

Rochester DX Association



CONTENTS

President's Letter	1
Submission Guidelines	2
IrvFest 2022	3
NYQP Update	4
RDXA Equipment Share	5
Learning CW over age 60	6
Field Day Photos	7
RDXA Field Day 2022, My Perspective	9
Shorts!	10
2022 Field Day—the Final Score	11
ARRL Field Day Locator	17
Webster Park: Radio Amateur Emergency Field Exercises	18
Notes on Setting up Sound Card Levels for WSJT	20
Calendar	22

Deadline for Next Issue:

November 30

President's Letter

Welcome to the 2022-23 RDXA "club year". I'm once again looking forward to continuing the Rochester DX Association tradition of providing interesting and informative programs, technical expertise and operating enjoyment – something we've done for 75 years!

Probably overlooked, our 75th anniversary was on 9 June, 2022 (we were formed on 9 June, 1947), arguably, one of the oldest DX clubs in the USA and quite possibly the world!

Even through the trying times of late, we continued the tradition, especially with the successful FD effort of several months back. Initial projections puts RDXA in the "elite" class of the operating event once again.

Our presence at the RARA and ROC City hamfests also demonstrate our dedication to the local ham radio community.

IRVfest was a **huge success**, well attended with almost 30 members and friends, even enjoying the event's namesake Irv AF2K, who was in attendance. Thank you to all that makes this picnic a yearly, "must attend".

Speaking of getting together, we'll once again be holding "live" and in person meetings at Johnny's throughout the year. A number of us have been meeting for dinner beforehand (at the Merchant's Grill, right next door) also bringing back one of the "traditions" from years past.

One change in this year's meeting lineup, we will only be providing "Zoom" for selected meetings throughout the year, October, January and April to be exact. The hope (as many other organizations I'm involved with) is to begin to return to normal. Overall restrictions have been relaxed or alleviated and as IRVfest would have demonstrated, many

are once again willing to return to an "in person" setting.

Those months were selected as filling the gap between bulletins which also allows our out of town members to keep in touch with the club. There are always FD only related sessions which keeps those interested as FD 2023 approaches.

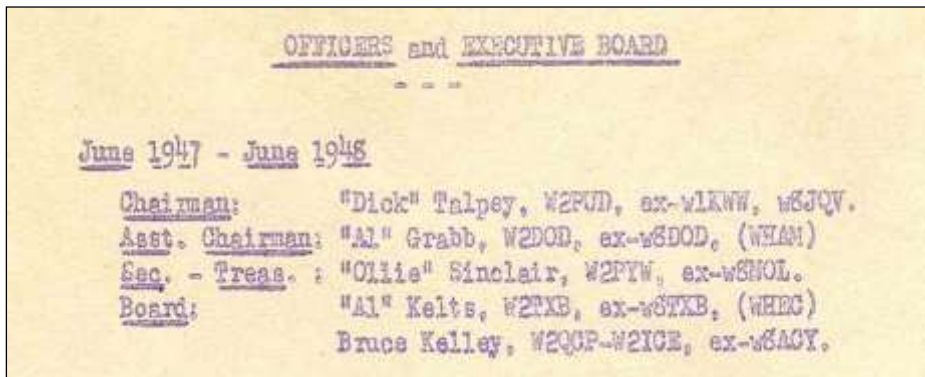
The board has already had a meeting and hopes to continue the Holiday Party in December and along w/ the RVHFG, resurrect the combined Awards Banquet in April of 2023. Other joint activities may also be considered.

In the waning days of summer, probably best to consider whatever projects may remain before the start of the 2022-23 contest season, several events are only weeks away. With the hope of better propagation, contesting should be more desirable than in years past.

Hoping to hear you all on the air and "see" you at the September (20th) meeting in a few weeks.

In the mean time, best DX es 73,

Chris, K2CS



Submission Guidelines

Microsoft Word is the preferred format for newsletter article and item submissions. If that is not possible, a plain text file, such as that produced by Notepad, is second best.

Please end each paragraph with a single return (Enter key), I have to remove excess returns by hand. And don't use returns for line breaks in a paragraph. I may be flowing the text into a different column width.

The standard body font is 11 point Calibri. If you can't do that, don't worry, it's easy for me to change.

It's okay to, use tables and bulleted or numbered lists in Word. Bold, italic, colored, and underscored text is also fine.

Images, photos and diagrams are best in .jpg format and may be supplied separately or embedded in a Word document. If you have Excel or Powerpoint stuff to be included, send them in that form.

Following these guidelines will make my job easier but, if you need to do something else, let me know and I can probably accommodate you

Thanks,
Your Humble Editor



IrvFest 2022

Doug N2BEG

Irvfest was held this year at the same venue as previously, The Dolomite lodge in Veterans Park in Penfield on August 17th. The weather turned out perfect and the club attendance was great. The highlight was of course the in-person appearance by Irv himself who by all accounts thoroughly enjoyed himself.

As we all gorged ourselves on the plethora of food and drink, several of us had a chance to sit and talk with our esteemed colleague. He imbibed of a few 807s and seemed to really enjoy them. The staff member, Kelly Cantaben from Cherry ridge was awesome and helped us get the most out of his visit.



Thanks to all who help make the event happen. As was said by Kelly, feel free to drop off supplies she mentioned, food stuff (Irv is apparently now a cookie monster) toiletries, etc. as long as it has his name on it. Visits can also be arranged by calling (585) 697-6700. As before, he ALWAYS likes getting QSL cards! No QSO necessary, he has an album that he puts them in and looks at them all the time. Duplicates are not an issue!

Thanks to all who came out and helped make the event a success.

His address is:

Irv Goodman AF2K
Rainier Grove
900 Cherry Ridge BLVD
Webster NY 14580

NYQP Update

N2BEG

As you all are probably aware, we have been unable to finalize the results for last years NYQP. If you did not hear why, it had to do with Dave, WJ2O's website being hacked and the database and scoring software and all 5 years' worth of data being compromised. In order to score the contest, the database had to be rebuilt by Dave which is in itself a monumental task. During this same timeframe, Dave was in the process of building a new house in Tennessee, liquidating several properties in NY (and all that entails) and moving. Suffice to say, it took a long time.

Once that was done, testing had to be done to make sure the results will be accurate. That took the rest of the team (Russ, Ken, Carey and Jack) to do multiple test runs. Rus reports that they should be ready for release in the coming week or so. Then we publish results and start the plaque process. The goal is to have them all done and mailed PRIOR to NYQP 2022!

I met with Dave at the Roc City hamfest last weekend and he reiterated that they were "very close". Look to the NYQP website in the next couple weeks for the results.

It's never too early to start planning your activity for this years contest! Are you staying home? Are you roving or doing a portable operation? Look to the webpage for the planned activation page to be updated in the coming weeks with a couple new rules changes and categories also. Try something new! New mode? new location? Be ready, **NYQP 2022 is 1400Z, Oct 15 to 0200Z, Oct 16**. Spread the word!



RDXA Equipment Share

Do you have gear just sitting on your shelf that you rarely use? Maybe it's your previous rig that you're keeping in case your new rig goes out for repair? Or a wire dipole you took down when you put up your beam? What about tools and test equipment that you can't do without but only use once or twice a year? Perhaps that coax crimper or an RF voltmeter? Your second-best antenna analyzer? How about sharing them with other RDXA members?

