

The VHF



Journal

Volume 66, Issue 6

February 2014

The next regular meeting of the Rochester VHF Group will be Friday, February 14th at 7:00 PM at U of R's Laser Energetic Lab.

Map and directions on last page

In this issue:

- The Chairman Speaks!
- Secretary Report
- Treasurer's Report
- The Vice Chairman's Report
- ARRL's Centennial QSO Party
- Devastating RFI on 2 Meters

Classified

Topic: U of R Laser Lab Tour

RVHFG's Beacons	
Band	MHz
6m	50.078
2m	144.298
1.25m	222.050
70cm	432.300
23cm	1296.257

The Chairman Speaks! Bob Nezelek W2CNS

Groupers: I hope that everyone who participated in the Contest enjoyed the event. I participated in 'passing out the QSO's mode. I believe that the scores are out or close to be released. Thanks to all.

The W1AW/2 effort will be this spring. Consider participating on the VHF/UHF bands. WB2BYP and I plan to be active via EME. John will be on 1296 and myself, 144 and 432. Other EME stations in the country have been on the air via this mode.

This month's meeting is going to be at a University of Rochester site. It will be an exciting tour. Details are elsewhere in the Journal. Please plan to attend.

If you have a pet project, how about sharing it with the group. It will appear in the Journal.

Also, try to bring a guest to the meeting.

W2CNS Bob Nezelek

Published by
Rochester VHF Group
PO BOX 92122
Rochester, NY 14692

Editor: Tom Jennings, KV2X

The VHF Journal is published by the Rochester VHF Group monthly except June-August. The subscription price is included in the membership dues. If you elect to receive the PDF version by downloading it from our website, dues are US\$10 per year. In this case, you will be notified by email the day it is available for download. If you choose to receive the hardcopy Journal by Postal delivery, the dues are US\$15.00 per year. Articles and comments should be submitted to journal@rvhfg.com

Secretary Report

Freddie Sulyma, WB2GFZ

Rochester VHF Group Meeting Minutes for 10 January 2014

The meeting was called to order at 1920L by Bob (W2CNS). Bob welcomed everybody and asked if there was a motion to accept the minutes from the last meeting as printed in the Journal. John (WB2BYP) made the motion to accept and Bill (K2TER) seconded. Freddie (WB2GFZ) reviewed the Treasurer's report as reported in the January Journal and a motion to accept the report was brought up by Dave (K2DH) and Bill (K2TER) seconded. This month's meeting location was re-located to Rancho Viejo Restaurant, 500 S Union St, Spencerport, NY. Thanks for the goodies Bill (K2TER)!

Attending: Dave (K2DH), Frank (K2OS), Bill (K2TER), Bob (W2CNS), John (WB2BYP), Paul (K2DB), Ev (W2EV), Steve (K2STF), Betty Jennings, Tom (KV2X) & Dave (AB2YI).

Old Business:

MUD 2014 conference (Oct 24 – 26) planning progress report by Frank (K2OS) & Dave (K2DH)
Dave & Frank presented the Rochester Airport Marriot (1890 Ridge Rd West, 14615) as the best choice hold the MUD conference.

Deposits to secure the venue is \$250 by 17 January '14, \$250 by 18 July '14 and \$3500 by 3 October '14. Freddie (WB2GFZ) to mail a \$250 check to Dave (K2DH) on 11 Nov '14.

A 3600 square foot Ball Room was included with the understanding that food & beverage purchased during the event would be greater than \$5000. Additionally, MUD hotel guests would be provided with a 10% food discount.

Breakfast concerns were raised and the group decided that including the cost of a continental breakfast in the price of admission would alleviate long queues during breakfast.

The decision to hold the conference at the Marriot was unanimously agreed on.

The AWA trip scheduled for 23 October '14 was discussed. The suggested time was 1PM to 5PM. Bus transportation is being investigated with Golden Memories quoting 55 person bus at \$600. Other Bus company options were to be looked into. It was noted that AWA entrance fee needed to be worked out.

Frank (K2OS) indicated that the ARRL League will publish proceedings at an estimated cost of \$7 to \$12. A 10% processing fee & freight fee (UPS Ground) is the club's responsibility. They indicated that the input deadline is 31 August '14 with a grace period to 8 September '14. Delivery by 20 October '14.

Bill (K2TER) indicated that he would see to the club's Website regarding MUD information and it was agreed that PayPal would be the likeliest method for MUD registration. The ability to utilize PayPal at the website needs verification.

