

The Rochester VHF Group

The VHF



Journal

Volume 70, Issue 8

April 2017

The next regular meeting of the Rochester VHF Group will be Friday April 14th at 7:30 PM held at Rochester Makerspace located at the rear of 850 St. Paul St., Rochester. Doors open at 7PM Map and directions on last page.

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Topic: Makerspace tour and 6m Amplifier Club Project

W2UTH 6 meter Skimmer

<http://www.reversebeacon.net/dxsd1/dxsd1.php?f=0&c=W2UTH&t=de>

The Chairman Speaks!

Dave Halliday K2DH

Hello again, fellow VHF+ "addicts", as you all know, we had to cancel the March meeting due to the power outages from the windstorm. Hopefully, mother Nature will cooperate with us this month and we'll be able to check out the new venue for our meetings. Our meeting this month will be at the Rochester Makerspace, located at 850 St. Paul St in the city. This location appears to be a good spot for us, and I'm told they even already have some ham equipment in place! Please try to attend, as we want to get a feel for what you think of the place in terms of future (maybe long-term future) meetings.

Continued...

RVHFG's Beacons W2UTH			
Beacons Hosted at AWA Museum FN12hv			
Band	MHz	Power	Antenna
6m	50.075	5W	Squalo
2m	144.298	6W	Big Wheel
1.25m	222.050	5W	Par Omni-Angle
70cm	432.300	5W	Par Omni-Angle
23cm	1296.257	2W	Halo

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The Chairman Speaks!

Continued... I must again thank Len KC2PCD for the efforts he's made to increase participation in both the 2m Monday night and the 5m Thursday night RVHFG nets! Nice job, Len! And, although I'm not much of a Facebook person (I have an account, but I'm not addicted to it like most people, it seems), I have to also thank Len for his work with our FB page. I see frequent notifications in my home email of postings to our FB page and that's a good indicator to me that it's becoming quite popular.

I'm afraid that once again, I'm going to miss the next club meeting, as well as the combined RVHFG/RDXA Banquet! My wife and I will be away for both events. I'm really embarrassed about this- I'm afraid I've not done a very good job leading the club this year. For this reason, I've decided not to run for re-election to the position of Chairman for the 2017-2018 season. There seems to be just too many interruptions in my amateur radio activities to permit me to lead the way the club deserves to be led.

I mentioned last month (but didn't hear any responses positive OR negative), that we might want to consider eliminating the business portion of our monthly club meetings in favor of just spending more time with projects and experimentation. Our club's constitution only requires ONE formal "business meeting" per year, and that would be the May meeting, when elections of officers are held and a final accounting of the treasury is also made. The other meetings are permitted to be anything we the membership want them to be. Please- if you have any thoughts on this subject, let me or the others in the BoD know.

I personally, due to work and other commitments, haven't been very VHF/UHF active lately. But I have been keeping my eyes on the ON4KST chat page, and you should do the same- it's a good place to see who's on and when there's a possibility of some enhancement that can make our time on the bands very exciting.

As mentioned, I'll miss the April meeting but I know it will be in good hands with Jarred and Tom at the wheel, and I do plan to back for the May meeting!

CU on the bands.

73,
Dave Hallidy K2DH

Secretary Report

Freddie Sulyma, WB2GFZ

Rochester VHF Group Meeting Minutes for 10 March 2017.

March's meeting was canceled due to a wind storm.

Rochester VHF Group Treasurer's Report (2/7/17)

CHECKING/CASH ACCOUNT

Previous Balance (PP = \$0.00, Cash = \$380.83Cash, \$1541.15 Checking): \$ 1921.98

Income: None

Expenses: None

Current Balance (PP = \$0.00, Cash = \$380.83Cash, \$1541.15 Checking): \$ 1921.98

Respectfully submitted,

Freddie Sulyma, WB2GFZ, Treasurer

Vice Chairman's Report

By Jarred Jackson, KF2MR

I was disappointed to have to cancel the March meeting, however we still did not have power at home due to the historic wind storm and some others were in the same position. The article I have contributed to the journal this month relates to the wind storm and backup power.