I ask you to look around your shack and see if you have anything you might want to make available on a short-term basis to other club members with a need.

We're not strangers. Another club member is likely to be a more trustworthy borrower than some random guy. That said, you are responsible for making it clear up front what happens if something were to break while the borrower has it. It's also up to you to make sure the borrower knows how to use the equipment. If it's something fussy, say your \$30K Rohde and Schwartz spectrum analyzer that's going to burn out if it sees one electron more than more than 10 milliwatts on the input, well, maybe you want to vet who you loan it to, right? On the other hand, something like a fence post driver is easy to use and hard to break.

This list is intended only to connect lenders and borrowers. You decide what to lend and who you lend it to. It's a private transaction. You can say "no" if you don't know/like/trust someone who wants to borrow. The club will take no responsibility for lost, broken, worn-out, or not-returned items. That's between you and the borrower.

I suggest a week is a reasonable loan period for tools, and a month for rigs, antennas, and other equipment, but in the end, that's up to you. A borrower can always ask to extend the loan if they need it longer.

Icom 735 HF transceiver	John Hall AC2RL
Leader 2 channel oscilloscope 15MHz	John Hall AC2RL
Fluke 80K-40 HV probe, 40 KV 1000:1	John Hall AC2RL
Desktop Variac	John Hall AC2RL
Bonton Signal Generator 100khz-175Mhz	John Cunliffe W7ZQ
Bonton RF millivolt meter good to 600Mhz	John Cunliffe W7ZQ
1.2Ghz Frequency counter	John Cunliffe W7ZQ
500Mhz mW meter	John Cunliffe W7ZQ
100khz to 40Mhz Chinese signal source	John Cunliffe W7ZQ
DT9205 Handheld digital multi meter	John Cunliffe W7ZQ
35Mhz to 4.2Ghz Chinese handheld spectrum analyzer	John Cunliffe W7ZQ
900Mhz basic NanoVNA	John Cunliffe W7ZQ
0-30V@10A adjustable power supply	John Cunliffe W7ZQ
13.8V@20A power supply	John Cunliffe W7ZQ
Agilent E4418B power meter	John Cunliffe W7ZQ
Bird 1kW dummy load	John Cunliffe W7ZQ
Bird 30dB 500W attenuator	John Cunliffe W7ZQ
MFJ 949C (100W) manual antenna tuner	Mike Sanchez KM2B

Learning CW over age 60.

Mike Sanchez KM2B

Introduction

In 2021, around Thanksgiving, as the winter settled in, I decided that CW was something that I would learn, at age 61 for the first time ever. After some research I found a site called lcwo.net, short for Learn CW.

It turns out this site is truly phenomenal for learning CW at any age. I will share my route with this site to learn all the letters of the alphabet and all the numbers. In short: After 6 months I was able to send capable CW with my Vibroplex single paddle keyer at a solid 17 WPM with few mistakes and could make out about 70% of a sentence in CW at 5 WPM. lcwo.net was absolutely the key to making this happen. Thanks also to Peter Fournia, W2SKY and Chuck Lempke, NN2L for their help and support (defined later in this report). Last but not least, I would like to thank Lynn Bisha and the AWA for loaning me a battery powered keyer so I could practice sending anywhere, anytime.

Fabian Kurz, author of lcwo.net

Fabian Kurz in Germany, <http://fkurz.net/>, a youngish EE and Amateur Radio operator, learned CW early and strongly believes in CW communication. He took up the challenge of building a website to enable anyone to learn CW and stay strong and build skill for those already capable. I can say: There is simply no more flexible, powerful and easy to use CW learning capability, anywhere → <https://lcwo.net>.

The Method: Koch Method, Lessons on lcwo.net, Listening ONLY.

Below is a visual of the interface used to begin and move through the lessons which are all listening only. The site, its forum members and anyone else I talked to said that using any visualization of the letter to morse encoding would result in SLOW CW since the visualization is an extra step.

To get started on can select both the character speed and the overall speed of the deliver of the character strings. In other words, one can control the speed of the sound delivery of the dits and dahs themselves and separately control the dead time between each sound. In the site instructions it is stated that doing anything less than 20 WPM for the “character speed” is pointless and a “character speed of 20WPM with a starting “overall” speed of 5WPM is reasonable starting spot. So, this is where I started. One can set the frequency of the sent letters and numbers too.

The interface can be seen below and is here: <https://lcwo.net/courselesson>. One can select which course number/letter, set the time duration to send the letter repeatedly. Each lesson is a single letter as shown below. There are 40 lessons in Koch order of numbers and letters.



Photo: Lynn W2BSN

Field Day Photos—2022

Thanks to Jack WA2CHV, John AC2RL, and Lynn W2BSN







RDXA Field Day 2022, My Perspective

Doug N2BEG

Field day 2022 is in the books. I think all things considered we had a very good showing and a very positive event after our long hiatus. We have the benefit of so many members doing this exercise for so long that its kind of like riding a bike. All of the regulars did their usual and the planning and setup went pretty much to plan. Some new members also helped immensely. There were a few hiccups and of course Murphy was always lurking.

The big scare for us was Ed's medical issue on Friday afternoon. For those that did not know, Ed passed out upon standing in the parking lot with only a couple of us around. I had real trouble getting anyone's attention as

most were spread out over the big field. In the future, I think we need a better local communication setup for this type of scenario. We had a loose field day 2m FM liaison freq, as we normally do but it wasn't handy when the issue happened and calling for help fell on deaf ears as most were out of ear shot. All turned out OK, but going forward, we need a plan and to make sure all know what its is. We aren't getting any younger. We called 911 and an ambulance was dispatched but that was after Ed had mostly recovered. The response time was not what I would call good at 22 minutes. He was checked out in the ER and went home Sunday after his Dr. gave him the OK. This was a first for us at Field day as far as I know. I'm grateful for the ambulance crew that did eventually show up, they were professional and took good care of Ed. I would like to NOT have to go through that exercise again, as I'm sure all would agree, but the adage should always be, "be prepared".

The simplified antenna and station layout was a big plus. We found that by the end of the day Friday, the hardware was in pretty good shape. The prebuild of the new spider beam was a huge help. No milmasts were also easy on the "older" crowd. The setup of the beverages ahead of time also helped. The majority of setup was getting dipoles shelters and stations setup and we had a good size crowd for all.

As others have pointed out, the one issue that stood out was food. Vic had had folks volunteer for everything, however those that did had issues arise that prevented them from their tasks. They didn't have any backups and we scrambled for a couple meals and wound up paying more than we should plus the added stress of running around to feed a crowd at the last minute. (thanks Mike, KM2B!) Jeff's (N2JQR & Co.) pasta dinner on Saturday was fantastic as always. A great meal after a long day!

