



Newsletter of the
Twin City DX Association
www.tcdxa.org

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Gray Line Staff
KØAD
WAØMHJ
WØJMP
WØZF
AJ8B



Note from the President

Bert Benjaminson, WBØN, President

Hi all,

Well here goes another attempt at making sense to you all. We will see how many read this!

First, has everyone been having as much fun chasing DX as I have had this year? ATNO's and plenty band/modes for me so far, However, the bands have been lousy here for the last few weeks. Darn northern lights!

I have been doing a lot of playing with my antenna farm in the brush, I even had Donn KØQC over helping me one day. I have a lot more work to do out there fighting the buckthorn every step. Looking at my back and hands, I would have to say that the buckthorn is winning! I may be going back to work part-time so need to get done soon. How are you all doing on antenna projects?

My next questions are, how are we doing with speakers at the meeting and how do you like hybrid meetings... in person and zoom? Suggestions are always welcome, but we are booked for this year. I can pass these on to the next President or start acting on them myself.

I hope all the Dayton Hamvention people had a great time there! I have almost given up on making it there myself, but I love hearing about all the goodies and fun that was had there.

I really missed having the Pub42 meeting last month, but we have been assured we will be back there June 19th and things will remain as they have been for us. Hopeful of a good turnout to show the new owner that we are worthwhile to their business.

Enough of my ramblings... 73 all ES GD DX

Bert—WBØN

The DXpedition Vetting Process

by Mike Cizek—W0VTT
TCDXA DX Grant Manager



There was a discussion among TCDXA members at a recent hamfest questioning the amounts of money we donated to some recent DXpeditions. I joined TCDXA in 2014 and became our DX Grant Manager in 2018. During that time, we have not published an explanation of how and why we come up with our donation amounts. After participating in that discussion, it seemed that an explanation of the procedures involved in vetting DXpeditions and deciding on donation amounts was needed.

Our previous DX Grant Manager, Matt K0BBC, had a good system in place. When I was elected to replace Matt on the board, we sat down together and he explained his procedures, the whys and the wherefores, and how he handled everything. I'm a firm believer in "if it works, don't fix it"; Matt had a good system in place and I saw no need to make any changes. The only change we did make was forced upon us by Survey Monkey when they started limiting their free surveys to only 40 responses. Fortunately, K0PC figured out a way we could do surveys right on our own website and that is the system we use now.

The basic guidelines for DXpedition funding are spelled out in the *TCDXA Operations Manual*, which was put together by the board long before my time with the club. This document is exactly what its title states; an owner's or operator's manual for the club officers for running the day-to-day business of TCDXA. DXpedition funding is just one

of many subjects covered. An abbreviated version of the funding criteria appears on the TCDXA website here: <https://tcdxa.org/dx-grant-policy/>

One part of the funding process we choose *not* to make public are the amounts we consider giving, which are based on the country's position on the Clublog global most needed list. Amounts range from \$250 for a top 100 country to \$1000 and up for a top ten. Countries below the top 100 are generally not considered, but we have made exceptions in the past and supported DXpeditions to countries as low as #120 (EP6RRC in 2019 and 3DA0RU in 2022).

TCDXA has a three-part process for handling DXpedition funding requests:

1. Research & recommendation by the DX Grant Manager
2. Discussion among the Board of Directors
3. Vote by the club members

Research and Recommendation

There are several things to consider when deciding on DXpedition funding, but there are three that stand out in my mind:

1. The operators
2. The need for the country
3. The cost of the operation

The Operators

My first question when receiving a funding request is "who are these guys and what are their chances of being successful?" If the request comes from K0IR, or W0GJ, or one of the well-known DXpeditioners who have "been there and done that", I know they have done all of their homework and will be successful. I still check on them, of course, but I know they are going to succeed.



When the request comes from someone I don't know or someone we have not funded in the past, I look carefully at each of the team members. What DXpeditions have they done before; how many QSOs did they make; how well did they satisfy the demand for QSOs? Clublog is an excellent resource for this. I request an itemized budget for their operations. I also ask if they have all their permissions and licenses, what are their travel arrangements, what are their QSL plans.

I sometimes trade notes with my counterparts in other DX groups around the country. I am a former member of both the National Capitol and Northern Illinois DX Associations, and know some of the NCDXF board members pretty well. These folks have all helped me in the past, and I hope I have also been able to help them with some of their decisions. If the DXpedition operators appear to have all of their ducks in a row, we move on to question #2.

The Need

Once I have confidence the team can get to their destination and make a reasonable number of QSOs that will count for DXCC, I look at the Country's position on the Clublog global most needed list. This is the first, but not the only, factor in determining the size of the donation I will recommend to the board. The country's position on the list is balanced with changes that have recently taken place, or are expected to take place, that may cause it to move up or down on the list.

For example, many remote islands are now being declared ecologically sensitive and governments are restricting access. Places that were once commonly active, like many of our US Pacific possessions, are becoming increasingly difficult to activate.

This is the main reason for our larger than normal donations to Clipperton, Jan Mayen, and Sable Islands. (Jan Mayen JX0X was cancelled and we received a full refund.)

On the other hand, some fairly rare countries have recently become more active so we can expect them to move down the list. Five years ago, we received a funding request from a European group for their trip to Rotuma, which was #51 at the time. I knew that Antoine 3D2AG had recently started making regular trips to Rotuma so I recommended to the board that we not fund this operation. Rotuma is now on the air periodically and has fallen to #86 on the needed list.

The Cost

The second factor in deciding how much of a donation to offer the DXpedition is the cost of their operation; how much money do they actually need? Typically, but not always, countries that are higher on the most needed list cost more to activate. The higher cost plus the higher demand for the country rates a higher donation amount. The budget for 3Y0J going to #2 Bouvet was \$715,000, most of which needed to be paid up front. We gave a grant of \$5000 to 3Y0J; the most we have ever given to a DXpedition. The FT8WW operation to #3 Crozet had a total cost of around \$40,000. The relatively low cost was because F6CUK was able to take a regularly scheduled supply ship to the island instead of chartering a vessel. Because of the low cost and the amount of support he had already received, I recommended a donation of only \$500 instead of the \$1000 we would normally give to a top ten country.



Board of Directors Discussion

Once I decide on a donation amount, I forward my recommendation to the board members, along with information about the operation and the reasoning behind my recommendation. Most of the time, my recommendation is in line with the club guidelines and is accepted as it stands, but sometimes the board makes changes. One example is the recent TX5S operation going to Clipperton Island next winter. Clipperton rates a \$500 donation being #38 on the needed list. Because of the increasing difficulty of landing on the island and the likeliness of fewer operations in the future, I recommended that we give \$750. After some discussion, the board members thought that \$1000 was more appropriate, so that's what we put to the membership for a vote. There are other times when the board members think I am being too generous and they lower the amount I recommended. Our discussion usually only takes a few days.

Voting by the Membership

Once the board agrees on an amount, we put it to the membership for a vote. My records for DXpedition funding go back to 2015, and in that time every donation has been approved. We typically receive 55 to 65 votes for every operation, with a little over half getting unanimous approval. We often have a few dissenting votes, but not many. The most contentious vote was for our \$1000 donation to JX0X in 2021. That one only passed by a vote of 25-16; a surprisingly low vote count for such a controversial donation. The highest number of votes ever received was for the last Bouvet operation, which passed by a vote of 77 to 1. No, I don't know who the dissenting vote was, it truly is anonymous.

Closing Thoughts

Based on the voting results we have received (50 DXpeditions funded in the last eight years), it appears that the club members are satisfied with our DXpedition funding process and the board members' recommendations are closely in line with what the membership wants.

One thing that concerns me is the low number of votes we receive. Our roster currently shows that we have 144 members, but we typically only receive 55 to 65 votes; a voter turnout of around 40%. This is *your* money we are spending; please take an active role. I want to be a good steward of our club funds, and I make sure to do my homework properly before making my recommendations to the board, and then to the club members.

On the other hand, I think that the amount of money that TCDXA gives to DXpeditions is something that we can be truly proud of. Over the years, I have been members of three DX clubs; TCDXA, Northern Illinois DXA (Chicago area), and National Capitol DXA. Both Chicago and DC are *much* larger metropolitan areas than the Cities, yet we are more active and give out a lot more money to DXpeditions. "Dollars for DX" is more than just a slogan for us; it really is what we do.

Join TCDXA

Our mission is to raise *Dollars for DX*, used to help fund qualified DXpeditions.

Our funds come from annual member contributions (dues) and other donations.

TCDXA is a non-profit organization, as described in Section 501 (c) (3) of the Internal Revenue Code. All contributions from U.S. residents are tax-deductible.

Becoming a member is easy. Go to <http://tcdxa.org/> and follow the instructions on the home page.

