Rochester DX Association

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Deadline for Next Issue:

February 28 2023

Want a new RDXA name badge?
Doug Stewart N2BEG is looking to put together an order. He's also asking about interest in new Field Day tee shirts.
Contact him directly at:
dstewart@akoustis.com

President's Letter

So how's the DX lately? With several of the larger DX (and domestic) contests concluded, I hope you've enjoyed the vastly improved propagation.

I've seen some pretty good scores on the grid but know many have not added theirs as well. Any score is a good score, regardless of the time you had "in the chair". I've had to miss some of my favorite outings as there has been an unusual number of conflicts this year. I know I'm not alone.

As I approach my 31th anniversary in ham radio, I remember the days I could stay up 42 hours or more, taking 90 minute "naps" during the contests. Your body sleeps in 90 minute intervals, learned that during my PRO Rally career, many events lasted for days and afforded very little sleep. Great training for contesting honestly. Same with certain foods regarding sleep deprivation. No coffee or soda, raw vegetables are the best as it induces your body to "work" on digesting them. Though I like an 807 as most others, best to stay away from them if trying to stay awake.

As you operate more, you learn when and where to be to add mults to your score, this really is the key as opposed to beams, power and sdr's.

In the recent CQWW CW contest (on 10m only) I grabbed a few ZL by knowing when they'd "show up" propagation wise. Same will hold true in the upcoming ARRL 160m contest, you know when EU will come in, otherwise, forget it. With a small station, this is critical if you want to ad a few mults. Sometimes, you have a very small window when those stations will be workable.

Another thing to remember, head to the top of the band,

you never know who's up there… I find many weaker stations calling CQ as they realize they'll never hold a frequency with the "big guns" at the bottom of the band.

Personally, I'm not a good "run" guy so look for mults, combing the band over and over, listening between powerhouses for that weak guy (that may not hear what I am, no idea he's getting drowned out). My rate won't be impressive but consistently, I have more mults than stations with a higher score (they work more folks obviously calling CQ).

To each his own, right?

Had a great "in person" meeting a few weeks back, Dave did an excellent presentation on the RF-Kit RF2KS Amplifier. I did video the entire presentation and am learning the ins and outs of YouTube so will have it published for all to see shortly (I rotated the camera, not a good idea I guess – what a pain to fix that). There were others concerns, such as the video format and "viewer", as I suspect most will watch with a Windows based PC. I was recorded on an IPhone so not natively compatible.

At the meeting, we had a show of hands for those who would attend the Annual Holiday Party on Tuesday 20 December, most will. There is an informational flyer elsewhere in this issue. My hope would be to see attendance along the lines of last year (where we had almost 30).

We will have the event catered, it will be at Johnny's - $25 a person.

Looking forward to see folks "in person" once again, in some instances (with my inability to attend FD (was in Ireland)), I personally haven't seen some of our membership in over 2 years. I'm sure I'm not the only one either.

Speaking of FD, congratulations to those who participated as we were 3rd in 2a this year. With a 2 year break and the implementation of many new FD components, we did an outstanding job all things considered.

Looking forward to continuing the tradition and improving on what was learned this year. Meetings on 2023 FD will begin soon.

As always, thank you to the Board of Directors as they continue to keep this organization viable and active.

Several outstanding contests remain and some extremely rare DX will be activated in the coming weeks, **a great time to be a DXer I'd say**.