The actual operation seemed to click on every level with the end result eclipsing everyone's expectations for our first actual club field day in 3 years. The 2A effort confused some who did not know we had switched from our traditional 3A. The addition of FT8 with direct sampling rigs and proper filtering and isolation was an absolute game changer. We were able to run 2 stations on the same band within 15kc of each other with no issues. THAT was huge. The digital station also closely matched the QSOs of the CW station which also netted a substantial score increase over our traditional phone station point per Q. The GOTA station had a ton of activity and also put in a serious amount of QSOs on FT8 as well as phone with a host of different guests taking turns. The one thing that made it tough was operators. Some long shifts were put in by both the digital ops as well as the CW guys and even GOTA at times. We wound up with only 4 ops for the whole 24 hours on CW. That was rough. On top of that, Jack, WA2CHV, after manning a long night shift, going home to rest and coming back Sunday morning, managed to cream a huge deer on 590 which damn near totaled his car. He limped it back home somehow, but he was out after that. (I still can't believe the airbags didn't go off AND that you drove it home)

The equipment all worked great except for 2 balun/ antenna issues that were quickly remedied. The takedown went great with a lot showing up for that which was great to see. The weather was perfect as well which always helps.

Thanks to all who came out to help, or plan, or contribute. The score breakdown I won't go into as Vic summed it up, but I think another top 10 (or even 5?) is in the making which everyone should be proud of.

Doug

N2BEG



Shorts!



Ever wonder what's inside a double female connector? As I was removing one from a length of coax, I felt something move inside. The picture shows the components that are inside these connectors.—Dave Wright N2CK



RDXA at the Roc City Net Hamfest
Ed K2MP bargains with Doug N2BEG

Photo: Dave Wilson WA2HOY

2022 Field Day – the Final Score

Well, it finally was possible, with a lot of effort. A “real” Field Day, out in a **field**, at our location of choice, *Webster Park Boy Scout Campgrounds*. And a lot changed on many fronts. That was outlined in this brief summary sent by e-mail:



Our standard 3A Class was reduced to **2A**.

Mil-masts morphed to Push-Up masts. (But can you guess where they came from? Yep, the **Antique Wireless Association**. Their continued generosity and resources are fascinating in every respect. Huge thanks from RDXA to AWA yet again.)

HF Yagis disappeared, replaced by a club SpiderBeam for CW, and a 4-Band aluminum dipole (W2BSN) resembling a single element of a trap beam for Phone/Digital.

Phone/Digital? Both the Phone and GOTA stations expanded on the multi-mode concept, with both covering both phone and digital modes, with digital being a focus, and *significantly* contributing to the bottom line, as you can see in the band/mode breakdowns in the chart.

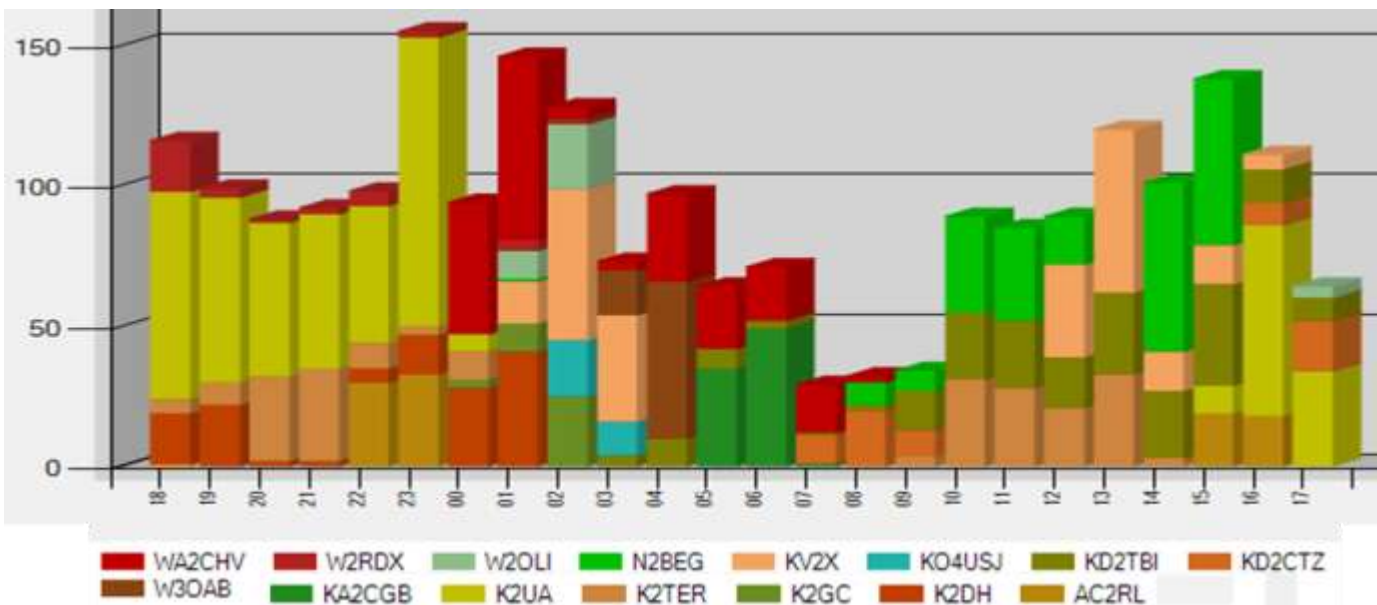
Unfortunately, Phone was the mode that paid the price. In recompense, in the bottom line, phone contacts are worth 2 points, whereas digital contacts, like CW, are worth 4 points.

According to reports, both setup and takedown were significantly easier and quicker than ever before.

So, what are the results after this long wait and significant changes? It all breaks down to making contacts. As usual, we used N1MM Logger+, and it provides us with quite a few neat features that lets us get down to the nitty-gritty. Let’s start with those folks that bring in the contacts.

The OPERATORS

Of course, it took an extensive team to make Field Day happen, and everyone contributes in many ways. With making contacts the key part of FD, here are the folks that made the Q’s.



Hr	AC2RL	K2DH	K2GC	K2TER	K2UA	KA2CGB	KD2CTZ	KD2TBI	K04USJ	KV2X	N2BEG	W2OLI	W2RDX	W3OAB	WA2CHV	Tot	Accum
18	1	18		5	74								18			116	116
19		22		8	66								3			99	215
20		2		30	55								1			88	303
21		2		33	55								2			92	395
22	30	5		9	49								5			98	493
23	33	14		3	103								2			155	648
00		28	3	10	6								1		46	94	742
01		41	10							15	1	10	4		65	146	888
02			25						20	54		23	1	1	4	128	1016
03								4	12	38				16	3	73	1089
04								10						56	31	97	1186
05						35		7							22	64	1250
06						49		3							19	71	1321
07						1	10	1							17	29	1350
08							20	2			8				2	32	1382
09				4			9	14			7				34	1416	
10				31				24			34				89	1505	
11				28				24			33				85	1590	
12				21				18		33	17				89	1679	
13				33				29		58					120	1799	
14				3				24		14	60				101	1900	
15	19				10			36		14	59				138	2038	
16	18				68		8	12		5					111	2149	
17					34		18	8				4			64	2213	
	1	100	132	38	218	520	85	65	216	32	231	219	37	37	73	209	2213

Runs

We had some pretty good runs and rates at each station. The data below is grouped into batches of 10 or more QSOs.