Volunteers for Chairman/Coordinators for the following functions are indicated below;

Registration – Freddie (WB2GFZ)

Prizes – Frank (K2OS)

Presentation – Bill (K2TER)
Public Information Officer – Dave (K2DH)

The RVHFG/RDXA 6m Skimmer status was highlighted by John (WB2BYP). John indicated that the Skimmer system is presently operational at his QTH. The system is scheduled to move back to Jeff Ach's QTH this coming Spring.

Bob (W2CNS) suggested that we periodically include a pictures of an operator's shack and include pertinent information regarding the shack and the individual. It was also suggested that individuals could present displays and descriptions of their shacks to be published in the clubs journal.

New Business:

ARRL's 100 Centennial celebration:

Paul (K2DB) presented information regarding ARRL's 100 Centennial celebration operational event. He proposed that an operation effort of local Rochester clubs support the event during the period of 21 May thru 27 May '14 utilizing the W1AW/2 call. The support would require individuals to log contacts via ADIF logging (Paper Logs Require Translation). A contact is complete with the communications of Calls, Names & States. Paul (K2DB) indicated that a website is being set up to organize schedule times for those Hams wishing to participate. Ev (W2EV) discussed the option of utilizing PropNet (Auto Control of Transceivers) to support communications and indicated that much information regarding PropNet can be obtained at www.propnet.org.

VHF Group

Treasurer's Report

CHECKING/CASH ACCOUNT

Balance (as of 1/10/2014, Cash = \$110.00, Checking = \$2000.09)	\$2110.09
Income:	\$10.00
Steve (K2STF) 1/10/14 (Membership/Renewals, \$10 Cash)	
Expenses:	\$250.00
Chk # 1039 Dated 1/11/14 to Marriot (1 st Deposit, \$250)	
Current Balance (\$120.00 Cash, \$1750.09 Checking):	\$1870.09

Respectfully submitted,
Freddie Sulyma, WB2GFZ, Treasurer

The Vice Chairman's Report

By Tom Jennings KV2X

Our February meeting will be held at the U of R's Laser Energetic Lab starting at 7 PM, Friday February 14th (a half hour earlier than usual). After a short business meeting, there will be a brief presentation of the history and mission of the Laboratory for Laser Energetics (LLE) at The University of Rochester along with a description of a few parallels between RF engineering and lasers. The parallels will be illustrated by a demonstration or two. The talk will be followed by tours of both the Omega

and the OMEGA EP Lasers. The presentation will be suitable for a general-interest audience. Should be a very interesting and educational talk/tour. Check the last page of the Journal for directions.

Somebody on the qrp-l reflector mentioned a great web site for VHF propagation. I checked out and found an interesting article regarding required take off angles for 6 meter sporadic E. Go to "K9LA's Amateur Radio Propagation Web Site" url: <http://k9la.us/>

Congratulations are in order for three top performer in the ARRL September VHF Contest: W2EV for his first place score in the Single Op FM only category, K2QO/R for top Limited Rover, and the K2LIM team for third place in the multi-operator class.

As for the ARRL's January VHF Contest, (I wasn't able to operate) I heard that conditions were not very good. Here are a couple reports:

From K2QO:

I setup at home and operated NF2RS, the club call of Niagara Frontier Radio sport: Conditions were Hideous!. I cannot think of any other way to describe this contest. No propagation, minimal participation, could not find the rovers despite having their routes, the squelch on the FM radio never broke and there is more but no one wants to read all this crap. But truth is that there were highlights:

- working a three band sweep with K2NV and AB2YI even though they are in my "backyard"
- working lots of VE3 stations which is not a surprise given their super active clubs, Contest Club Ontario and Ontario VHF Group
- finding that the cross mode feature of the K3 is FB
- having the time to clean the basement while the K3 beacons CQs
- not having to worry about the score because my logging program didn't count the mults correctly.

Operating a VHF contest from a station that is 0' HAAT is just no fun. See you from the road for the balance of 2014.

Mark, K2QO

From AB2YI:

Although I began early on preparation for this contest and was mildly considering a rove, as the kickoff approached, I became concerned with close stacking of 432 and 222 antennas. With just one duplexer, and that it was not suitable to reject 222, so I decided to throw together a 222 filter to protect my RX front end. For a unique approach, Google: zs6tmv diplexer A single filter looks simple, but it still took two hours Saturday morning to fit into the only small box I had.