All contributions (including annual dues) may



The Simplest Tower Issue

by Bob Seaquist, W9LSE



Something was clearly wrong last year when my rotor wouldn't respond. The beam pointed North and that was that. It was at the crum- my time of the year right after hams are warned to "check your tower, guys, connections etc." so it was too late to lower and repair the damage.

Mine is a modest station set up for a modest operation. I like to get on the air, find someone with whom to chat, sometimes operate in QSO parties and sometimes chase DX. My antennas feature a 40-foot aluminum Universal tower, an eight-foot mast topped by a Comet VHF UHF antenna, and a beautiful five element three band Hygain TH5DX Thunderbird beam. There's also a Mystery dipole hung as an inverted Vee. Or it was hung before the bargain bin rope used to hang it succumbed to UV and transformed from rope to what looked like toilet paper flags. The rotor was a CDE Ham III that quit working. (Crucially important clue: check the crimped lug connectors on the controller in the shack!)

So commenced a long and relatively radio-free winter despite superlative propagation. True, I could use the beam on its northerly heading, and I could use an attic mounted PAR Endfedz all-band antenna. Neither were fun to use. I don't plan on a lot of sympathy from most hams that do not and cannot have towers for their antennas.

Apparently, my small tower qualifies my station as one that is very well equipped, and we all know guys that do not have towers or other amenities yet earned DXCC with a fence post and paper clip.

Fast forward to late spring: I figured I'd have to replace what seemed to be a failed rotor and, as luck would have it, found a CDE Ham IV at a swap fest and purchased supplies I thought would be needed to repair the tower. The next headache was getting someone to lower the tower (it's not safe to climb a self-supported aluminum tower, something I am too old and feeble to do even if it was safe). The local ham community seems to consist of many older fellows who are not able to conduct heavy work or should not conduct heavy work. So, they were out of the equation. Fortunately, out here in Holmen's Spring Coulee there are many generous, helpful neighbors and three of them, hearing my plight, generously offered to lower the tower.

On the appointed day, the three, father, son and grandson, all expert mechanical contractors used to dealing in toilets, HVAC, welding and sewers, arrived with a truck-mounted winch, a John Deere tractor, and lots of tools. They hung a pulley from the tractor's bucket, stretched a cable through it to the tower (grandson had to stand in the bucket to attach the cable to the tower) and gently lowered my 40-foot aluminum joy.



We discovered that several months without a brake let the beam weathervane back and forth enough to dang near destroy the rotor's mount on the tower. We also found when we mounted the new Ham IV rotor, it didn't work. It worked wonderfully when I tested it in the shack. The mounting plate was also misaligned. We fussed with the rotor, the wiring and the mount for a while concluding that the rotor mount needed re-machining and I had to find a rotor expert. Some adult brewed beverage settled nerves.

Many of you know Mike Cizek, W0VTT, and that he once professionally worked on ham towers. So, I phoned him and begged for his help. I don't think I needed to beg because he's a helpful kind of a guy. The next day he was here on the "mountain" doing detective work. He checked voltages at the tower, at the tower's base and in the shack. He checked electrical continuity. We put the new rotor on the tower. Didn't work. We put the new rotor at the tower base where it didn't work. We took the rotor into the shop and disassembled it. (Ham IV rotors are very heavy duty and quite simple; they are rocks and probably could go forever).



We disassembled the Ham IV rotor to see if there was a problem in it. There wasn't.

Worked fine there. We put the old rotor on the tower where it, not surprisingly, did not work. Suspecting the control wire grounding device was shot we called three area hams to raid their junk boxes for a simple terminal strip that would substitute for the grounding device, but they didn't have what we required so we journeyed to Menards to get one of those.

This project, beside phone calls, big box travel and electrical measurement necessitated a great deal of seafaring language, perspiration, and five hours of trudging up and down my hill until almost accidentally we found the issue, one badly crimped spade lug in the shack. Suddenly, I could point the beam in different directions!

It is true the tower had to be lowered anyhow for routine maintenance like lube for the thrust bearing and checking cables, not to mention replacing the bargain rope with some very tough and UV resistant Mastrant guy line. Finally, the W9LSE aluminum radio wave magnet was back in its place of prominence. Working!

But Geez, one badly crimped spade lug in the shack! Really?



Three neighbors, father, son and grandson, all mechanical contractors, easily lowered my tower for repair, later raising it up again.



Dollars for DX Report

Mike Cizek WØVTT—mgcizek@gmail.com
DX Grant Manager

During the past quarter we funded three DXpeditions: FT8WW to Crozet, TX5S to Clipperton, and VU7W to Lakshadweep. We also received one funding request: E6AM to Niue Island by Stan LZ1GC.



Yuris Petersons YL2GN made a solo trip to the Lakshadweep Islands and operated as VU7W. Lakshadweep was ranked 51 on the ClubLog needed list and we voted to award him a \$500 donation. He made over 40,000 QSOs, but there is still great demand for VU7. A large group of JA hams put up a sizeable donation and asked him to return. He plans to go again in June. VU7 was a new one for 31% of the members voting on the donation.

The last large scale operation from Clipperton Island was ten years ago. Clipperton is currently #38 on the Clublog needed list and the Perseverance DX Group is planning a large operation next winter. After some discussion, your board of directors recommended a \$1000 donation for TX5S and it was approved by a vote of 60 to 7. 33% of our membership needs Clipperton for a new one.

TCDXA typically has given money to DXpeditions before they depart, and only after they request our support. Our donation to FT8WW came after the fact, and as a result of conversations at a local hamfest where a number of club members suggested that we contribute. The board quickly approved, so I asked Paul F6EXV for some financial information on Thierry's trip.

Based on their modest budget and the amount of support they had already received, I recommended a donation of \$500 which was approved by a vote of 54 to 3. Crozet was a new one for two thirds of our membership. Despite making over 51,000 QSOs, Crozet is still listed as #3 on the Clublog needed list. I thought for sure it would fall below Scarborough (15,000 QSOs in 2007) and maybe even below San Felix and Pratas, both of which have had no QSOs in the last 20 years. Maybe once all of the QSLs come in and everyone uploads to Clublog, we will see Crozet move down the list.

Just before press time, I received a request from Stan LZ1GC. Stan and LZ1OM requested our support for a two week operation from Niue Island E6AM in October. Niue is #82 on the Clublog global needed list. I will research their request and make my recommendation to our board of directors. We will likely be voting on this about the time the Grayline is published.

There were more than a few questions about why we gave \$1000 to Clipperton, which is ranked #38, and only \$500 to #3 Crozet. There will be a separate article in this issue of The Grayline where I will attempt to explain my DXpedition vetting process and how the board arrives at a recommended donation amount.

Thank you.

Mike Cizek WØVTT

TCDXA DX Grant Manager





Report on the 74th International DX Convention in Visalia April 21—23

Submission #1 by Fred Regennitter, K4IU

I attended Visalia with KØMD. I always like getting together with our West Coast friends. They are as numerous as the MWA members. There were about 450 attendees who enjoyed an excellent conference with DX and Contest forums at the Visalia Marriot Convention Center. There were several group dinners. Scott, KØMD, arranged a nice one which included Mike, AB4EB, and Adrian, KO8SCA from the 3YØJ team and others. A previous Bouvet DXpeditioner and well known MWAer Glenn, WØGJ received an award from Adrian and Mike. The certificate recognized Glenn's contribution in the form of a satellite phone to Adrian which was invaluable to the Bouvet team.

There were several well known vendors at the Convention but no new product revelations! Adrian and Mike spoke at the banquet. Glenn spoke at the Sunday breakfast.



Fig. 1 Vivian, KL7YL and Glenn Johnson, WØGJ and Adrian KO8SCA



Fig. 2 Left Ted, K4SV and right Mike, AB5EB team member/ physician, Tom Schiller, N6BT across from Adrian



Submission #2 by Scott Wright, K0MD

Visalia – the Ultimate DX and Contest Convention!

Visalia has been long touted as the “Ultimate convention for DXers and Contesters”. I have to agree – I last attended in 2019 and it lived up to that billing then and again in 2023.



It had been four long years since the last Visalia meeting in person. What is there not to like about leaving the late winter season of Minnesota in April and traveling to Visalia, especially with ham friends. K4IU and I decided to travel together to the 2023 conference, and we secured our plane tickets in November of 2022 after realizing how much the prices were going up on the US Airlines. We flew Minneapolis to Fresno, via Salt Lake City. I will travel through Salt Lake City anytime I need to, as it is one of the most beautiful and picturesque settings among US Airports and is likely one of the friendliest airports in America!