W2RDX MAX RATES

0201Z - 7.0 per minute (1 minute(s)), 420 per hour by K2UA K2DH K2GC
 0139Z - 4.0 per minute (10 minute(s)), 240 per hour by K2UA W2RDX AC2RL K2DH WA2CHV
 2347Z - 2.8 per minute (60 minute(s)), 170 per hour by K2UA K2TER W2RDX AC2RL

FD RUNS – CW STATION: >10 QSOs

1801 - 1850Z, 14042 kHz, 65 Qs, 78.4/hr K2UA
 1852 - 2010Z, 14043 kHz, 86 Qs, 65.7/hr K2UA
 2027 - 2241Z, 14035 kHz, 120 Qs, 53.7/hr K2UA
 2246 - 0337Z, 7026 kHz, 333 Qs, 68.7/hr K2UA WA2CHV KV2X
 0344 - 0833Z, 7027 kHz, 116 Qs, 24.1/hr KV2X N2BEG
 1025 - 1110Z, 7032 kHz, 39 Qs, 51.8/hr N2BEG
 1154 - 1215Z, 14040 kHz, 15 Qs, 42.2/hr N2BEG
 1232 - 1307Z, 14030 kHz, 43 Qs, 74.1/hr KV2X
 1310 - 1345Z, 14028 kHz, 43 Qs, 74.3/hr KV2X
 1347 - 1538Z, 14029 kHz, 118 Qs, 63.8/hr KV2X
 1550 - 1727Z, 21022 kHz, 100 Qs, 62.1/hr N2BEG K2UA

FD RUNS – PHONE/Digital STATION: >10 QSOs

2028 - 2132Z,	7050 kHz,	49 Qs,	46.5/hr	K2TER
2156 - 2244Z,	7050 kHz,	38 Qs,	47.3/hr	K2TER AC2RL
2246 - 0008Z,	14082 kHz,	55 Qs,	40.1/hr	AC2RL K2TER
0051 - 0234Z,	14076 kHz,	47 Qs,	27.5/hr	K2GC KV2X
0347 - 0541Z,	3819 kHz,	103 Qs,	54.4/hr	W3OAB KA2CGB
0543 - 0652Z,	3825 kHz,	62 Qs,	54.1/hr	KA2CGB
0719 - 0855Z,	3575 kHz,	34 Qs,	21.2/hr	KD2CTZ
0924 - 1009Z,	7076 kHz,	15 Qs,	20.1/hr	KD2CTZ K2TER
1011 - 1241Z,	7050 kHz,	82 Qs,	32.8/hr	K2TER
1247 - 1321Z,	7076 kHz,	19 Qs,	33.5/hr	K2TER
1326 - 1432Z,	7050 kHz,	34 Qs,	31.0/hr	K2TER KV2X
1444 - 1615Z,	14082 kHz,	53 Qs,	34.6/hr	KV2X AC2RL

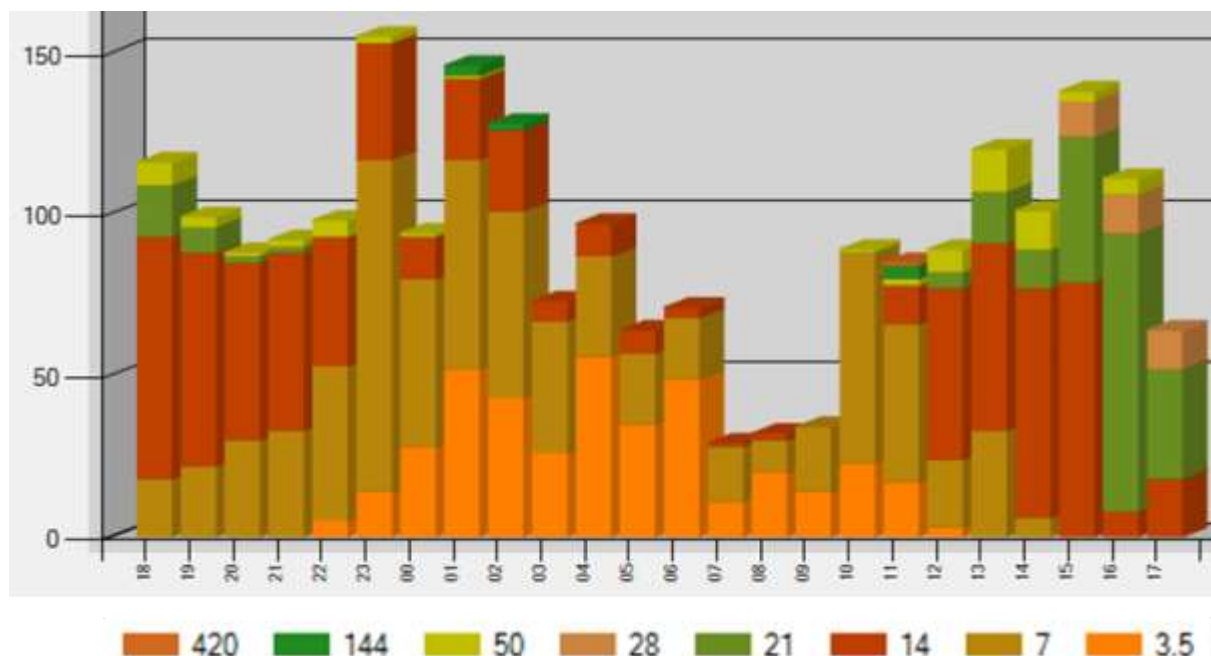
FD RUNS – GOTA/Digital STATION: >10 QSOs

1911 - 1924Z,	7049 kHz,	12 Qs,	55.5/hr	K2DH
2253 - 0114Z,	3575 kHz,	52 Qs,	22.2/hr	K2DH
0122 - 0240Z,	3782 kHz,	85 Qs,	65.1/hr	K2DH N2BEG W2OLI KO4USJ
0307 - 0320Z,	3574 kHz,	11 Qs,	48.9/hr	KO4USJ
0348 - 0440Z,	14075 kHz,	13 Qs,	15.1/hr	KD2TBI
0442 - 0524Z,	14076 kHz,	12 Qs,	17.3/hr	KD2TBI
0950 - 1015Z,	3575 kHz,	15 Qs,	36.0/hr	KD2TBI
1239 - 1420Z,	21075 kHz,	28 Qs,	16.6/hr	KD2TBI
1459 - 1533Z,	21141 kHz,	25 Qs,	44.8/hr	KD2TBI
1541 - 1646Z,	28076 kHz,	23 Qs,	21.5/hr	KD2TBI

Congratulations to ALL!

The Bands

Here's the **BAND x HOUR** Info. This of course combines contacts from all band/mode stations. After incorporating digital at a couple of the stations at our last (pre-Covid) Field Day, this year, under the prompting of Bill K2TER, we experimented with a significant digital presence at all but the CW station. As you'll see in later pages, this yielded a significant increase in contacts and score.