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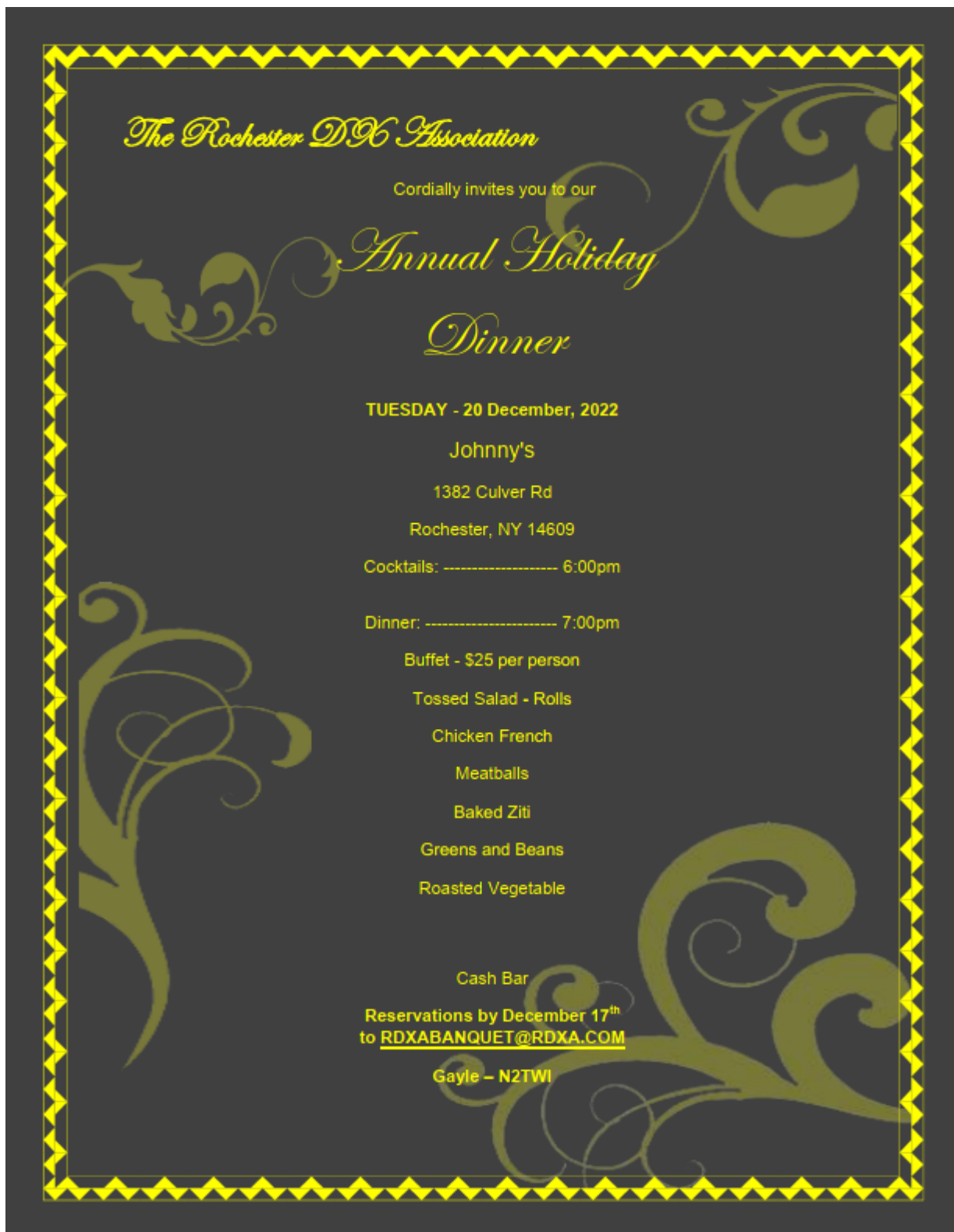
It's okay to, use tables and bulleted or numbered lists in Word. Bold, italic, colored, and underscored text is also fine.

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

The Rochester DX Association

Cordially invites you to our

Annual Holiday

Dinner

TUESDAY - 20 December, 2022

Johnny's

1382 Culver Rd

Rochester, NY 14609

Cocktails: -------------------- 6:00pm

Dinner: ----------------------- 7:00pm

Buffet - $25 per person

Tossed Salad - Rolls

Chicken French

Meatballs

Baked Ziti

Greens and Beans

Roasted Vegetable

Cash Bar

**Reservations by December 17th
to RDXABANQUET@RDXA.COM**

Gayle – N2TWI

Roof Tower Mounting

Dave Wright N2CK

With the coming of bad weather, I recently opened the access hatch in the attic (real houses have attics!) to inspect the interior mounting hardware for the big antenna on the roof. I wanted to ensure there was no sign of water intrusion on the inside (doesn't look like it) before winter closed off access to the roof until spring arrives with warmer temps. While open, I snapped some pictures of the mounting hardware holding it to the roof. The antenna started out as a Mosley Classic 33 tribander, to which I added the 12/17 and 40M add on kits. I'm using an aluminum (5'?) quad tower affixed to the roof via 3/8" threaded rods. To spread out the weight of tower and antenna, I added a 4' length of 2X4 under the tower feet. The tower was positioned such that the 4 legs were (as close as we could get them) located in the middle of the joists. The threaded rod goes through the feet and roof. On the inside, I nailed 2"X6" studs between 3 of the 4 areas where the threaded rod came through (couldn't figure out how to cut/mount the 4th stud in a manner that would provide any strength).

Tightening the nuts on the inside of the backing studs served to affix the tower and antenna to the roof, but to bolster wind resilience, I added another 2X6 (on both sides) that tied multiple joists together. The stud spans 4 roof truss beams – effectively spreading the footprint and (hopefully) adding strength.