Fred, his wife Judy (K0UH) and I traveled to Visalia together last in 2019. It was a tough journey. The day of travel, a blizzard hit MSP. We were one of the last flights out but delayed just enough that we had to spend the night in Salt Lake City. This year, it was completely different. Fred and I traveled as Judy decided she would rather stay in Rochester. The weather was perfect, and we had no travel delays. We landed in Fresno in the late afternoon and traveled by rental car to Visalia, about one hour. Fred was the apt navigator and I the driver. California traffic had a few surprises for us, but we persevered and got lucky to miss an accident or two.

The Marriott Convention Hotel is the home of the Visalia conference – *the International DX and Contest Convention*. Several of our friends were on the program committee, N6PSE, AA7A, KC7V, K6MM, KY7M, W00Z and several others that I won't mention just to avoid omitting someone so we knew it was going to be an outstanding three days of ham radio. The keynote banquet speakers were the Bouvet group on Saturday night and our very own W0GJ on Sunday morning. Neither disappointed the audience but bravo to Glenn for his brevity and organization!

Friday at Visalia is largely limited to talks about DXing and Contesting. Separate sessions on DX University and Contest Academy are run with the DX University Friday morning and Contest Academy in the afternoon. Friday morning had a parallel track called DX and Technical Presentations. This session was particularly interesting to me. I spoke mid morning on my “New 80 m 4 SQR, about the decisions to upgrade to it, the planning, installation and performance of it. I estimated 100-150 hams attended it.



The session before mine was even more interesting and entertaining. Scott, N6MI (A California Attorney and entertainer) and Paul, W6PNG/MØSNA (Good friends with Matt, KØBBC) spoke about the W6E Expeditions: California QSO Party Adventures in the Desert and Mountains. Scott in particular held all of us spellbound with his practiced and well honed oratorical skills. He actually purchased a used TV uplink van, outfitted with a 40 ft telescopic hydraulic mast. He mounted a 3 element Tri bander on it once parked and used it to run the California QSP. Wow! Imagine the signals he could hear as a mobile station. Paul worked with him using a different set up, a Hexbeam, not quite as tall but as successful from the vantage point of fun and pleasure. They spoke of the difficulties of working together during the COVID pandemic and the ease that the post-pandemic times brought. Paul later told me that Matt, KØBBC will be joining them in October for the CQP. Good luck Matt!

The afternoon Contest sessions had a number of very interesting talks. We enjoyed hearing about the new LUSO tower at K9CT as well as his new beverage system that is replacing the Hi-Z 8 Circle array. One of us (KØMD or K4IU) has ordered the parts to build a similar beverage system. We will leave you guessing until the December ARRL 160 contest. There were 150 or so in attendance for any of the sessions that day.

Friday, April 21, 2023			
Time		Description	
11:00 - 17:00	Lobby	Registration	
10:00 - 17:00	Lobby	Raffle Ticket Sales	
08:00 - 12:00		DX University <i>Sponsored by DXU</i> Location: San Joaquin A-B	DX & Technical Presentations Track A - Morning Session Location: Charter Oak A-B-E
		Tools For DX Dave, WD5COV	A Very Low Cost Vector Network Analyzer John, K6YP
		How to Break the Pileup Bill, K8TE	The W6E Expeditions: California QSO Party Adventures in the Desert and Mountains Scott, N6MI & Paul, W6PNG/MØSNA
		DXing With FT8 Rob, N7QT	My New 80M Four-Square Antenna Scott, KØMD
		DXing & Best Practices, Q&A Door Prize Drawing	So, You Want To Go On A DXpedition? Tom, ND2T
12:00 - 13:00		Lunch	
13:00 - 17:00		Contest Academy <i>Sponsored by NCCC</i> Location: San Joaquin A-B	DX & Technical Presentations Track A - Afternoon Session Location: Charter Oak A-B-E
		Introduction and Welcome Chris. N6WM	JTAlert: Audio & Visual alerts for WSJTX & JTDX Configuration & Use Cases Rob, AG6RK
		Contesting Live Hank, W6SX and Kurt, W6PH	Some Ham Radio and DX History Ron, KF7ZN
		Advantages of Waterfall Displays for Contesting Bob, N6TV	Get Some and Get More Tom, N6BT, Next Generation Antennas
		In Band Multiplier Systems Bill, W9KKN	T88WA DXpedition To Palau Rob, N7QT
		ARRL CAC Activities and K9CT Station Additions Craig, K9CT	Effect of Mounting Height and Ground Quality On HF Antenna Performance Jim, K9YC
		Panel Discussion, Q&A	
13:00 - 17:00	Exhibit Hall	Exhibits and Displays Open	
13:00 - 17:00	Exhibit Hall	N6V Special Event Station Open	
17:00 - 18:30	Eucalyptus Courtyard	DX Bar: Attitude Adjustment Hour Sponsored by DX Engineering	



We had dinner on Thursday night with some of the Bouvet team members along with Glenn/Vivien (W0GJ, KL7YL), Dave Anderson (K4SV, Chair W4DXCC) and Greg Lambert K1IT, Dan and Debbie White (W5DNT), Tom Schiller (N6BT, Founder of Force 12, former TCDXA member) and his XYL Vicky Zumwalt, N6KLS. Tom has been instrumental in my antenna array and is a great friend. Vicky is as well so it was nice to have them join us for dinner. Adrian and Mike from Bouvet joined us and then honored Glenn with a special certificate for his contributions to the Bouvet effort. It was an enjoyable time. The stories about the Bouvet experience would frighten you as we learned about some of the untold perils and situations. Bouvet is not for the faint of heart or anyone who is not an extreme risk taker. We will let them tell you the full story as they can.



K4IU, N6BT and XYL Vicky.



Friday night, Fred and I joined the November 6 Hotel California dinner organized by Gene Sperling, K5GS. Gene had a reservation at the nicest restaurant in Visalia; we enjoyed the company of several friends, and for me it was a treat to have two old Ky friends on either side, KE4KY Glenn Petri on my left and K4IU Fred on my right. Fred had a lovely conversation with another DXer on his right. We learned about the upcoming Clipperton DXpedition that night; we are excited for them.



Saturday, April 22, 2023		
Time	Location	Description
08:00 - 11:30	Lobby	Registration
08:00 - 08:15	Charter Oak	Welcome & Overview ARRL Introductions Introduction of DX Visitors
08:15 - 09:15	Charter Oak	New Product Showcase
08:00 - 17:00	Lobby	Raffle Ticket Sales
08:00 - 17:00	Exhibit Hall	Exhibits and Displays Open
09:00 - 17:00	Exhibit Hall	N6V Special Event Station Open
09:30 - 10:25	Charter Oak	DX Forum, Paul, N6PSE (Chair)
09:00 - 15:00	Saturday Bus Tour of Local Area	
10:00	Hourly Prize Drawing #1	
10:30 - 11:25	Charter Oak	Contest Forum, Bob, N6TV (Chair)
11:30 - 13:00	Plaza Courtyard	Saturday Buffet Lunch
12:00	Hourly Prize Drawing #2	
13:00 - 16:00	San Joaquin D	DXCC & WAZ QSL Card Checking
DX & Technical Presentations		
	Track B Location: San Joaquin A-B	Track C Location: Charter Oak A-B-C
13:00 - 13:40	YL Forum Gayle, K6GO (Chair)	Solar Cycle 25 and Related Issues Carl, K9LA
13:45 - 14:25	Remote HF After The Pandemic Mark, K6UFO	Networking Basics For Amateur Radio Al, K7AR
14:30 - 15:10	60 Years of Ham Radio - Working Them All Jim, K6ZH	DXing Using Remotes Ned, AA7A
15:15 - 15:55	Grounding and Bonding Tim, K3LR, DX Engineering	TX5N, Austral Islands DXpedition Gene, K5GS
16:00 - 16:40	ARRL Forum Kristen, K6WX (Chair)	Ham Radio: The Lighter Side John, K6MM
14:00	Hourly Prize Drawing #3	
16:00	Hourly Prize Drawing #4	
17:00 - 18:30	Eucalyptus Courtyard	DX Bar: Attitude Adjustment Hour Sponsored by Individual Sponsors
19:00 - 21:30	Exhibit Hall	DX Convention Awards Banquet
19:00 - 21:30	Emcee: <i>Kristen McIntyre, (K6WX)</i> Keynote: "3YØJ Bouvet DXpedition" - <i>Adrian, KO8SCA and Dave, WD5COV</i> Announcements Major Prize Drawings	

Saturday was dedicated to Dxing and Contesting.



The DX forum was well attended (300 plus people). The DX panel did their best to explain the policies of the DXCC program and a few attendees were advocating for change. Several believe that achievement programs for hams licensed in the last two decades are appropriate, as they believe they cannot achieve 340 DXCC entities ever. They may be right unless geopolitics change. What was disappointing to me is the lack of sensitivity of some DXAC members to this issue. No one suggested that the DXCC Honor Roll go away but the program needs to remain vibrant and alluring to attract newer and younger hams.