By then my preparations were running late, and going downhill. Facing a late start, a single-op, same day set-up and tear down in the field, and likely icy roads, the tipping point was approaching on the fun value of this exercise. At 3 PM, I decided to do what I could from home instead. I'm at about 330' ASL with antennas for 2m 6 el and 6m 3 el up 18 feet. Not the best, but usable.

I was able to keep a 4 PM sked with K1TEO on 2m, but couldn't work on 6m. Later I got up the 432 stack up at 12', but the 222 stack above was bending a PVC mast, and had to be ditched. From there it was a casual 3-band effort, relieved of the challenges of roving--perhaps an opportunity lost to score among the few, but for this time, it was OK.

Worked as far as FN20, 21, and 31 on 2 meters. Had a partial Q on 6m CW with K1TOL FN44. 26 Qs, 14 grids, score 406.

David AB2YI

Groupers, it is time to start your planning for the ARRL June VHF Contest so that Murphy doesn't visit at the start or during the contest! Also don't forget to register and sign up for vhf/uhf operation for the ARRL's Centennial QSO party and operate as W1AW/2. I hope to see you all at the February meeting!

Tom KV2x.

Rochester Participation in ARRL's Centennial QSO Party

Since this year is the ARRL Centennial, the ARRL is sponsoring a "Centennial QSO Party" lasting all year as a way to celebrate hams making contacts and in the process hams accumulate points and make new friends from all over the world.

The two main activities of the "Centennial QSO Party" are W1AW operating portable in each state and most territories; and The Centennial Points Challenge which is the accumulation of points from qualifying contacts made throughout 2014. Logs must be submitted to the Logbook of the World system. To find out all the nitty-gritty details of the "Centennial QSO Party" see

http://www.arrl.org/centennial-qso-party#Operating_Period

What is the Rochester area participation going to be? Thanks to the efforts of K2DB, K1PY, and K2RNY a proposal has been made for an operation effort of local Rochester clubs supporting the event during the period of 21 May thru 27 May 2014 all ham bands (including VHF/UHF/uWave/EME) utilizing the W1AW/2 call. K2DB, K1PY, K2CS, and K2RNY are busy designing a sign-up calendar and will roll it out when completed. At present, we are looking at 2 hour slots for operating. The first step is for whoever wants to sign up for time slot(s) is to register via email. A separate, moderated, secure e-mail reflector has been setup for W1AW/2 NY. To register send an e-mail to w1aw@rdxa.com. In order to keep things under control we need the following information included in the email:

Information	Sample Information
Call Sign	AA2**
First Name	Pete
Last Name	D***
Street Address	Fleets Cove Road
City, State, Zip	Huntington NY 11743
Primary Phone	631-549-****
Secondary Phone	631-678-****
County	Suffolk
Grid Square	FN30hv
email address	*****@gmail.com

The information include in the emails will be preserved on a private offline database, and only available to the 4 team leaders.

When we receive your e-mail, you will get a reply back that your e-mail is being held for moderation. When the team receives it, and it has all of the information shown above, you will be approved for the list. This reflector will be for all info related to W1AW/2 and will keep traffic off the regular club e-mail reflectors. Only people approved will be able to post and receive emails from the list. So if you want to operate, go and register, the sign up data base is almost complete and we will roll it out for sign-ups ASAP.

Bands & Modes

To count for points, all QSOs must be two-way (no cross-band or cross-mode), using any of the modes CW, Phone (FM, SSB, AM, digital voice), or Digital (any digital mode, i.e. PSK31,

RTTY). You are encouraged to work stations on each mode, but you may not work someone on three modes on the same frequency. QSOs must be made within the following bands (**some bands show suggested frequencies for modes that are not allowed in the USA -- stations outside the USA may use these frequencies if they desire for the QSO Party**):