One thing to note, I'm located on a small village lot. They did have tower ordinances on the books when I installed this – but due to close proximity of my neighbors, I would have required a variance. They also had an ordinance for roof-mounted satellite antennas – but that didn't cover what I wanted to do. I saw this configuration in an old CQ magazine, and shared my plans with the village administrator. His primary concern was the ability to stand up to wind loading. Well, it's been up there 15+ years and still holding strong.

If you are in an area where towers would be considered an eyesore (while everyone has a cell) and have access to the inside of the roof, you might want to look at this option. Also note in the antenna picture the route that the coax, grounding and rotor cable takes to reach the ground. When first installed, I ran all the wire down the valley between the peak and dormer. As winter progressed and water melted down the roof, it very conveniently formed a nice icicle (reaching down past the center of the second floor window) – nice clear ice with my wires embedded inside. Should that ever break off, in addition to tearing my gutter down, it would likely also render the antenna unusable. By routing the wires down the valley, and then across the dormer, water could then run down the roof into the gutter. I affixed a piece of scrap wood with a curved notch in it to hold the wires away from the house (it's screwed through the flashing). Ice buildup has not been a problem since.

QRM Busting in the
National Radio Quiet Zone

John Hall AC2RL

I recently visited the Green Bank Observatory, home to the world's largest steerable radio telescope. With a 100 meter collecting area, the Green Bank Telescope's sensitive receivers operate in the 0.1 to 116 GHz (3.0m—2.6 mm) range.

They measure signal strength (spectral flux density) in Janskys, where one Jansky is 10^{-26} Watts/Meter^2/Hz. The signal from a cell phone a mile away is 110,000,000 Janskys. Radio emission from the Sun is 1,000,000 Janskys. The GBT routinely detects 0.001 Janskys. As you may imagine, QRM can be a big problem for them.

The National Radio Quiet Zone is a region of about 110x120 miles in Virginia and West Virginia that protects both the Green Bank Observatory and the NSA's Sugar Grove listening site from radio interference. (Sugar Grove doesn't offer public tours). There are various restrictions on radio transmission in the NRQZ, which get stricter closer to the sites. Broadcasters must use reduced power and directional antennas. Residents living near the telescopes cannot have microwave ovens, cell phones, or wifi. Wired telephone, TV, and internet are the rule.

AC2RL and Humphrey the Traveling Bear with the GBT

Some people who believe they are sensitive to radio waves have moved to the NRQZ for their health.

There are several towers around the observatory campus carrying discone and rotatable Yagi antennas used to monitor the airwaves for interference.

I saw the "EMITT" Electromagnetic Interference Tracking Truck that they use to track down QRM. It is a RAM 2500 crew cab pickup with a diesel engine to avoid ignition

A monitoring tower

spark noise. It carries quite an antenna farm. Two spiral wound whips on the front bumper, smaller whips on the cab roof, and a pallet of phased direction finding whips on the ladder rack.

A peek in the window revealed an Icom IC-R9500 communications receiver, a Hewlett Packard 8563E spectrum analyzer, an Optoelectronics Digital Scout frequency recorder, a Garmin GPS, and a Panasonic Toughbook laptop.

And that's how the big boys fight QRM!

Doug Stewart writes that his new kitten, Aslan, was a big help during the recent CQWWCW contest

N1MM Logger Tips

Dave Wright N2CK

I wanted to share something I recently stumbled across with N1MM Logger +. For those who want a teaser, here it is – N1MM *wants* to be run in administrator mode. Failure to do so will result in some strange behavior. Read on to learn how I discovered this pearl of wisdom.

Earlier this summer, I read an enlightening book "This is how they tell me the world ends: the cyberweapons arms race". It's fascinating, educational, and scary all at the same time and delves into the world of cyber-hackers, and how they take advantage of software flaws to take over machines. While I don't have state secrets to protect, or robust computing hardware to take advantage of, I do have personal data I would like to protect.

Flashback to spring of this year – the shack computer (a used Dell desktop purchased from W2FU) running windows XP had a dead cmos battery. It would come to life and work for shack purposes, but after reading the above mentioned book, I sought to come up with a more robust and secure shack computer. A little background, the old machine had a parallel port which I used for CW keying, and a serial port that I used for rig control. I figured that the XP machine was probably close to 20 years old, and hadn't received windows updates for many years so it made no sense to spend money for a new battery. Being ever the cheap ham, I decided to repurpose the old windows 7 household machine as a shack computer. Yes, I know win 7 is no longer supported – but I felt that an updated win 7 machine might have tighter security than an older, updated XP machine.