The Contest forum was less controversial. Four recognized contesters were on the stage: W2GD, K3LR, K9CT and N6AA (Dick Norton). Most of the opinions were typically a 3 to 1 split with one member waxing about the need to return to the 1970's without packet clusters and without spotting. Real time contest reporting and real time scoring appear to be on the precipice of gaining enough traction to emerge as the latest change. The next few years will tell.



There were only a few vendors at the Exhibition Hall. Icom and Kenwood did not display. Icom was at a non-ham radio show in Canada. Kenwood was not ready to return to the ham market until Dayton. Yaesu, Flex and Elecraft all came with a large team. They were busy during the show. No new products were announced but those three companies appear vibrant and in good shape. The CEO of SteppIR, John Mertel was there and answering questions. Ham Radio Outlet and other vendors were there. This show offered plenty of face time with the individual vendors. I was able to spend ½ hour with Eric Swartz at Elecraft learning about the soon to be released K40 and remote software. Yaesu had their new entry level SDR on display, the FT-710. It along with the other Yaesu rigs are all the top ranked ones by Rob Sherwood.

Saturday evening, we were entertained by Adrian, KO8SCA, David WD5COV and Mike AB5EB who shared for about two hours the Bouvet experience. It was a spell-binding story and all left appreciative of the effort, work and success they had. Kudos to all of them for the risks they took and the personal investments each of them made north of \$25,000 apiece. Wow.

The IDXC has lots of prizes and I won a power meter. TSA allowed me to bring it back home and it is in my shack, with gratitude to the donors for IDXC. It is the first major prize I have won at a meeting.

Our friend and club member Glenn Johnson W0GJ closed out Visalia with his talk on Sunday morning “What is a real ham”? We will leave it to Glenn to share those secrets with you. (Sounds like a club presentation...Just sayin’ -editor)



A bonus while there

Our friend Dave Anderson, K4SV, is a prominent YouTuber now with 15,000 followers. He is an expert on all things EV. He had driven his Tesla Model X from Tryon, NC to Visalia in full self driving or autonomous mode. He drove us around Visalia in full self driving mode. It was something to experience as the car drives itself, stops appropriately at signs, red lights and can merge with traffic. Pretty cool. Fred and I each took turns driving it on the outskirts of Visalia, in the Tesla Ludicrous mode. The Ludicrous mode allows acceleration from 0 to 60 in 2 to 2.5 seconds. It is everything you can imagine and more. And yes, it does get to 60 in that rapid of a time period. It feels like take off in a jet at MSP. The Tesla Model X is an amazing and comfortable car. I think we both decided to wait on ordering one until they come installed with an HF rig, antenna and a Begali paddle though.

I can recommend Visalia to any of our members. It is a great experience and one that you won't forget.



K7UT & KY7M



Rock from Bouvet



Visalia Banquet Crowd



The HOA Gamble

By John Rusciano—NG0Z



HOA. It's a three-letter word that many Amateur Radio Operators harbor deep disdain for. When my wife Koren and I fell in love with a new townhome project in Eden Prairie, I knew it would pose a challenge for me. At the time, I had a substantial station in the basement of our home in Minnetonka: Icom 7610, Icom PW1, SteppIR Urban Beam, a 43' DXE Vertical, and a 200' doublet in the trees. Anyone who ventured into my backyard knew someone inside had a peculiar hobby.

We talked to the realtor about an antenna, knowing it was a longshot. He talked to the builder and we were told, no antennas *of any kind* will be allowed. Truth be told, I love everything *else* about the HOA, but there it was: *Except with prior written approval of the Architectural Control Committee, no exterior television, radio, satellite, or microwave antenna or dishes of any sort shall be erected or maintained upon any Unit.*

I admire those creative amateur radio operators that see that paragraph as a challenge, hanging wires and even yagis in their attics, turning flagpoles and gutters into stealth antennas, or operating mobile from their driveways. However, I had already planned to build my dream station up at the cabin...someday, and operate it remotely...*from time to time*. It was on my "bucket list" but with no particular timeframe in mind. I have had many a QSO with remotely operated stations, and it was usually a Flex Radio station. By even considering a move to this new home, I took a leap of faith that I (and my ham radio friends) could figure it out. So, we made an offer on the townhome, submitted to the idea that from now on, I would be operating remotely...all of the time if I were to get back on the air someday.

A little dramatic perhaps but Amateur Radio isn't just a pastime for me. I've been around radio since I was a kid. I love radio. I love reading about its history. I love the goodwill and making new friends on the radio. I love talking to other hams about radios. Mostly, I love being on the radio. It's how I unwind.

We sold our home quickly and the next thing I knew, I had sold all of my radios and peripherals and we moved into the new home. I was off the air. I passed some of the downtime on Remote Ham Radio – expensive, but impressive – and for some, cheating! I threw a wire between some trees at the cabin with an Icom 7300 "100 Watts and a Wire" and stayed somewhat active as a result. But it wasn't the same. I have never considered myself a big gun on the air, at the same time I'm not interested in QRP.

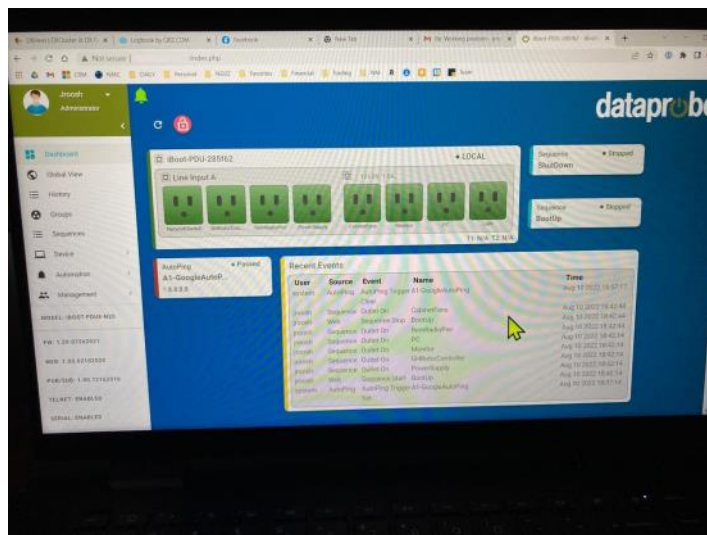
I started researching the provisions and pitfalls of remotely operating an amateur radio station. I consulted with Denny (K0TT) and other hams, as well as my son Mark, who like Denny, is also an electrical engineer, and started specifying and ordering the elements of a new



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were operational, 75 feet in the air, and just in time to grab the next solar cycle. Before winter set in, we assembled a four by four metal shed, to house and protect the equipment rack from the climate and critters in the pole shed. Cameras and a security system, both inside and outside, also help to protect the investment.



We programmed a Dataprobe iBoot internet-enabled power distribution unit (PDU) with station boot-up and boot-down macros to sequence and pace the power up and power down of each device. The iBoot looks for Google every five minutes and if it can't connect, it reboots the internet equipment until connectivity is restored. One power port toggles a 220-volt relay to reboot the 1500-watt amplifier. Other ports are dedicated to remotely powering the radio, rotor control, power supply, and the cabinet's cooling fans. The PDU also allows me to manually and remotely reboot the internet equipment if all else fails. The first time I tried it remotely, I had my fingers crossed as for about two minutes, all connection is lost to everything in the "shack." But it worked perfectly. I ramp up or down my entire station from virtually any device.



**In the Rack From top to Bottom:
TempStick, Lenovo PC, Network, PDU, Flex 6400, Flex
PGXL, Astron Power Supply, APC UPS, Flex TGXL,
Green Heron RT-21**

We programmed the station PC to boot up when power is restored to it and put an uninterruptible power supply (UPS) in place to keep it running during power outages, so I don't lose control of the station abruptly,

or corrupt the PC's operating system. The UPS and it's liquid battery has the narrowest tolerance for low temperatures, so Mike from Flex Radio suggested a reptile tank heating pad – the kind that adheres itself to an aquarium - with a thermostat – to safely keep the bottom panel of the UPS at fifty-five degrees in the middle of winter. A Tempstick monitors and alerts me of extreme temperatures and humidity in the shack.

Luckily, I have clean, fast internet and power at the “shack.” Mark modified the router's network settings to favor low latency over sheer throughput as the former is much more critical to operating Flex radios remotely than the latter. I had an electrician install a building-wide surge protection system as well as bond my outdoor tower grounding system to the indoor system. I added a surge protector to the internet cable coming into the shed as well as fiber optic buffers on the ethernet cables to the radio equipment to provide surge protection on every path to the most sensitive devices. A Paradan P-ADA-2 Dual Antenna Disconnecter disconnects and grounds the coax when I shut down the power supply.



Operating Position in our townhome in Eden Prairie.