Meters	CW	Phone	Digital
160	1.800 – 1.843	1.843 – 1.900	1.800 - 1.843
80	3.500 – 3.600	3.600 – 4.000	3.525 – 3.600
40	7.000 – 7.125	7.040 – 7.300	7.025 – 7.100
30	10.100 – 10.150		10.110 – 10.150
20	14.000 – 14.150	14.110 – 14.350	14.025 – 14.150
17	18.068 – 18.110	18.110 – 18.168	18.090 – 18.110
15	21.000 – 21.200	21.110 – 21.450	21.025 – 21.200
12	24.890 - 24.930	24.930 – 24.990	24.900 – 24.930
10	28.000 – 28.300	28.200 – 29.700	28.025 – 28.200
6	50.000 – 50.125	50.100 – 50.500	Use normally accepted frequencies
2	144.010 – 144.200	144.100 – 148.000	Use normally accepted frequencies
1.25	222.000 – 225.000	222.000 – 225.000	222.000 – 225.000
70cm	420.000 – 450.000	420.000 – 450.000	420.000 – 450.000
33cm	903 MHz & higher	One QSO per band, per eligible station is allowed regardless of mode	
	Satellites	One QSO on any satellite per eligible station, regardless of mode, is allowed.	

Keep checking the RVHFG and RDXA email reflectors, RDXA webpage, and the RVHFG Journal for further updates regarding Rochester's participation.

GL es 73,

Tom Jennings, KV2X, Editor

Devastating RFI on 2 Meters

Roger Shultz, NJ2R

A couple of weeks ago began some RFI that completely rendered the 2 meter spectrum unusable. While I got a few suggestions about common sources, this was something completely new to me at least.

At last the source of the RFI has finally been positively identified!

To recap, the wideband RFI centered on 145 MHz which began in mid-December was isolated to a specific house in Caldwell, NJ about 700 feet from my home. The RF level was about 20db over S-9 or nearly 1 millivolt, yes, "millivolt" at my receiver. It wiped out the entire 2 meter band as well as the lower portion of the public safety and aircraft spectrum.

While the RFI sounded like AC line buzz, looking at it on a spectrum analyzer showed a 20 MHz wide signal that swept and pulsated. PSEG was instrumental in first identifying that the RFI was wideband

and close to the residence in question as I had determined from walking the area. I then used a 4 element 2 meter Yagi to positively identify the direction of the source. I considered that the problem might be channel 18 leakage from Comcast cable but that did not prove to be the case.

I was able to talk to the home owner who was very cooperative in working with me to find the source. I first thought that it was associated with TV usage but several tests did not yield the precise problem though the Comcast cable box and Samsung large screen TV were able to be heard inside the house on my Yaesu HT in AM mode but nowhere near the level had I seen at times at my home. It seemed that when the homeowner was not home the RFI would disappear and in that case TV's were off.

Today, another test was made where the homeowner turned off all TV's and the RFI was still present. She then started tripping breakers and the RFI completely disappeared! It was now positive that the RFI was from something in the home. Further testing revealed the source as 9 LED lamps in the kitchen that had been installed in mid-December, at the time I first noticed the beginning of the problem.

The lamps were obtained at Home Depot and are the Eco-Smart brand, MR-16 halogen replacements and are rated at 50w = 8 watts consumption. Obviously this is going to become a really big problem, not only for PSEG as people bite the bullet and purchase these things but it will also become a FCC issue as well as they clearly exceed any radiated emission specs for consumer devices

For now, since we know the source of the problem, I am working out with the homeowner a plan to perhaps go back to the halogen lamps. This problem needs to be escalated to Home Depot, the FCC, and anybody else that should be notified before the entire 2 meter spectrum is lost to licensed users in this country and others.

So, if you are thinking about LED replacements as was I, it might not be the best thing to do or if you do, make sure you can return them or take up some other hobby!

73, **Roger Shultz**, NJ2R

Editor's note: Al, K2ERG, and Ev, W2EV, forwarded this story and wanted everybody to be aware of this situation. Ev hopes that this is simply a "bad batch" from a good manufacturer. At least the "personality" of the QRM is something that can be tracked by others if encountered.

Classified Listings

For Sale: I have a couple excess signal generators:

- HP-614 Rack Mount (1 GHz). I bought it from Charlie Reynolds years ago. Never found a power cord for it.
- HP-620A (10 GHz) Complete as-is untested

What are they worth? Anyone interested?

Wanted: I'm still looking for an HP-8443 tracker with interface cable

Thanks –Tom KA2OMQ

Meeting Location

Come to the West end of the complex and come in through the entrance by the flag pole. Park anywhere in the main lot that is not marked "reserved". No parking permits required after 6. Once inside the building they can proceed up the stairs to the "Coliseum".

Directions to the Laboratory for Laser Energetics

250 E. River Rd.
Rochester, NY
(585) 275-5101
FAX (585) 275-5960