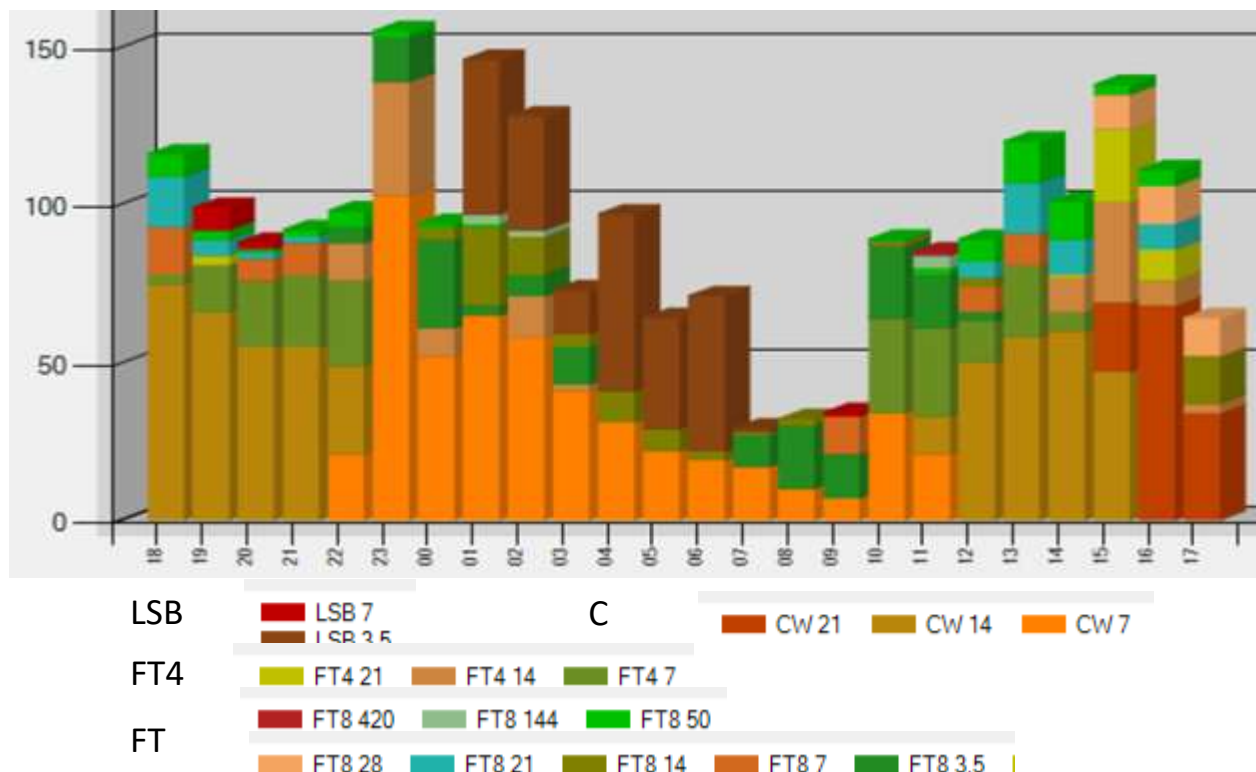
Here's a different depiction of the **band x hour** info in the preceding graphic.

Day	Hr	3.5	7	14	21	28	50	144	420	Tot	Accum
2022-06-25	18		18	75	16		7			116	116
2022-06-25	19		22	66	8		3			99	215
2022-06-25	20		30	55	2		1			88	303
2022-06-25	21		33	55	2		2			92	395
2022-06-25	22	5	48	40			5			98	493
2022-06-25	23	14	103	36			2			155	648
2022-06-26	00	28	52	13			1			94	742
2022-06-26	01	52	65	25			1	3		146	888
2022-06-26	02	43	58	25				2		128	1016
2022-06-26	03	26	41	8						73	1089
2022-06-26	04	56	31	10						97	1186
2022-06-26	05	35	22	7						64	1250
2022-06-26	06	49	19	3						71	1321
2022-06-26	07	11	17	1						29	1350
2022-06-26	08	20	10	2						32	1382
2022-06-26	09	14	20							34	1416
2022-06-26	10	23	65				1			89	1505
2022-06-26	11	17	49	12			2	4	1	85	1590
2022-06-26	12	3	21	53	5		7			89	1679
2022-06-26	13		33	58	16		13			120	1799
2022-06-26	14		6	71	12		12			101	1900
2022-06-26	15			79	45	11	3			138	2038
2022-06-26	16			8	86	12	5			111	2149
2022-06-26	17			18	34	12				64	2213
Total		396	763	718	226	35	65	9	1	2213	2213

And then there are MODES

As was indicated earlier, you can see the extent of the digital contribution for our FD this year!

CW										DIG						PH			
Hr	CW 7	CW 14	CW 21	FT4 7	FT4 14	FT4 21	FT8 3.5	FT8 7	FT8 14	FT8 21	FT8 28	FT8 50	FT8 144	FT8 420	LSB 3.5	LSB 7	Tot	Accum	
18		75		3				15		16		7					116	116	
19		66		15		3				5		3				7	99	215	
20		55		21				7		2		1				2	88	303	
21		55		23				10		2		2					92	395	
22	21	28		27	12		5					5					96	493	
23	103				36		14					2					155	648	
00	52				9		28		4			1					94	742	
01	65						3		25			1	3		49		146	888	
02	58				13		7		12				2		36		128	1016	
03	41				2		12		4						14		73	1089	
04	31								10						56		97	1186	
05	22								7						35		64	1250	
06	19								3						49		71	1321	
07	17						10		1						1		29	1350	
08	10						20		2								32	1382	
09	7						14	12								1	34	1416	
10	34			30			23	1				1					89	1505	
11	21	12		28			17					2	4	1			85	1590	
12		50		13			3	8	3	5		7					89	1679	
13		58		23				10		16		13					120	1799	
14		60		6	11	1				11		12					101	1900	
15		47	22		32	23					11	3					138	2038	
16			68		8	10				8	12	5					111	2149	
17			34		3				15		12						64	2213	
	501	506	124	189	126	37	156	63	86	65	35	65	9	1	240	10	2213	2213	