The easiest setup of all was the radio. Flex's elegant design makes it easy to set up the radio and "find it" remotely over the internet. The radio, amp and tuner all "find" each other via ethernet connections. CAT and DAX pathways are virtual. With SmartSDR via SmartLink, Flex's remote server service, I access my station anywhere I can find suitable Wi-Fi with my iPad, iPhone and my main device, a gaming laptop. Audio is a Razer gaming headset or a Blue Yeti USB microphone. SmartSDR's audio equalization settings allow me to tailor my RX and TX audio and save a profile for either microphone. I receive excellent audio reports with these simple and economical input devices.

A Lenovo "Tiny" Desktop PC at the shack hosts the Green Heron "GH Everywhere" software for rotor control, as well as the API for the Flex Tuner and Amplifier. I operate these apps and devices remotely via Google Remote Desktop, operating them as seamlessly as if I were standing at the PC in the shack. This saves bandwidth for the more critical functions of the SmartSDR console and panadapter. This will also host WSJTX down the road; Flex's virtual DAX API will feed audio to and from the Flex 6400. Logging is via N3FJP's Amateur Contact Log on the remote laptop which gathers frequency data from the Flex 6400 via the Flex's remote virtual CAT API.

The FlexControl, essentially a USB radio "mouse," offers a traditional VFO knob and three programmable buttons, one of which is set up as the "MOX" or PTT. This is really the only form factor that emulates the traditional knobs and dials radio setup in my old, "local" station and allows me to key up no matter what screen I am viewing. Essentially, I now operate 100% remotely, whether I am 114 miles away at home in Eden Prairie or 100 yards away, across the street in the cabin.

Despite thorough planning and design, and true to the universal experience of hams since

the beginning of the hobby, there soon were problems only discoverable by firing up the station and getting on the air:

- Periodically, a quick reboot of the Flex SmartSDR software is required to get the Flex devices to synch with each other.
- An overnight power outage occurred in the middle of a Windows update and corrupted the operating system. A new UPS solved this issue for the future and is programmed to send a command to the PC to boot itself down if an outage persists beyond a specified length of time. This prevents a hard shutdown of the PC. When power is restored, the PC boots up automatically.
- A compromised limit switch on the tower failed and allowed the tower to slightly hyperextend itself before I stopped it manually. A replacement under warranty restored my confidence that the tower wouldn't try to pull itself apart again. US Tower customer service has been excellent.
- The station is dependent upon the internet service and the providers that interconnect with each other. For two weeks last fall, my latency doubled. Calls to Xfiniti were unproductive. A "tracert" command revealed a lengthy reroute of my connection to the East Coast and back, impacting my latency and rendering my station substantially inoperable – and just as quickly it was resolved one day.
- Periodically, the Flex servers go down and if you aren't already validated and connected to your station, you must wait for the service to be restored. Patience, as well as reminding yourself that it's just a hobby, is key.



I would prefer to have a basement dream station and an antenna farm on the “back forty” but in the in the balance, there are distinct advantages to operating remotely:

- There is no way I would get away with a tower this size and height in the backyard of our previous suburban home in Minnetonka, let alone hanging a twenty-four by forty-eight foot moonraker on it.
- RFI, the bane of almost every suburban amateur radio operator, is nearly non-existent operating remotely from God’s Country. The RFI I *do* experience is self-inflicted and I will continue to chase down each and every source over time.
- And, if you *can* operate from anywhere, you *do* operate from anywhere. From the front porch to the garage, on vacation, and in the office between appointments. On a recent Hawaiian vacation, I logged into my station poolside on my iPad, and made a contact with Viet Nam, imagining my signal going back over our heads.

We live in a golden age of amateur radio technology and without it, there is no way I would have moved from our old home and into an HOA environment. Since getting back on the air with my new setup, I have rediscovered the joy of our fascinating hobby. The performance of the station has been confirmed by signal reports all over the world, and the design and implementation of the peripherals required for remote operation have been remarkably reliable. If I don’t mention I’m operating remotely, the other station wouldn’t have a clue. The delay, 60-milliseconds in the city and 25 milliseconds at the cabin, is imperceptible.

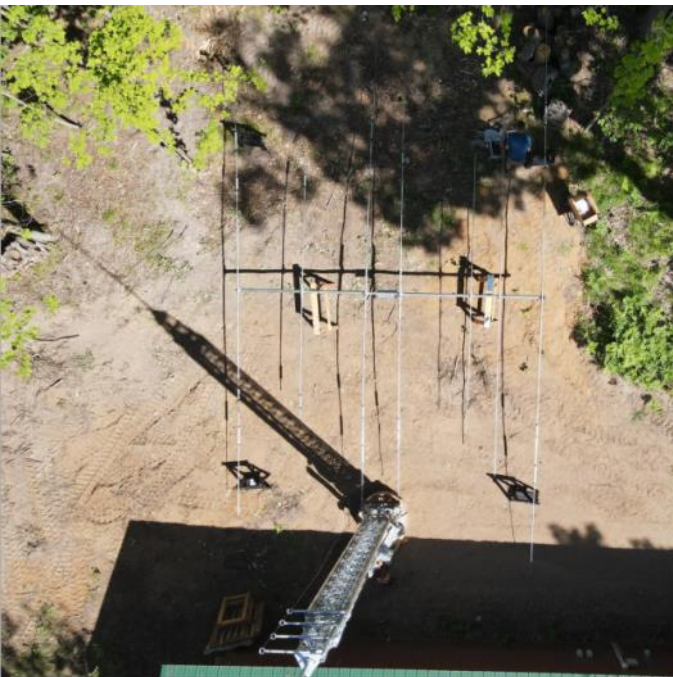
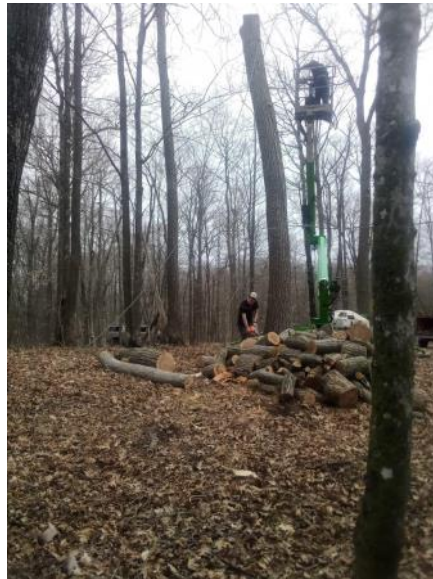
I am grateful to my son Mark and to Denny Moe for making my dream station a reality and would also note that I would not know Denny or many of my radio friends if not for the wonderful fellowship we enjoy in the TCDXA. I hope you enjoyed this and perhaps were inspired to push the envelope in

your own amateur radio pursuits. If I can help, I am always looking to pay it forward, so please don’t hesitate to reach out. If you hear me on the air, please call – there’s always time for one more QSO.



Mosley PRO-67-C-3 at 75 feet/25m
[3 elements on 40/20/17/15/12 meters; 4 elements on 10 meters]





2023 Hamvention

We asked for some feedback from those who were attending the 2023 Hamvention in Xenia. NI0K and K0MD submitted their comments. Thanks to John and Scott for their input.

If you attended Dayton, what were your thoughts?

Loved it, my third one. (BTW, why does everyone still call it 'Dayton'?) The flea was loaded with boat anchors, gear that many of us drooled for in the day. Plenty of bargains were available in any category of item. In the vendor area there weren't any surprises; no new gear, no new hot item that I found. The \$2100 mag loop antenna was impressive, though. The best part of the Hamvention for me is meeting people. Chat up anyone, and a great conversation ensued. I met 4 hams from Holland; one fellow is a builder and said he buys from Mouser because with a \$50 order they pay shipping and duty.

I saw some of you at the DX Dinner - other than the rubbery chicken, how was it?

Who cares about the food? Hobnobbing with big guns and little pistols is the reason for going. Last year I lucked out and got a table with the big guns. Wow!

Thanks John

Dayton 2023 – Crowded!

By Scott—K0MD

I attended Dayton this year for Thursday and Friday. I typically attend Contest University and the DX dinner on Friday night. Lately I have not been attending the Contest dinner due to the food service at the Hope Hotel. This year I had a work trip to Germany which required me to leave Dayton on Saturday so all Saturday activities were off limits. I flew into Dayton on Wednesday from a work meeting in Baltimore. I met several friends – K4SV, K1IT, WU4E, W9IXX, KC8CKW—Mindi, W8KJ—Kevin and AJ8B of SWODXA and Steve and Jessica Molo (of Gigaparts) for dinner. It was great to see old friends, and make some new ones!