We will make another attempt at checking out the Rochester Makerspace and talking about finalizing the 6m amplifier project. Please arrive at 7pm so we can take a tour of the facility and make the most of our time there. We will also begin talking about some changes that are being considered for the 2017-2018 season and accept nomination of club officers. As I mentioned in last month's newsletter, if an officer position does not appeal to you, volunteer to do whatever it is that does appeal to you. It's important that we structure the activities and events of the club around the interests of our active members.

On March 30th, VE3DS forwarded an interesting news report provided by the ARRL for affiliated club entrants. Our net score for the 2017 January VHF contest was 200,004. This is the first contest using the new eligibility process and it seems to have worked fairly well. I will continue to add new people to the list as they participate or let me know in advance if they are not already on the list. Looking back at our historical cumulative scores, the last time we scored higher than 200K points was in 2008. I am quite happy with these results and look forward to the final results when they are published in QST. It would be great to see us continue to improve upon this in the June contest.

I hear that Bruce, WA2TMC will be joining us once again with several microwave bands from FN22. His participation will certainly help move us forward. You should have ALREADY marked your calendar for June 10th and 11th, but just in case you forgot, please make plans now!

I am looking forward to the banquet on 4/21. While the January contest honor roll is fairly new, I will be happy to recognize those who made it on the list this year. Following the banquet my work schedule shifts to night shift working 13 hours a day, 7 days a week for a few weeks. Unfortunately my hobbies (and everything else) will get put on hold while we refuel the power plant and perform maintenance. I am looking for someone who can carry the amplifier project forward and help with the May meeting while I am offline for a while.

73,

Jarred Jackson, KF2MR

Spring Sprints – Reminder

By Jarred Jackson, KF2MR

The “sprints” are short contests that many people like to use to test out equipment and try new things without having to commit an entire weekend. The ON4KST Chat website is used in our region to help coordinate contacts. Your score is entered into 3830scores.com after the contest is over and unless you are one of the top 3 scores, you will not be asked to submit your log. The 2m Sprint always falls on a Monday, allowing us to gather together before and after the 9pm SSB net to pick up local contacts. I encourage everyone to get on the air and at least make one contact in each event. For those with Microwave capabilities, please consider getting on the air for this event and let me know if you wouldn't mind being part of a demonstration for those who may be interested in seeing how this stuff works.

144 MHz: Monday, 4/17/17 from 7 - 11 PM local

222 MHz: Tuesday, 4/25/17 from 7 - 11 PM local

432 MHz: Wednesday, 5/03/17 from 7 - 11 PM local

Microwave, 902 MHz and up: Saturday, 5/6/17 from 8 AM - 2 PM local

50 MHz: Saturday, 5/13/17 from 2300Z until 0300Z Sunday, 5/14/17

2017 Wind Storm and Backup Power

By Jarred Jackson – KF2MR

The 2017 Wind Storm is now in the history books. My wire and Moxon survived just fine, but I recognize that many hams in the Rochester area were not so lucky. At home we lost power for about 75 hours (but who was counting!). FEMA recommends that families prepare for an emergency lasting 72 hours, yet many people in our community were not able to stay in their homes due to lack of heat as the indoor temperatures plummeted into the 40's in the third night of the power outage. Some well-intentioned people had generators or were lucky enough to buy one, but were still forced out of their homes when they realized that they didn't know how to power their furnace with the generator and the little electrical room heater just wasn't cutting it. If you can spend \$8,000 for a whole house natural gas generator, then feel free. Most people can't justify the expense. Instead they buy a \$500 gasoline generator from their local hardware store, run it a couple of times a year and hope for the best. If you are not in the whole house generator club, here are some tips you many want to consider.



Install an “essential circuit” generator transfer panel. You will be able to power between 4 and 8 circuits from your main electrical panel. This is a safe way to power up circuits like a furnace, the refrigerator, a sump pump, and a few lights. Some even come with an outdoor weather resistant outlet for easy connection to your generator. A panel like this may run about \$300 and can generally be wired up quite easily by someone with basic electrical skills. The most convenient installations will involve drilling a hole in the side of your house to mount the outlet outdoors.