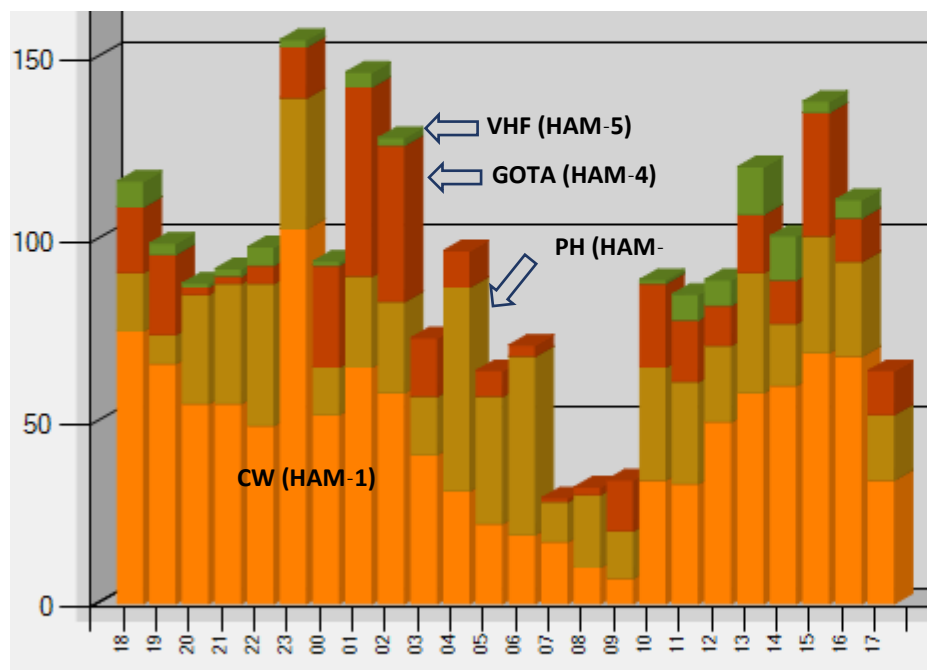


Individual stations

CW PH GOTA VHF

Hr	HAM-1	HAM-2	HAM-4	HAM-5	Tot	Accum
18	75	16	18	7	118	118
19	68	8	22	3	99	215
20	55	30	2	1	88	303
21	55	33	2	2	92	395
22	49	39	5	5	98	493
23	103	36	14	2	155	648
00	52	13	28	1	94	742
01	65	25	52	4	148	888
02	58	25	43	2	128	1016
03	41	16	16		73	1089
04	31	56	10		97	1186
05	22	35	7		64	1250
06	19	49	3		71	1321
07	17	11	1		29	1350
08	10	20	2		32	1382
09	7	13	14		34	1416
10	34	31	23	1	89	1505
11	33	28	17	7	85	1590
12	50	21	11	7	89	1679
13	58	33	16	13	120	1799
14	60	17	12	12	101	1900
15	69	32	34	3	138	2038
16	68	26	12	5	111	2149
17	34	18	12		64	2213
	1131	631	376	75	2213	2213

How busy were the individual stations? As you can see, they stayed pretty busy.
(HAM-1 CW, HAM-2 PH, HAM-4 GOTA, HAM-5 VHF)



Results summary

Band	CW	DIG	PH
80	0	156	240
40	501	252	10
20	506	212	0
15	124	102	0
10	0	35	0
6	0	65	1
144	5	9	8
222	0	0	3
432	1	1	5
Satellite	0	0	0

QSO's	1,137	832	267
Q Points	2,274	1,664	267
2xMult	4,548	3,328	534
Total	8,410		
SCORE	8410 + 1170 = 9580		

BONUS POINTS	
100% Emergency Power	200
Media Publicity	100
Setup in Public Location	100
Info Booth	100
NTS message to SM	
W1AW Bulletin	100
NTS Messages Handled	
Natural Power QSOS	
Site visit by elected official	
Site visit by served agency official	
Youth	40
Educational activity	
Web submission	50
Satellite QSO	
GOTA Op + Coach Bonus	280
Social Media	100
Safety Officer	100
Total Bonus Points	1,170

Here's what it all adds up to. CW is, as usual, the money mode. Mainly because CW Q's have twice the value of phone's – 2 points/per vs. 1 point for phone. However, running low power (100W) provides a 2x multiplier for all contacts, yielding 4 points for CW and 2 points for PH for each contact. (See Q Points in table.) With digital now in the race, with 2 points/per, we get a big boost. And that shows up in the final results. Running a 2A Class station, our score looks pretty good compared to our up-to-now regular 3A scores.

17	18	19	22		
3A	3A	3A	2A		
9684	8384	8736	4548	PTS	CW pts
0	0	532	3328		DIG pts
3358	2766	2592	534		PH pts
13042	11150	11860	8410		QSO pts
2050	1830	1690	1170		BONUS
15092	12980	13550	9580		TOT pts

Figuring two stations vs. three, two thirds of our average **QSO** points for the previous three years are 8003. So, this year's average per station increased, with prospects for the future likely to increase if we continue honing our digital skills.

Phone points suffered as well since Digital's effectively took over.

Bonus points suffered somewhat due to unforeseen circumstances. Although we made 1170 points, our previous 3-year average is 1857.

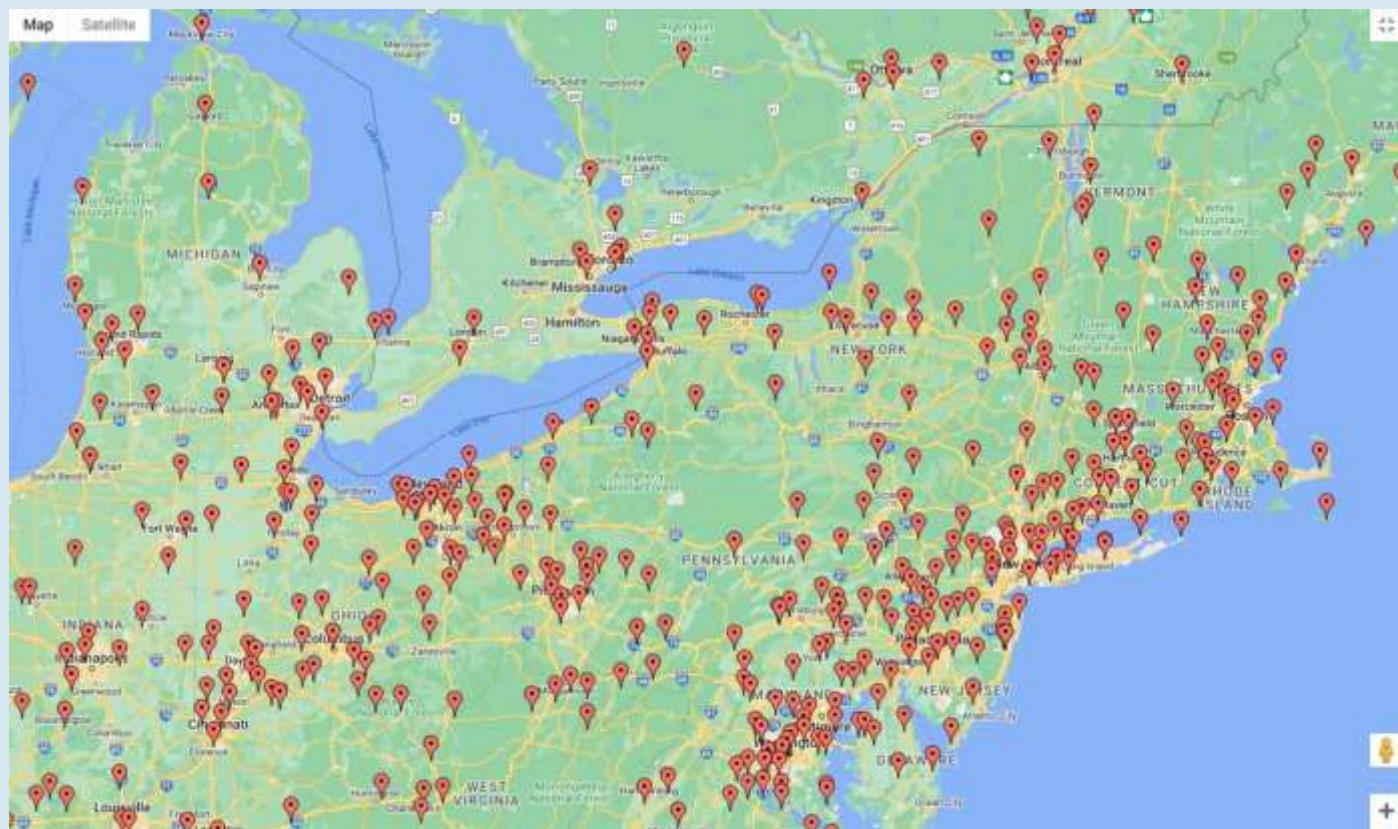
GOTA has the most flexible results, this year obtaining a nice 320 points over and above QSO points. Nice job!

