is open. My hope is that it will be obvious why many hams have called 6M the “magic band” after reading this article. I also hope this article entices each NADXC club member to not forget 6M when they chase DX.

If you are not active on 6M, you may not understand the characteristics of 6M. You almost have to experience the band activity and propagation in order to understand. Hams utilizing 6M or the 50-54 MHz band can be joyous when the band opens with a sudden flurry of stations or can be heartbroken waiting for the band to open, anxiously waiting to hear a single signal. Signals appear to come from out of nowhere, but like a rock dropping, can suddenly vanish. As Steve Werner, AG4W has informed me several times, “You must be present to win!”



Map 1: 6m activity (courtesy of DXMAPS)

Propagation varies from ground wave, sporadic-E, F2 layer, trans-equatorial, meteor scatter or burst, tropospheric ducting, and perhaps aurora borealis propagation types.

6M QSOs (cont.)

In my opinion, the fun begins when the solar flux rises above 150-200 and worldwide contacts can occur. DX on 6M can be fairly reliable. We have been recently achieving flux levels above 150 and the fun has begun. But remember Steve Werner's expression, "You must be present to win!" That is, you must be active on 6M in order to make long distance QSOs. One approach to see if 6M is open is to check DX clusters routinely and monitor the 6M band. Another method is to check the network of 6M beacons. Some use the Weak Signal Propagation Reporter Network (WSPR) and setup a map to see signals from around the world being reported. Also, DXMAPS (see map on previous page) provides a graphical representation of active stations. One last source is to simply get on the air to determine if any 6M signals are present. Whatever source one may use, the use of several sources will help define if the band is open somewhere.

Just a few days ago, I looked back in my logbook to find that I became active on 6M back in 1996. I wanted to see if I had made DX contacts from years ago.

Put A Spring In Your STEP

Stay Active On All The Bands






6M QSOs (cont.)

I also recently looked in my logs to go on a data mining escapade to seek and find old QSOs made years ago in order to get my DXCC totals up. My approach was a simple one – seek and find QSOs for DXCC entities that I never sent for a QSL card. My plan was to simply send my QSL card to them, hoping to get a confirmation QSL card back. My goal was to achieve DXCC (confirmation of at least 100 DXCC entities) on 6M. Unfortunately, I was unable to find the necessary QSOs to add to my current DXCC 6M collection. Therefore, I am now on a mission to work as many new countries on 6M as possible, while the high bands are open, taking advantage of the current Solar Cycle 25.

At a few of our NADXC club meetings in recent months, I polled the North Alabama DX Club (NADXC) members regarding DX our members worked. Many of the club's members have added new DXCC entities to their ham radio repertoire by making QSOs on the HF bands. I was fascinated that several members have added 6M DXCC QSOs to their plan. One must understand and be reminded that any QSO on 6M never comes easy, but requires long hours of dedication or just plain luck to work a new DXCC country on 6M. Cycle 25 offers this opportunity.

There have been many times in the past six months, and going back a year, when I have announced on the club 2M repeater rare DX on 6M. But to my surprise, I do not believe anyone was around to hear my verbal spots because I never saw or heard anyone making any attempt to work the DX. Recently, and within the past month, I worked some fairly rare DX on 6M and fortunately, some members heard my 2M repeater verbal spots and were around to work some VKs and ZLs (approximately 10,000 miles away). I also recently verbally announced the presence of some FKs (New Caledonia). Just a couple of week ago, we had a brief opening to ZL7DX, Chatham Islands which I was able to pick up on 6M. I once again verbally announced this DX on the club 2M repeater, but by the time some of the club members made it to the band, the DX was gone. If you have not already surmised, 6M openings are usually brief and do not hang in there too long.

6M QSOs (cont.)

Remember these words of advice, “You must be present to Win”; hence, why we 6M DXers call 6M the magic band.

When a major DXpedition distributes their band plan to operate, I always check to see if they are going to operate on 6M, knowing that sometimes I don’t have any chance to work them. Recently, in mid to late January 2024, a team arrived on Clipperton Island as TX5S and began operating their typical activity utilizing the HF bands 10M through 160M. I went back to see if they would be on 6M knowing the distance was approximately 2200 miles. Indeed, they offered 6M as one of their planned bands.

On January 21, 2024 at 0130Z, I happened to see a spot for 6M EME activity by the Clipperton Island, TX5S team. This drew my interest even though I am not setup on 6M EME, so, I QSY’ed any way to the frequency spotted (50.189 MHz) and heard FT8 tones. When I began receiving and decoding signals, I heard one station during even transmissions and several stations on the odd transmissions. This was a sign of Fox-Hound FT8 mode. To my surprise and after examining the callsigns, it turned out to be the Clipperton Island, TX5S station working stateside stations on 6M. The TX5S station peaked at +24 signals strength, but I was unlucky to make a QSO at that level. I moved my transmit frequency a few times and kept calling as their signal gradually began to get weaker. When the TX5S signal strength was around “0” and to my surprise, TX5S called me and I successfully worked a new DXCC country on 6M. “Halleluiah!!”