Thursday, I attended Contest University with 400 of my closest contest friends. I ran into two Minnesotans, Pat K0PC and Jeff W0JM. It was great to see two fellow TCDXA/MWA members there and catch up with things for a short time. The talks and teaching at Contest U were probably the best I have experienced since I started attending in 2008. Tim Duffy, Bob Wilson, Frank Donovan and the rest really do pack a lot of material into one day. I had a brief trip to the Xenia Fairgrounds over the lunch break with the NCJ Editor, Lee Finkel, KY7M so we could pick up our parking passes and name tags. It was great getting a bite of lunch with Lee and hearing how

Gary Grivna K0GX

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Friday was my only day at Hamvention and boy was I ready! My description of the experience, in a word, Dayton 2023 was CROWDED. The large attendance was back. Friday was jam packed, at least in my experience. It took an hour for me to drive from the hotel to the fairgrounds, as the last 2 miles were 40 minutes of the hour-long commute. I was moderating a session at 1020, and was concerned I might be late! Fortunately, I had picked up the presenter so we were either late or on time, together. Our forum was on the K4D user group, where Bob Wilson taught new K4D owners some tips and tricks, and Eric Swartz updated the audience on new things to emerge from Elecraft later this year.

I am impressed with all of the food vendors that the Hamvention team are able to organize and this year was no exception. I counted over a dozen food types available, along with specialized lemonade and ice cream stands.

The exhibition halls were crowded with a lot of hams working to meet vendors and see what was new. Kenwood announced a new color LCD HT, likely to be in the 700+ USD price range. Icom announced two new products: a monochrome HT for 2 meters and 440 Mhz, (no price or availability announced) and a UHF (2 m – 1200) rig using the 705 form factor, a multi-band rig in a single box with a variety of antenna options, all for the low price of \$ 3600.00 + at your local ham dealer. The long-awaited PW 2 by Icom continues to be a concept only amplifier at this time. Yaesu continues to offer more HF and VHF models than the other vendors; I believe they had a new mobile VHF/UHF rig on display. As usual, Yaesu drew a big crowd, all in a queue for a ‘free hat’. Flex did not have anything new this year that I saw. Elecraft indicated that they had caught up on the backlog of K4D orders; orders placed at the show would have a 2 to 4 week delivery time table. Their KPA 1500 amplifiers were in stock, while the KPA 500 amplifier is on a backlog

of a few weeks. Every vendor continues to cite supply chain shortages as the limiting step for innovation and manufacturing.

The Begali display continues to draw standing room only crowds of hams admiring their entire paddle line-up. As usual, Bruna Begali was there to answer questions and pose for pictures with her many customer fans.

DX Engineering had a larger display this year than at any time in the past, along with many new products and product lines. I believe they must have had 40 staff on hand to help with questions and process orders. I ordered some beverage supplies from them. The supplies shipped out Friday and arrived at my QTH before I could get home.

The ARRL was well staffed also. Our very own W0VTT was on duty checking DXCC cards for Friday and Saturday. I am not sure Mike got to see any of the show otherwise! I also made a trip by the RSGB, another society of which I am a member. They were courteous, and even gave me a new issue of RADCOM to read on my transatlantic flight for Saturday.

Friday night was the big SWODXA DX Dinner. I sat beside W0VTT so we had a chance to catch up and chat with some new folks as well. The speaker did an excellent job, as his talk was funny, focused and it finished on time! Neither Mike nor I won any big prizes, but rumor has it that the Grayline editor came away with something...

Dayton 2023 was a great experience and I hope to see you there in 2024.

Thanks Scott!

Scott was correct. The attendance was finally announced to have been 31,367—2,000 more than last year and the most ever at this location.



Here is a walk down memory lane from the 2013 Grayline



NCDXF announcement regarding DQRM

The Northern California DX Foundation (NCDXF) recognizes the negative impact deliberate QRM (DQRM) is having on our hobby. We believe this is a problem that can be mitigated by amateur radio operators applying their vast knowledge and creativity to the advanced receiving and direction finding technology currently available. In order to spur research into solving this problem the NCDXF Board of Directors at their April 2023 Board Meeting allocated \$100,000 for grants to develop DQRM solutions.

NCDXF will entertain grant proposals from individuals or groups that specifically outline their approach to identify bad actors. A group of NCDXF Directors led by Craig Thompson, K9CT and Don Greenbaum, N1DG will weigh the probability of success of their proposals as well as monitor the progress of the grantees.

Funding will be available for R&D as well as implementation of technology proposals. It is hoped that manufacturers will also assist NCDXF and grantees with equipment and other resources.

NCDXF will shortly outline specifics for how to apply for these DQRM grants. We have created a webpage devoted to this project, DQRM Project :
<https://ncdxf.org/pages/dqrm.html>



Fighting Power Line Noise...and Winning!

By Tom, NYØV

I have (had) a strong (S-7) level of noise to the SW on 50.313. This really sucked as several VK/ZL and 3D2AG have been spotted lately! I found that the signal was strongest on 49mHz and about 3MHz wide noise. 49mHz is an RC control part 15 frequency, but with this strong of a signal, I had my doubts that the source was an RC model transmitter.

I used my FT991A on a battery and a 2m whip in my car to find the noise to be loudest 1/2mi down our road. I then put on the 3 element Arrow yagi and isolated it to a power pole.

I called MiEnergy and within 3 hours (awesome!) they were at my door saying they cleaned all the contacts and ground on the pole and didn't find anything. I took them down to the shack and showed them that they had not found the root cause....as they could now see on the radio.

At that point I volunteered to take the mobile 991A set up down with them to the pole. At the pole they went back up and one-by-one isolated the arrestors. Boom. Signal went away. They replaced both lightning arrestors. Problem solved!

We took a look at the arrestors and one of them had a crack and small hole at the bottom and the other had a deformed bottom seal. It looks like they took a lightning hit that had partially taken out some of the arrestor(s) to where at least one of them was arcing. This was a win-win situation for both me and MiEnergy. The guys told me that all they usually do is run their AM radio to find arcs. That is not much of a tool-set! I offered that

If they had another situation where they could not find a noise/arc source to feel free to contact me. I figure having a good relationship with the power company is a good thing when you have power related noise issues.

Now bring on the VK/ZL/3D2 guys on 6m!



Arcing occurred between two of the three components in this insulator. It was a significant source of noise until it was replaced by utility personnel.





The MWA Contest Corner

Rating MWA as a Contest Club

By Al Dewey, KØAD



I do not claim to be a Charter Member of the Minnesota Wireless Association. That honor belongs to Tod Olson, KØTO (sk) and a gang of enthusiastic testers who got MWA off the ground long before I moved to Minnesota in the late 1970s. Being an active tester under my previous calls of K9DHN and W1GBG, I quickly enquired about the availability of a contest club in Minnesota and was told about MWA. I attended my first meeting at the library on Penn Avenue in Minneapolis. Meetings were very informal in those days but there was an effort to have all members identify the Minnesota Wireless Association as their club. The club did have a roster to help members keep in touch with each other. With the introduction of the

MWA Reflector in the 1990s, the membership and connectivity among its members has grown exponentially over the last few decades.

Today, MWA is an active contest club with over 230 members and rates with the top contest clubs from around the country. Although there has been quite a bit of interest and focus on the “team” competition (and pizza!) between Team North and Team South, there does not seem to be that much discussion (or interest?) on how MWA (as a whole) compares with other contest clubs around the country. There is a lot of historical data available on both the ARRL and CQ sites so I thought I would look at how MWA stacks up against the top contest clubs from around the country.

ARRL Contests

When listing Club Contest Scores, ARRL categorizes clubs as **Unlimited** (51 or more entries), **Medium** (Less than 50 entries), and **Local** (10 or fewer entries). In recent years, MWA has virtually always ended up in the Unlimited category. This, in itself, puts MWA in the upper echelon of contest clubs in North America.

However, I The first table below shows how MWA stacks up in the four major ARRL Contests it competes in as a club. The 10 Meter Contest is a tough one to evaluate because it is so dependent on conditions, activity, and latitude. Located so far north makes it tough on MWA in this one. In three of the five



years listed, there were five or less entries in the Unlimited Category. MWA (along with SMC – another Midwest Contest Club) placed at the bottom of the first tier in the five years shown.

The results for the 160 Meter Contest were interesting consistent. The same five clubs showed up in positions one through five for all five years shown. MWA was part of this top five for all five years. MWA finished around the middle of the top tier stations in ARRL Sweepstakes although it rose to number two in the country in 2022! For the ARRL DX Contest, MWA placed near the bottom of the top tier contest stations for all five years.

The results for the ARRL DX Contests and ARRL Sweepstakes were the most interesting and I decided to look at them in a little more detail.