Widow makers or Suicide Cords – These cords are custom made by people to have the exposed electrical connectors on both sides of an extension cord. This allows you to back feed the generator power through one pole of your electrical panel using an electrical outlet. Every year several people are killed with these cords because they are not handled properly. People sometimes forget to open the main circuit breaker in their home risking damage to their generator or possibly risking the life of the electrical lineman working to restore the power. You may think that you can handle the risks, but why bother if there are much safer solutions available. I do not recommend using these cables, but I recognize that they are widely used.

If the cost or complexity of a 6 circuit transfer panel is not your style, there are other options. Single circuit transfer switches are also available for under \$100 that you can use for something like a furnace or a lighting circuit. These panels are a bit easier to install and use standard extension cords instead of the large 240V generator cords used in the 6 circuit switch. You still need to get the extension cord inside of your house, which would require you to run it through a door or window. This plan not only lets cold air into your home, but if the window is not at least 15 feet away from the generator, it also provides a convenient path for carbon monoxide and noise. Some tape and plastic around the opening will work.



Generator transfer panels work fine as long as it's safe to go outside and crank up the generator. Who wants to do that when trees are falling around you? I have found that most of the stress from a power outage can be minimized by having the normal lighting in the house work. Flashlights and candles are fine for a couple of hours, but in the midst of a snow/wind/ice/lightning storm nothing is better than having the lights on. When not in use in my rover, the 200Ah battery bank works well with a pure sinewave inverter to power up many of the lights in my house. I have replaced all light bulbs on these circuits with LEDs and made a cord that connects my inverter to the 6-circuit generator transfer panel in the basement. My home is normally wired up this way so that my wife can easily turn on the inverter and turn the lights back on if I am not home. At night it is also nice to turn off the generator to reduce the noise and save some gas, yet still have the bathroom light available.



Luckily in WNY we only experience major weather events one every ten years or so. However it's important that you install and try out everything you plan to do during the normal weather when everything is calm and a trip to the hardware store is convenient. Things happen that you might not expect. For example, I found that the power quality of my first generator was so poor that the computer UPS refused to charge. It would click on and off every other second and the battery continued to deplete. I also found that I one of the circuits on the transfer panel would overload when the microwave was running and trip the circuit breaker. While the main electrical panel has a 20A breaker, the transfer panel only has a 15A breaker, something I didn't notice until it tripped.

So while you memory of the wind storm is still fresh in your mind, make sure you are ready for the next unexpected storm while you're still thinking about it.

Classified Listings

For Sale - KF2MR

1296 & 2304 MHz Transverter Set (\$575)

This is the system I built and used for many contests now in the Rover (including this January contest). The bands share an enclosure and power connection, however IF, PTT, and Antenna connections are all independent. The transverters are setup with 5W input. Output is approximately 10W on 1296 using a small DEMI amplifier and 2W on 2304. 1296 has a 144 MHz IF, while 2304 is currently setup with a 434 MHz IF (I use an FT-817 as the IF radio). Built with SG-Lab transverters. The 2304 transverter has the option for an external 10 MHz clock, though I have rarely used this option and didn't notice much of a difference when I did.



IC-1271A 1296 MHz Base Station Radio

(\$400)



(Stock Image – Not the actual radio)

Kenwood TK-930 (\$50)

This FM Mobile radio has been modified with new the 902-903 MHz portion of the band. It is programmed for 902.1, 902.3, 903.1, and 903.3 cheap way to get on the band.



filtering for
MHz. A very

Meeting Location and Directions

March Meeting Location – NEW LOCATION

The Rochester Makerspace is located at the rear of 850 St. Paul Street in almost 4,000 square feet of workspace. Parking is in the rear of the building off of Scrantom St. You must go down Scrantom St. to locate the rear parking lot. Do not park in the front of the building and please do not park directly in front of the loading dock. The entrance will be through the double overhead doors or the entry door to the right. The door code will be shared with RVHFG officers and BOD members to help with entry if needed. Go through the inside door at the top of the loading dock, turn left and walk a short distance to the end of the hall. The main Makerspace is on the left through the overhead door. Talk-in will be on 146.52 if anyone has trouble finding the place or needs help getting in.