So, considering the challenges that needed overcoming due to the longer-than-hoped-for hiatus, we came together in spite of it. It also resulted in some significant changes that made things significantly easier and quicker. Overall, it seems things are boding well for continued RDXA Field Days.

June 23-25, 2023, here we come!

ARRL Field Day Locator

Here's a little side bar. We know FD is a major annual event, and ARRL has a neat feature that lets clubs publish their location and contact info over the internet. Below is the map of clubs that take advantage of this, the Field Day Locator. There's only room enough to show our area, but it's certainly impressive. Our "Field Day Locator?" See below.



The pointer next to ours is the **XRX Amateur Radio Club** that uses **W2XRX**, and with whom we've shared contacts over the years.

Another note: As of 8/13/22, ARRL has received **4,936 FD entries**. Just to double check, I went to the Logs Received page. It's kind of interesting to see so many "Rochesters!"

AI0M	Complete	Rochester (MN) ARC	1D	MN
K0GMK	Complete	Rochester (MN) ARC	1D	MN
K0JFJ	Complete	Rochester (MN) ARC	1B1	MN
KB0GT	Complete	Rochester (MN) ARC	1D	MN
W0MXW	Complete	Rochester (MN) ARC	2A	MN
KA2ENE	Complete	Rochester (NY) ARA	1D	WNY
NV2K	Complete	Rochester (NY) ARA	1D	WNY
N2ZN	Complete	Rochester (NY) DX Assn	1B1B	SC
N4KHZ	Complete	Rochester (NY) DX Assn	1D	WNY
W2RDX	Complete	Rochester (NY) DX Assn	2A	WNY

If you've forgotten, Ken's and John's (N2ZN and N4kHz) entries are part of a new club FD feature where FD home stations can submit their scores and attribute them to the club. It's the **Club Aggregate** option. Our "regular" Field Day effort is published as usual, as well as part of the aggregate score. Thanks Ken and John. Let's see how it all goes. 73 to all.



Webster Park: Radio Amateur Emergency Field Exercises

Vic Gauvin K1PY

[I sent this to someone that I was told might use this as a Facebook posting. It never happened. I'm thinking of sending it to the League, as they request FD-related pieces. But I thought it also might go well with this issue of the newsletter.]

It happens—severe winds, major storms, wide-spread power outages, communications go down. We need to restore communications. In Monroe County, western New York, and state-wide, established radio links are overrun.

How can average citizens help?

There is a cadre of knowledgeable radio operators at hand. Licensed by the Federal government via the Federal Communications Commission, many are likely living in your neighborhood. They are assigned official radio callsigns, just like WXXI, and communicate around town, around the state, the country, and even around the world. They are seen in the background at disaster sites, coordinating with their own radios, out in the fields providing communications between temporary shelters and emergency medical sites.

On the 4th full weekend in June, an annual event takes place that focuses on that kind of emergency radio communications. In the local area, there will be several ham radio clubs participating in field exercises, and one, the *Rochester DX Association*, will be in Webster Park at the Boy Scout Campgrounds. This will be the 29th year at the park.

The event is sponsored by the American Radio Relay League, the primary amateur radio organization in the U.S. The goal is to provide a means of continually enhancing our communications skills.

Planning generally starts in February or March, seeking to find ways to improve our communications capabilities. To mirror the needs during an actual emergency, the event occurs away from any established radio setup, instead, we operate strictly in the fields, hence the event's name, *Field Day*.

We're not allowed to have any pre-existing radio facilities specifically left in place from previous years – just whatever is already at the site. For the most part, it's a field and a bunch of trees. Also, no existing commercial power is used to run the radio equipment – we fortunately have a 25kW generator annually donated by ADMAR Supply. That's a huge help.

Things actually start on Thursday when teams pull together the tents, tables, chairs, and grills, along with radio antennas of all sorts and sizes, and the ham radios that make it all happen. Friday morning, the event begins with breakfast at

the *Nutcracker* restaurant on Empire Boulevard, and reinforced for the day's work, we proceed to the park.

First, antennas go up into the trees – typically as high as we can get them. That increases our operating range, as we are looking to contact stations in the U.S. and Canada. There are about 40,000 participants across the entire country. Next are shelters – canopies and EZ-Ups. We make sure we have side panels to ensure we're safe against rain. With wraps for lunch, we end the day with pizza. If things went well, we can actually "get on the air" and see how we're doing – we look for other Field Day stations, compare approaches, and otherwise have pleasant chats.

Saturday starts at the *Nutcracker* again, then off to the site. It's then computer time – we run a wireless local network among the stations. To keep track of contacts, we have a computer application which captures contacts as we make them, and our other stations can see how we each are doing. It also displays how many total contacts we have. The point is to see how well we can communicate with other field stations, from New England to California and Alaska.

At 2 p.m., it starts for real. You might think that this is the hard part, but no. The setup, and subsequent Sunday takedown, is where the work is. Making contacts, that's the much more relaxing fun part. We generally do pretty well, making an average of 4,000 or more contacts each year. It's always a pleasure to see that we could be effective should a real emergency call us to do this for real.

Anyone is invited to stop by and see this up close and personal. Best date is Saturday the 25th at 2 p.m. and on. The entrance is at 999 Lake Road. Proceed due south, and go past the entrance to the actual campground (on the left), and continue a bit further until you get to another opening. Cars on both sides of the road indicate you're there. Stop by the info table, check out the flyers we have on Amateur Radio in general, and then roam around and check out a few of the stations. There're people who would be glad to give you a tour and explain what's what as you go around. You'll see and hear exchanges we make with other stations, and get an idea of how it all works. The phrase you'll hear the most, at least at the "voice stations" (we also use Morse Code as well as digital modes), will be "CQ Field Day." That's telling other stations that we'd like to contact them, and it's pure fun to hear others respond. That's among the reasons we do it, because it means our efforts are working well. And should we ever be needed for emergencies, we'll be ready.

"CQ Field Day"



Notes on Setting up Sound Card Levels for WSJT

Ken Hendrickson

You want to set up your sound card levels so your sound card modes work well in both receive and transmit. You don't want to distort your own signal during transmit, making it harder for other stations to copy you. You don't want to reduce your dynamic range on receive, making it harder for you to copy other stations.

This note will assume you are using Windows and WSJT. It will not make any assumptions about which version of Windows, nor which version of WSJT. It also will not make any assumptions about which radio you are using.