MWA Club Competition ARRL Contests - 2018 through 2022

ARRL 10 Meter Contest

2022	2021	2020	2019	2018
PVRC	FCG	PVRC	PVRC	PVRC
YCCC	PVRC	FRC	FRC	MWA
FRC	YCCC	YCCC	MWA	SMC
NCCC	FRC	FRC		
FCG	MWA	MWA		
SMC		SMC		
MWA				

Total #
of
Clubs

77	65	71	61	48
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ARRL 160 Meter Contest

2022	2021	2020	2019	2018
PVRC	PVRC	PVRC	FRC	PVRC
FRC	FRC	FRC	PVRC	SMC
YCCC	YCCC	SMC	YCCC	YCCC
MWA	MWA	MWA	SMC	MWA
		YCCC	MWA	FRC

Total #
of
Clubs

42	43	48	39	41
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ARRL Sweepstakes

2022	2021	2020	2019	2018
PVRC	PVRC	PVRC	PVRC	PVRC
MWA	FRC	SMC	FRC	SMC
YCCC	YCCC	FRC	SMC	YCCC
FRC	MWA	YCCC	YCCC	MWA
SMC	SMC	MWA	MWA	FRC
	FCG	CCO		NCCC
	NCCC	FCG		
		NCCC		

Total #
of

82	76	79	65	63
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ARRL DX Contest

2022	2021	2020	2019	2018
FRC	FRC	FRC	FRC	FRC
YCCC	YCCC	YCCC	YCCC	YCCC
PVRC	PVRC	PVRC	PVRC	PVRC
CCO	CCO	CCO	SMC	CCO
FCG	FCG	SMC	FCG	SMC
AOC	SCCC	FCG	AOC	FCG
SMC	AOC	AOC	CCO	NCCC
MWA	SMC	SCCC	NCCC	MWA
SCCC	TCG	NCCC	MWA	AOC
NCCC	NCCC	MWA	SCCC	SCCC
	MWA			

Total #
of

81	80	71	73	66
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ARRL DX Contest

The table below shows a comparison of the Unlimited Category scores in the ARRL DX Contest for 2022 and 2021. First of all, the top three clubs (FRC, YCCC, and PVRC) had almost twice the number of members participating as MWA. The average score per entry of these three clubs was also considerably higher than MWA's. Although I do not have the data to back this up, I attribute the higher scores to propagation on the east coast vs the black hole in Minnesota. Another factor I noticed

was that the east coast clubs did a lot of multi-ops compared to MWA. Over 5% of their entries were multi-ops compared to 1.7 % for MWA (and 1.9% for SMC). Something to think about for MWA.

One preconceived notion I had about the East Coast Clubs vs MWA was that they had a lot of their members participating in DXpeditions during the DX contests allowing them to run up some big scores. The data did not seem to bear that out, however. The percentage of members from FRC and YCCC operating as DX were not that different than

MWA. It is possible, of course, that some of their members were operating with members of another contest club at a DX location and the club East Cost club receiving a part of the score. I did not look into that.

ARRL Sweepstakes

It is clear that ARRL Sweepstakes is more in MWA's wheelhouse than the DX contests. The table on the next page shows a comparison of scores for ARRL Sweepstakes in 2022 and 2021. For both years, MWA's level of participation was exceeded only by PVRC. MWA placed **second** in 2022 and fourth in 2021. The "score per entry" for MWA was low compared to other clubs for both years.

ARRL International DX Contest (2022)						
Club	Entries	Multi-Op	Total Score	Scores Per Entry	Club Members	% Active
FRC	218	12	227,263,08	1,042,491	n/a	n/a
YCCC	215	11	186,503,10	867,456	300	71.7
PVRC	214	14	129,289,38	604,156	750	28.5
CCO	71	2	50,928,516	717,303	110	64.5
FCG	78	4	37,180,971	476,679	364	21.4
AOC	54	4	36,389,619	673,882	n/a	n/a
SMC	108	2	35,169,246	325,641	320	33.8
MWA	116	2	27,580,176	237,760	237	48.9
SCCC	59	2	21,799,734	369,487	210	28.1
NCCC	72	3	13,145,934	182,582	300	24.0
ARRL International DX Contest (2021)						
Club	Entries	Multi-Op	Total Score	Scores Per Entry	Club Members	% Active
FRC	257	8	157,523,30	612,931	n/a	n/a
YCCC	207	10	106,928,55	516,563	300	69.0
PVRC	232	8	97,965,663	422,266	750	30.9
CCO	73	2	29,306,424	401,458	110	66.4
FCG	72	2	23,578,464	327,479	364	19.8
SCCC	61	1	21,520,677	352,798	n/a	n/a
AOC	52	1	20,859,123	401,137	320	16.3
SMC	122	0	19,731,921	161,737	237	51.5
TCG	52	1	13,983,621	268,916	210	24.8
NCCC	80	3	12,743,277	159,291	300	26.7
MWA	119	2	12,458,031	104,689	237	50.2



That surprised me a little bit. More about that later. Except for YCCC, the percentage of club participants doing a multi-op during Sweepstakes was very similar and didn't appear to be a factor in how the club scored overall.

ARRL Sweepstakes 2022						
Club	Entries	MultiOp	Total Score	Scores Per Entry	Club Members	% Active
PVRC	195	4	12,228,356	62,710	750	26.0
MWA	115	4	5,409,052	47,035	237	48.5
YCCC	92	6	5,318,568	57,811	300	30.7
FRC	93	2	5,274,264	56,713	n/a	n/a
SMC	107	4	5,273,764	49,288	320	33.4

ARRL Sweepstakes 2021						
Club	Entries	MultiOp	Total Score	Scores Per Entry	Club Members	% Active
PVRC	246	3	13,589,630	55,242	750	32.8
FRC	88	3	5,847,978	66,454	n/a	n/a
YCCC	79	11	5,525,326	69,941	300	26.3
MWA	115	5	5,481,890	47,669	237	48.5
SMC	95	5	4,829,368	50,835	320	29.7
FCG	51	2	3,183,438	62,420	364	14.0
NCCC	54	3	2,395,360	44,359	300	18.0

was by YCCC both years at around 70%.

For the ARRL Sweepstakes Contest, MWA was a leader in member participation the last two years with approximately 50% of the club participating in both years. The result was a second-place finish in 2022 and a fourth-place finish in 2021.

When I first saw that the score per member of MWA trailed that same percentage from other clubs, I was disappointed. However, the more I thought about it, I realized that this is really a good thing. Although all members of MWA do not necessarily have the equipment, time, experience, or skill to turn in a top score in every contest, the fact that so many turn in their scores no (no matter how big or small their score is) keeps MWA in the top tier of Contest Clubs at least for ARRL Contests.

(cont. on next page)

Percent Participation

As most MWAers know, Rich (NØHJZ) does a phenomenal job of cheer-leading and encouraging MWA members to get on the air for major contests. A major purpose of Team Pizza Competition is to encourage MWAers to get on the air for major contests. I thought it would be interesting to see what affect Rich's efforts are having (at least for the ARRL DX and ARRL Sweepstakes contests). Determining the number of members in each of the major contest clubs was not an exact science. In most cases, these clubs have a roster on their web site from which I manually counted the number of club members. Some clubs did not have a roster but stated an approximate number of members. And some clubs had no indication at all of what their membership was.

For the ARRL DX Contest, MWA's member participation percentage was in the middle of the pack. For this contest, approximately one half of the membership participated (48.9% on 2022 and 50.2% in 2021). The highest participation percentage



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	CQ WorldWide DX Contest				CQ WorldWide WPX Contest			
	Number of	MWA	MWA	MWA	Number of	MWA	MWA	MWA
Year	Entries	Position	Logs	Position (%)	Entries	Position	Logs	Position (%)
2022	286	20	135	7.0	183	37	75	20.2
2021	296	26	132	8.8	251	45	71	17.9
2020	295	30	142	10.2	235	50	66	21.3
2019	252	23	107	9.1	171	51	47	29.8
2018	250	19	131	7.6	165	37	57	22.4

CQ Contests

I also took a quick look at where MWA stood among its peer contest clubs in the two major contests sponsored by CQ magazine. These are the **CQ Worldwide DX Contest** and the **CQ Worldwide WPX Contest**. It is important to point out that Club Competition in these two CQ Contests is **worldwide** as compared to ARRL Club Competition which just takes place between clubs located in ARRL sections in the US and Canada. The table above shows where MWA stood in its competition with other contest clubs worldwide for both that CQWW DX Contest and the CQWW WPX Contest. For the CQWW DX Contest, MWA placed in the upper **10%** of all clubs worldwide. This is pretty good for a club located in the black hole (for propagation) of North America. MWA's club ranking in the CQ WPX Contest was in the upper **20 – 30 %** of worldwide clubs. I attribute this lower placement to the lower level of participation that MWA showed in the WPX events. As can be seen in the table above, MWA's participation in the WPX Contest was almost half of that shown for the CQWW DX Contest.