The newer win 7 machine had NO communication ports – just USP. How do I handle communication with the radio for rig control and CW sending chores? As an extra security factor, on the new win 7 machine, I created a separate, non-admin user account that I intended to utilize for normal shack operations. For CW sending, I decided on a MORTTY keyer – recommended by Ken, N2ZN (thanks Ken!). Once properly connected (initially had the wrong output connected to the radio) it interfaced with N1MM quite nicely. The rig control communication link proved to be the more inter-esting nut to crack.

I installed N1MM as the administrative user, and did all the necessary updates. I made use of a USB -> serial port adapter, which the computer saw as com 3 and configured N1MM to use it. I defined the port protocol (speed, parity, stop bits, radio and hex value) in N1MM. Everything appeared to work. Changing things on the radio caused band/frequency/modes in the software to be updated.

After things seemed to be working, I created the standard user profile, and logged in with that – figuring that I wanted to run the machine in non-admin mode. I was surprised to see that the rig control was NOT working in N1MM. I have an old software application produced (I think) from Icom for rig control (I have a 756 Pro III), and when I ran that in the standard user environment, it saw the radio and all frequency/mode/band/etc information. Exiting out of the Icom software, and launching N1MM – the radio did NOT respond.

On a hunch, I found the executable that launches N1MM, and changed the properties to run as administrator. Upon program launch, once I provide the admin password in the standard user account profile, N1MM sees the radio and responds to all radio changes.

It's curious that such a subtle tweak made N1MM recognize the radio. One would think if 85% of the program (N1MM) works in regular user mode, it should work for all. Apparently that's not at all true. To summarize, if N1MM isn't work-ing correctly in a non-admin user profile, try running it as an administrator!

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

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

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

January 2023

4 BOD
7-8 **ARRL RTTY Roundup**
17 Meeting
21-23 **ARRL January VHF**
27-29 **CQWW 160m CW**

February 2023

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

March 2023

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

April 2023

TBD BOD
18 Meeting—Zoom, K2CS—DXAC
TBD Annual Combined Awards Banquet

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.
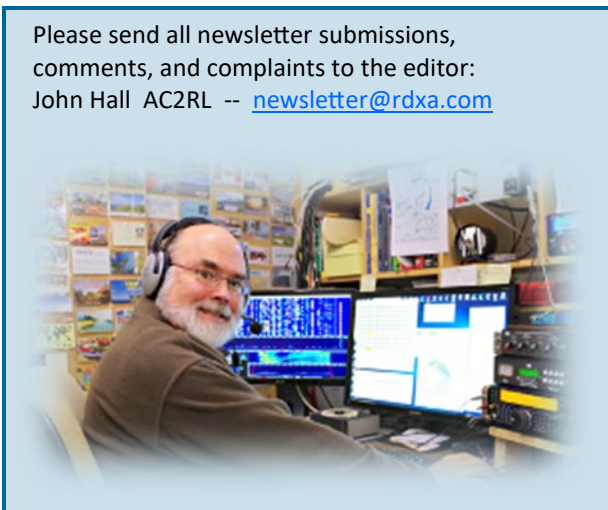
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Vice-President Mark Hazel — K2MTH
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Secretary   Bill Rogers – K2TER

Please send all newsletter submissions, comments, and complaints to the editor:
John Hall AC2RL -- newsletter@rdxa.com

Board of Directors
Chris Shalvoy – K2CS
Mark Hazel – K2MTH
Bill Rogers-K2TER
Mike Sanchez – KM2B
Lynn Bisha – W2BSN
Dave Hallidy - K2DH
Doug Stewart-N2BEG

Appointed Positions

Webmaster	Carey Magee K2RNY
Calendar Chairman	\<vacant\>
DX Chairman	Chris Shalvoy –K2CS
Contest Chairman	Charles Kurfuss-WB2HJV
Banquet Coordinator	Gayle Shalvoy - N2TWI
Media Coordinator	\<vacant\>
Election Committee Chair	Bill Rogers – K2TER
Membership Chairman	Mike Sanchez – KM2B
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	Doug Stewart – N2BEG
	Bill Rogers - K2TER
Newsletter Editor	John Hall - AC2RL
Board Support	Vic Gauvin – K1PY
	John Gilly – W3OAB
	Gene Fuller – W2LU

Membership Dues can be sent via:
Paypal: treasurer@rdxa.com
US Mail: Mike Sanchez KM2B
                8 Piccadilly Square
                Rochester, NY 14625

Regular Membership: $25.00

Family, Full time Student
or Out of State member: $6.25