TX Path

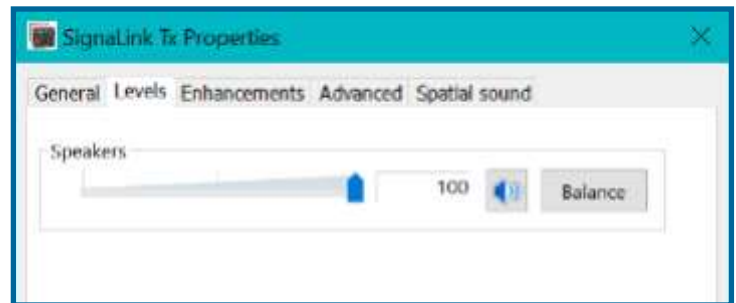
There are four or five "knobs" you can set in the transmit path, depending upon which radio you have.

Adjust TX Audio Level setting on WSJT (labeled Pwr)

- Sound Card control (software level setting)
- Sound Card control (physical knob level setting)
- Microphone Gain (on radio)
- Power Output (on radio)

First, there is a setting on WSJT itself, on the bottom far right of the main window. If you hover your mouse over this control, it informs you that you can attenuate the signal out of WSJT by some amount, specified in dB. Putting the setting to the max provides max signal output from WSJT. This is what you want.

Next, there are two controls for your sound card output. One is a software level control in Windows. The other is a physical knob on your sound card interface you can turn.



After that, there is the microphone gain in your radio, and the power output control of your radio.

Automatic Level Control (ALC) and Linearity

Set up your radio so you can see the ALC level during transmit. Adjust the first three transmit control knobs described above so that the ALC meter does not move – not even a little bit. Find the point where the ALC meter just starts to move, and then back off enough so that it never moves.

Some sound card modes are "constant amplitude". For them, the ALC in your radio won't matter. But some sound card modes, like MSK144 (for meteor scatter) and PSK31 are "non-constant-amplitude". If the ALC engages, it will modulate the amplitude of these signals as they pass through your radio. This causes distortion. If this happens, you will make it harder for the other station to copy your signal. You don't want to do this. You want the maximum linearity you can achieve. So, adjust the transmit attenuator in WSJT, the Windows sound card output level control, the TX knob on your sound card, and your radio's microphone gain – such that the ALC meter **never** moves.

In my setup, I left the WSJT transmit attenuator at 0 attenuation (full output), the Windows sound card output level control at 100%, and the TX knob on my sound card at 50%. I was easily able to find the radio's microphone gain setting to achieve maximum linearity with no ALC action.

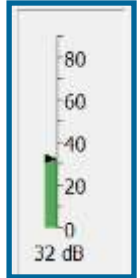
If you want the convenience of using the same microphone gain setting for both sound card modes and SSB, then set

the microphone gain where you want it, and adjust the sound card knobs so that the ALC meter never moves. (My radio has different independent settings for each.)

Adjust the power output of your radio to a point your radio (amplifier) can handle. I suggest half of the output that your radio can do in CW and SSB. Your final amplifier will only be generating half of the heat, and your signal will only be down by 3 dB. Nobody on the air can notice a 3 dB difference.

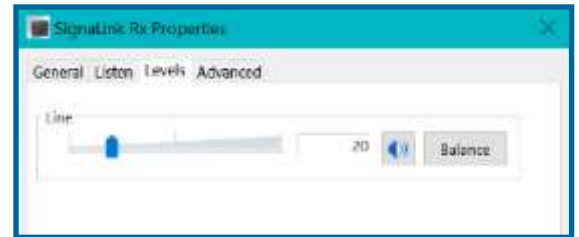
RX Path

There are a few knobs you can set in the receiving path. WSJT provides a Received Signal Strength Indicator (RSSI) to help you make this adjustment. But they do not call it RSSI. It is at the lower left corner of the WSJT main window. If you hover your mouse over it, it indicates that you should adjust your audio chain such that it shows 30 dB with no signals, but only noise. It also indicates that the indicator will be green if the audio level is good, red if the audio level is too high and there is clipping, and yellow if the audio level is too low. This widget in WSJT is not a knob you can turn; it is only an indicator.



The knobs you can turn in the receiving path include

- Sound Card control (physical knob level setting)
- Sound Card control (software level setting)



Tune to a frequency with no activity – no signals. Then adjust these knobs so that WSJT indicates 30 dB on its RSSI (audio sound level) indicator.

In my setup, I adjusted the RX knob on my sound card to 50%, and had to adjust the Windows software sound card level setting to 20%, in order to achieve the correct input level as indicated by WSJT.

Other WSJT Settings

There are other settings you can make in WSJT to achieve a pleasing palette on the waterfall display, and to compensate for imperfections in your receiver's IF filtering, but this document does not cover those settings. Consult the WSJT documentation.

Other Sound Card Programs (RTTY, PSK31, etc.)

If you set up your sound card to work well with WSJT, it will probably work well with all other sound card programs.

Windows Sound Card Settings

I am a Unix user. I try to avoid Windows. So, I am no expert. The Windows versions seem to be different enough that it is not possible to describe how to get to the software sound card level settings for all of the different versions. You're on your own. I recommend upgrading to Unix.

RDXA 2022-23 Calendar

September 2022

14 BOD
11-13 **ARRL September VHF**
20 Meeting
24-25 CQWW RTTY

October 2022

5 BOD
15-16 NYQP
18 Meeting
29-30 CQWW SSB

November 2022

9 BOD
5-7 ARRL SS CW
15 Meeting
19-21 ARRL SS SSB
26-27 CQWW CW
30 **BULLETIN DEADLINE**

December 2022

7 BOD
2-4 ARRL 160m CW
10-11 ARRL 10m
20 RDXA Holiday Dinner
26-28 RMSC Event - **tentative**
24-25 Stew Perry 160m CW

January 2023

1-8 ARRL RTTY Roundup
TBD BOD
17 Meeting
21-23 ARRL January VHF
27-29 CQWW 160m CW



February 2023

TBD BOD
11-12 CQWW WPX RTTY
14 Meeting
18-20 ARRL DX CW
24-26 CQWW 160m SSB
28 **BULLETIN DEADLINE**

March 2023

TBD BOD
4-5 ARRL DX SSB
14 Meeting
25-26 CQWW WPX SSB

April 2023

TBD BOD
18 Meeting

May 2023

TBD BOD
16 Meeting
19-21 Dayton Hamvention
27-28 CQWW WPX CW
31 **BULLETIN DEADLINE**

June 2023

TBD BOD
3 Rochester Hamfest - **tentative**
10-12 ARRL June VHF
20 Meeting – FD preparation review
24-25 ARRL Field Day

July 2023

8-9 IARU
16-17 **CQWW VHF**

August 2023

TBD IRVfest
26 ROC City Hamfest - **tentative**
31 Contest season concludes
Membership year concludes
31 **BULLETIN DEADLINE**

Rochester DX Association

Club Station — W2RDX

Club Website —<http://www.rdxa.com>

Facebook group —RDXA QTH

This Bulletin is the official publication of the Rochester DX Association and is published quarterly.

All those with an interest in amateur radio, DXing and contesting are cordially invited to any meeting and to join RDXA.

Meetings are held at 19:00 Local time on the 3rd Tuesday of each month, September through June. Meetings are located at Johnny's Irish Pub located at 1382 Culver Rd. Rochester, NY.

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John Hall AC2RL -- newsletter@rdxa.com



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