Summary and Conclusions

There is a tremendous amount of results data available online for both past ARRL and CQ contests. I have just touched the tip of the iceberg to get an idea of where MWA stood among the contest clubs both nationally and internationally. From a number's standpoint, I think it is safe to say that MWA is a major player both nationally and internationally in radio sport. Another source of recognition for contest clubs is whether any of its members have qualified for the World Radiosport Team Championship held every four years. For the first time in its history, MWA will be sending **TWO** teams to this year's event in Italy. MWAer's Scott, NE9U (and his partner Craig, K9CT) as well as Randy, NGØC (and his partner Bill, ACØW) will be representing MWA at this big event in Italy this summer. It's been a long time coming but it will be great to see **TWO** MWA teams at WRTC this year.

Finally, outscoring other contest clubs is an important reason for MWA's existence as it should be. An equally important reason for MWA's existence is the bond between its members. The cheerleading, encouragement, and mentoring provided by veteran contesters (often over the MWA Reflector), especially to those just getting started in contesting, makes me proud to be a member. Go MWA!

See you in the (contest) pileups.



Backscatter

Collected by Bill Salyers, AJ8B

WELCOME ABOARD

TCDXA has welcomed this new member since our last newsletter:

Erika Ostlund, KØDD
Rock Rapids IA

Sad News

You probably read this on the reflector, but we are sad to pass along the news that Jim, K0JUH, has passed away.

All of the emails messages that went around were a real tribute to Jim. He will be missed.



TCDXA OPERATING BUDGET FY 2023 **(Sep 2022 - Aug 2023)**

March 17, 2023



INCOME	ACTUAL	BUDGET	Actual 2022
Surplus from FY 2022 (balance 8/31/2022)	10024.48		12915.93
Member Dues 2023	4293.56	4400.00	4461.62
Door Prize Ticket Sales club share	229.00	500.00	277.00
Donatons (estates, wills, etc.)	0.00	0.00	0.00
Refunds and Reversals	0.00	0.00	0.00
TOTAL INCOME	14547.04	4900.00	17654.55
EXPENSES		BUDGET	Actual 2022
Member Recruitment/Retention/Zoom	0.00	(300.00)	(195.96)
Website ISP & Domain Name	(97.77)	(150.00)	(97.77)
Office Supplies, Miscellaneous expenses	0.00	(50.00)	(15.94)
Meeting Room Rental	(300.00)	(600.00)	0.00
Holiday Party Dec	(451.28)	(500.00)	0.00
ARRL Spectrum Defense Fund	0.00	(250.00)	(250.00)
NCDXF Donation	0.00	(250.00)	(250.00)
MWA Plaque	(80.00)	(80.00)	(80.00)
DXpedition Contributions Total	(756.05)	(5000.00)	(6896.07)
#1 Dxpedition - TN8K Republic of Congo	(251.07)		
#2 Dxpedition - 3B7M St. Brandon	(504.98)		
#3 Dxpedition -	0.00		
#4 Dxpedition -	0.00		
#5 Dxpedition -	0.00		
#6 Dxpedition -	0.00		
#7 Dxpedition -	0.00		
#8 Dxpedition -	0.00		
#9 Dxpedition -	0.00		
#10 Dxpedition -	0.00		
TOTAL EXPENSES	(1685.10)	(7180.00)	(7785.74)
NET	12861.94	-2280.00	
Checking balance	12557.64		
PayPal balance	279.30		
Cash / Checks on Hand	25.00		
NET BALANCE	12861.94		

When required, Wells Fargo & PayPal online statements can provide detail not shown in this report.





TWIN CITY DX ASSOCIATION (TCDXA)

CLUB FACT SHEET

Who We Are:

The Twin City DX Association (TCDXA) is a 501(c) (3) non-profit amateur radio organization, whose members have an interest in DXing and in supporting the club mission: **Dollars for DX**. Bylaws and Articles of Incorporation govern the club's operation.

Club Mission:

The club mission supports major DXpeditions with financial donations. The source of operating income for this activity is an annual contribution (dues) of \$25 from each member.

DX Donation Policy:

The policy supports major DXpeditions that meet our requirements for financial sponsorship. All requests must be approved by the Board of Directors. Final approval is by vote of the full membership. Over 70 DXpeditions have been sponsored since 1997. Details are available on the website at: <http://www.tcdxa.org/sponsoredxpditions.html>

Club History:

The club was formed in the early 1970s by a small group of DXers from the Twin City area. Over the years, the club has changed; most notably by opening its doors to anyone interested in DXing - from the casual to the very serious operator. Our membership now resides in numerous states and several countries.

Requirements for Membership

We welcome all hams who have an interest in DXing and hold a valid FCC Amateur Radio License. It doesn't matter whether you're a newcomer, or an old-timer to DXing; everyone is welcome!

Meetings:

The club meets on the third Monday of each month (except July & August) at PUB 42 Restaurant in New Hope, MN. Members gather early in the bar for Happy Hour, and move into a private room at 5:00pm for dinner and a short business agenda, 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 officers, plus one additional member make up the Board of Directors; currently: Bert Benjaminson, WBØN, President & Director, wb0n@yahoo.com, Vice President & Director, Tom Weigel, AB0J, Secretary/Treasurer & Director, Pat Cain, k0pc@arrl.net, Mike Cizek, WØVTT, Director & DX Grant Manager and John Rusciano, NG0Z, Director.

Website:

We maintain a website at www.TCDXA.org that provides information about a variety of subjects related to the club and DXing. The site is maintained by our webmaster Pat Cain, KØPC.

Newsletter:

The **Gray Line Report** is the club newsletter, which is published on a quarterly basis. We're proud of the fact that 99% of the content is "homegrown" – written by our members. Past issues are on the website at: <http://www.tcdxa.org/newsletter.html>.

How to Become a Member:

An application for membership can be completed and submitted online, or printed and mailed in. (See <http://www.tcdxa.org/Application.html>) Contributions may be made by check or via the PayPal link on the homepage at www.TCDXA.org.

Visit us at a Meeting:

You are most welcome to attend a meeting, and look us over, before joining. Meetings are held at the PUB 42 Restaurant at 7600 Avenue North in New Hope (<http://pub42.com/>). Join us for happy hour at 4:00pm with dinner at 5:30pm, followed by the meeting at 6:30pm.



VKØIR	K5D	AHØ/NØAT	3W2DK	K4M	XU7MWA
ZL9CI	VK9DWX	5X8C	FT4TA	TX3A	S21EA
A52A	FT5GA	K9W	VK9MT	KMØO/9M6	J2ØRR
T33C	3D2ØCR	XRØZR	VK9DLX	YS4U	J2ØMM
3B9C	E4X	T3ØD	VU4KV	YI9PSE	BS7H
TX9	CYØ/NØTG	3W3O	EP6T	ZL8X	N8S
CP6CW	VP8ORK	3W2DK	VP8STI	4W6A	3B7SP
3YØX	VU4PB	FT4TA	VP8SGI	T32C	3B7C
K7C	STØR	VK9MT	TX3X	HKØNA	5JØA
5A7A	3D2C	VK9DLX	VP6DX	7Ø6T	K5P
VU4AN	3CØE	VU4KV	TX5C	NH8S	FT4JA
VU7RG	TT8TT	EP6T	9XØR	PTØS	PZ5W
VK9DWX	9M4SLL	3GØZC	9U4U	FT5ZM	ZL9A
S9OK	3DAØRRU	7P8RU	VU4W	CY0S	ZL7/K5WE
TN8K	3B7M	FT8WW	TX5S	VU7W	3Y0J

TCDXA DX DONATION POLICY

The mission of TCDXA is to support DXing and major DXpeditions by providing funding. Annual contributions (dues) from members are the major source of funding.

A funding request from the organizers of a planned DXpedition should be directed to the DX Donation Manager, Mike Cizek, WØVTT. He and the TCDXA Board of Directors will judge how well the DXpedition plans meet key considerations (see below).

If the Board of Directors deems the DXpedition to be worthy of support, a recommended funding amount is presented to the membership for their vote. If approved, the TCDXA Treasurer will process the funding..

Key Considerations for a DXpedition Funding Request

DXpedition destination	Website with logos of club sponsors
Ranking on <i>Most Wanted Survey</i>	QSLs with logos of club sponsors
Most wanted ranking by TCDXA Members	Online logs and pilot stations
Logistics and transportation costs	Up front cost to each operator
Number of operators and their credentials	Support by NCDXF & other clubs
Number of stations on the air	LoTW log submissions
Bands, modes and duration of operation	Previous operations by same group
Equipment: antennas, radios, amps, etc.	Valid license and DXCC approval
Stateside and/or foreign QSL manager	Donation address: USA and/or foreign

To join TCDXA, go to <http://tcdxa.org/>.