My output power was low power, approximately 150 watts (do not own 6M amplifier). My antenna is merely a 5 element M2 antenna up about 40 feet (Reference Picture 1) which many of our NADXC members saw during our annual picnic by the pavilion. I must note that I was also using my normal Yaesu 101MP HF transceiver that has 6M capability.



Picture 1: AC4G's 5- element 6-meter antenna.

6M QSOs (cont.)

The software I used on my logging personal computer was the free-ware, WSJT-X software that allows capability for one to operate FT8, which many DXpeditions have resorted to during weaker signal activity and if propagation is questionable. As one can see, my 6M station is simple and does not require any special equipment to make QSOs on 6M.

When I made the QSO with TX5S on 6M, I must admit that I had an adrenaline rush and was so elated to work a new DXCC country, especially on the “magic band”. So why the hype? Where is Clipperton Island?

Reference Map 2 of Clipperton Island. Clipperton Island is fairly close, relatively speaking, and is toward the southwest and off the coast of North America. The distance is about 2219 miles from Taft, TN. The short path rotor heading from my (AC4G) QTH is 225 Degrees. Clipperton is a fairly



Map 2: Clipperton Island (yellow dot) and AC4G's QTH (black dot)

easy DXCC entity to make a QSO as demonstrated by my 6M QSO. Reference Clipperton Island details in the table on the next page.

The hype is that I have added another entity on 6M to my DXCC repertoire. It is so difficult to work countries on 6M as it stands. When the band comes alive and one is surprised to hear rare DX, I am elated to work a new country.

Reference Picture 2: FT8 Screenshot of AC4G <-> TX5S FT8 QSO. Even though this was a fairly easy QSO, I believe I could have made the QSO on other modes, such as SSB and CW, but one never knows when the band will drop like a rock, so one cannot be choosy, but take the QSO as it comes.

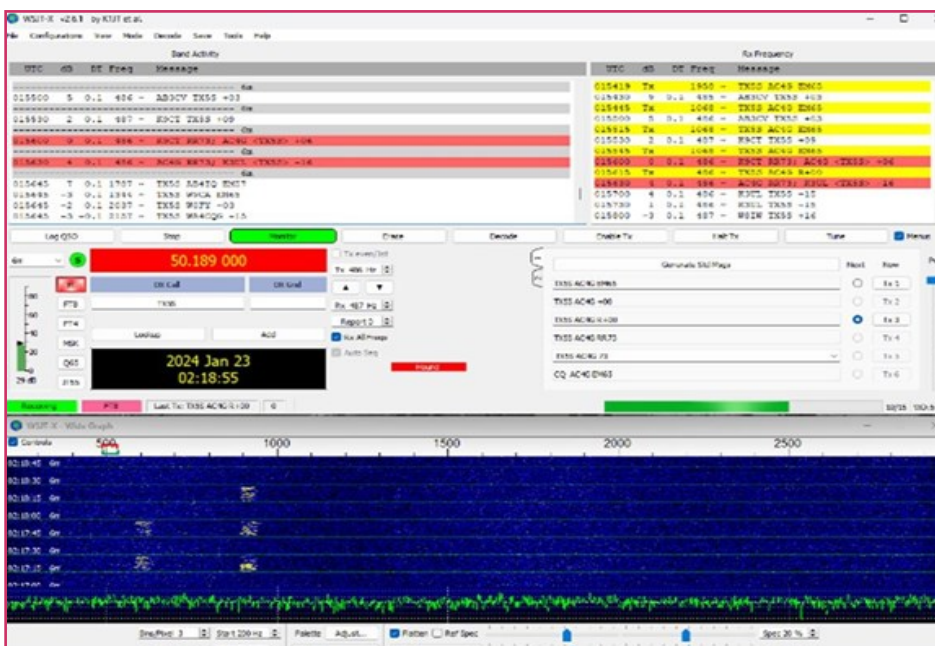
After I made my TX5S QSO and verbally announced Clipperton Island on the 2M repeater, a couple of our NADXC club members in the Huntsville area fired up their rigs, but could not see any signal trace from the TX5S station, even as I was still copying the TX5S signal.

6M QSOs (cont.)

I could not understand why two members only 25 miles away were not able to copy TX5S signals that I was copying, being within 25 miles of each other. This is

part of the 6M meter complexity. I don't understand why 6M behaves as described, but I will note that Johnny, KR4F, (NADXC member) performed some analysis several years ago explaining why one NADXC member on the other side of Huntsville was copying a station, while he was unable on the opposite side of Huntsville on 6M. As I recall, his explanation dealt with their terrain and the angles of attack being received by both NADXC stations being affected by the terrain, but I refer you to do additional research and possibly locate the KR4F program for further details.

Perhaps, I truly did not convince you, the reader, that 6M is a "magic band" and that QSOs on 6M are few and far between. I will tell you that much fun in anticipation of a signal arriving on 6M can be had. I hope this will motivate our members to try the 6M band and find out if 6M is for them. Six meters is fun if you like



A screenshot of AC4G's 6M FT8 QSO with TX5S on Clipperton Island. AC4G was present at the right time for the opening and

Search				DXCC				Heading	
callsign	Go	prefix	entity	code	short	long			
		F00	Clipperton Island	36	225	45			
Location @ 2024-01-23 10:36:37 local				DXCC database				GeoMag	
latitude	longitude	SP DX	cont	grid	CQ	ITU	max	K	
10 18' 0" N	109 13' 0" W	2219	NA	DK50jh	7	10	52	0	
location				IOTA		time zone			
Clipperton Island				NA-011		UTC-7			

DXCC and Location information for Clipperton Island

a challenge. I am always curious and looking to find interesting and difficult situations and 6M fits the bill. I am glad I was alert, checked the 6M band, and "worked a new one" on the "MAGIC BAND". Always remember when operating on 6M, **"YOU MUST BE PRESENT TO WIN!"**

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SWODXA Station
Trustee W8EX

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SouthWest Ohio DX Association (SWODXA)

Club Fact Sheet

Who We Are: *SWODXA* is comprised of active DX'ers and testers with a deep passion for all aspects of Amateur Radio. We welcome everyone who is interested in joining our club to please contact us. *SWODXA* members are active in all facets of DX and Contesting. We also travel to, and fund various DXpeditions all over the world. *SWODXA* sponsors the annual DX Dinner held on the Friday evening of Hamvention weekend in Dayton, Ohio. In addition, *SWODXA* members moderate the Hamvention DX Forum and host the *W8DXCC DX Convention*. *SWODXA* is proud sponsor of the prestigious *DXpedition of the Year Award*.

DX Donation Policy: The policy supports major DXpeditions that meet our requirements for financial sponsorship. Details are available on the website at: <https://www.swodxa.org/dxgrant-application/> and elsewhere in this newsletter

Club History: The Southwest Ohio DX Association (SWODXA) is one of the country's premier amateur radio clubs. Though loosely formed in mid-1977, the club had its first formal organizational meeting in August of 1981 where Frank Schwob, W8OK (sk), was elected our first President. While organized primarily as a DX club, SWODXA members are active in all aspects of our hobby.

Requirements for Membership: We welcome all hams who have an interest in DXing. It doesn't matter whether you're a newcomer, or an old-timer to DXing; everyone is welcome! Visit <http://swodxa.org/member.htm>

Meetings: The club meets on the second Thursday of each month at Hunter Pizzeria in Franklin, OH, and virtually via ZOOM. Members gather early in the private room for dinner and then a short business agenda at 6:30 PM, followed by a program. If you enjoy a night out on the town with friends, you'll enjoy this get together. Meeting attendance is NOT a requirement for membership.

Club Officers: Four presiding officers and the past president (or past VP) make up the Board of Directors. The current roster of officers are: Past President Tom Inglin, NR8Z, President Bill Salyers, AJ8B; Vice President Brian Bathe, AD8FD; Secretary Ken Allen, KB8KE, and Treasurer Mike Suhar, W8RKO.

Website: We maintain websites at www.swodxa.org and www.swodxaevents.org managed by Bill, AJ8B. These sites provide information about a variety of subjects related to the club and DXing.

SouthWest Ohio DX Association (SWODXA)

DX Donation Policy

The mission of SWODXA is to support DXing and major DXpeditions by providing funding. A funding request from the organizers of a planned DXpedition should be directed to the DX committee by filling out an online funding request.

(<https://www.swodxa.org/dx-grant-application/>)

The DX Grant committee will determine how well the DXpedition plans meet key considerations (see below). If the DX Grant committee recommends supporting the DXpedition in question, a recommended funding amount is determined based on the criteria below. The chairman of the committee will make a recommendation at the general meeting on the donation.

Factors Affecting a DXpedition Funding Request Approval

DXpedition destination	Website with logos of club sponsors
Ranking on the Clublog Most Wanted Survey	QSLs with logos of club sponsors
Online logs and pilot stations	Logistics and transportation costs
Number of operators and their credentials	Number of stations on the air
LoTW log submissions	Bands, modes and duration of operation

H40GC	H44GC	ZL9HR	XX9D	HK0NA	FT4TA
KH1/KH7Z	EP2A	FT5ZM	C21GC	VK9WA	NH8S
K4M	CY9C	VK9MA	PT0S	FT4JA	YJ0X
6O6O	VP6D	TO4E	XR0ZR	VP8STI	VP8SGI
W1AW/KH8	K1N	3D2C	VK0EK	S21ZBB	E30FB
ST0RY	TI9/3Z9DX	VK9MT	K5P	9U4M	TX3X
VU7AB	3Y0Z	3C0L	TX7EU	CE0Z	3C1L
TI9A	3D2CR	3B7A	K9W	VU7RI	6O7O
C21WW	CE0Z	T30GC	T30L	D68CCC	W8KKF/WP5
K5D	3Y0J	T33A	3Y0J	CY9C	