

The Rochester VHF Group

The VHF



Journal

Volume 62 , Issue 2

October 2010

The next regular meeting of the Rochester VHF Group will be Friday, October 8th at 7:30 PM

Spencerport Wesleyan Church
2653 Nichols St., Spencerport

Map and directions in back

In this issue:

The Chairman Speaks!
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September VHF Contest Activity
W2CNS's Remote PA and LNA for 1296 MHz

Classified

Topics:

Portable ATV running through the local ATV repeater.

The Chairman Speaks! Dave Hallidy K2DH

Groupers: It was good to see a good group of members at the September meeting. It looks like we're off to a good start for the year. I know there was quite a bit of discussion about the September VHF Contest and the second weekend of the 10GHz and Up Cumulative Contest, both of which were about to happen later last month. I wonder how many of you took the time to get on in either or both of them. Unfortunately, I wasn't able to participate in either, having both work and family commitments both weekends. However, I was able to attend the Elmira Hamfest (actually in Horseheads), on the 25th of September and I saw a lot of RVHFG members there. It was a beautiful day and the flea market was surprisingly large. Hamfests in Upstate New York are definitely NOT dead!!!

I was able, in spite of all the other things taking up my ham radio time, to participate in the first weekend of the ARRL EME Competition. There was tremendous activity on 23cm, and it was great fun- the moon was in a real good position and signals were strong all weekend. The final weekend of the contest will be at the end of October- the 30th and 31st. With today's advances in technology, you too could experience the thrill of your first Moon bounce contact...

Continued....

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The Chairman Speaks! Continued...

...There are a number of stations large enough to work small stations equipped with a single Yagi and 100-150Watts, even without elevation to track the Moon. You can use "Ground Gain" to enhance your signal, taking advantage of the reflection of your signal off of the ground during times of rising and setting Moon. This can provide you with the ability to hear (and work) stations on 2m fairly easily. If you're interested in the digital modes (WSJT, specifically), the results are even more spectacular. If interested in trying out the "Ultimate DX", talk to some of the members at the next meeting to get some details of how/ what to do. Some of the members who are (or have been) active on EME are: WB2BYP, W2CNS, K2OS, and K2DH.

This month, we're going to have an interesting talk provided by Fred WO2P, and Judy N2KXS, relating their trials, tribulations, and successes with getting portable ATV running through the local ATV repeater for use during emergency and public service opportunities. This should be fascinating, and I'm sure they will have hardware to demonstrate. Please plan on attending to show your support.

Our next meeting is on Friday October 8th, 2010 at 7:30pm at the Spencerport Wesleyan Church. There's a map included with this Journal to show you where we meet if you haven't been there before. Please plan to attend what should be a most interesting evening.

Thanks!

73

Dave Hallidy K2DH

Secretary Report

Tom Jennings, KV2X

Rochester VHF Group Meeting Minutes for September 10, 2010

The general meeting, held at the Spencerport Wesleyan Church, was convened at 1948 local, by the Chairman, Dave, K2DH. Dave asked everybody to introduce themselves and tell what they did ham radio wise over the summer. Attendees talked about their summer-time ham radio activities.

Attendees were KV2X, WO2P, N2KXS, N2YGG, K2DB, K2TER, W2CNS, AF2K, WB2BYP, K2MTH, K2DH, Gloria Butterworth and Ed Braimen

Irv's, AF2K, work refurbishing the RVHFG Banner was acknowledged.

Motions to accept Journal content:

Minutes from May's meeting – Motion to K2DH accept, second by WB2BYP,
Treasurer's report -- Motion to K2DH accept, second K2DB

Old Business

Beacon status was discussed. There is a possible new site at N2PA, need to check out, Bill and Dave will get it resolved ASAP if it is workable.

New business

Fred asked about the website getting spammed. There was a discussion on what we are doing about it.

We talked about contests this weekend. Everybody was encouraged to get on the air. It was noted that activity is less than it used to be. We need to get young blood involved. Internet has an impact in reducing activity. Young people seem not to be interested in going to technical fields. A very active discussion followed on how to increase activity. No solutions. We decided to inquire to the ARRL on what they suggest to attract new members.

Dave motioned to close the meeting, second by W02P.

Program:

WB2BYP talked about putting up his 28 ft dish

Dave, K2DH, talked about his DEMI Synthesizer board and 2304 transverter project

Bob, W2CNS, showed his tower mounted, 1296 MHz LNA and 50w PA box.

Fred, WO2P, showed his mini ATV repeater

Rochester VHF Group Treasurer's Report – September 2010

CHECKING ACCOUNT

<u>Previous Balance</u> (as of 10/08/2010):	\$2,025.09
Income:	
Membership dues	\$30.00
Donations for food at meeting	\$9.00
Expenses:	
None	\$0.00
<u>Current Balance</u>	\$ 2,064.09

*Respectfully submitted,
Tom Jennings, KV2X, Treasurer*

The Vice Report October 2010

For Friday October 8, this month's RVHFG meeting, we switched with the plan for November in order to better fit the presenter's schedule. On 8 October we will present Fred Miller WO2P and Judy Stonehill N2KXS with the topic of utilizing Amateur Television to fill a requirement for emergency communications in Monroe County. They have some interesting portable hardware to do the job, and an equally interesting story as to how to solve some of the propagation difficulties in a cluttered urban environment. Those of you who came to the September meet-

ing got a little taste of what they are doing, so we are looking forward to a more in-depth discussion and demonstration.

On Friday November 12, we are looking forward to the visit from Jeff Ach, W2FU who will be updating us on some of the new technology in use with Green Heron Engineering. Jeff's GH Everywhere is a pretty clever problem solver for the dense interconnection environment at any multi-band station, and really is an impressive how he has integrated it into his HF/VHF/UHF contest station.

As is the usual at the RVHFG meetings, we go around the room and have a quick "Who's doing what to whom and with which" session, often bringing up a lively discussion. If you have anything new, bring it in and show it around. I have a new 432 MHz Preamp, and will bring it to the meeting. I'm in the throws of getting the hydraulic ram on the 28' dish, and running a lot of cables. Did you work the 222 Sprint? There were a surprising number of stations on, and in a couple of hours I worked 9 grids with good signals, SSB and CW. Some of the guys working from the hilltops and roving did pretty well, and I am anxious to hear the results.

This in from Mark, K2QO:

Buddies are good.

From: Mark Adams <msadams60@gmail.com>
To: Dick Stein <k2zr@arrl.net>; rvhfg_general@yahoogroups.com
Sent: Wed, September 15, 2010 9:12:36 AM
Subject: [RVHFG] Some VHF Reports of Note

Reports from K1WHS and N6NB. Wayne operated QRP Portable and demolished the previous record by using his lunchbox buddies.

<http://lists.contesting.com/archives/html/3830/2010-09/msg00913.html>

<http://lists.contesting.com/archives/html/3830/2010-09/msg00912.html>

73,
Mark K2QO
FN03ra

The Monday Night and Thursday night nets at 2100L on 144.260 USB have been well attended, but could always use more check-ins. It is a pretty informal net, so I would encourage you to stop by and checkout your gear. We go to 50.200 USB at 2130L and if there is interest up the bands. It is a great way to keep aware of the band activity, and see the differences between station antennas, power, polarization and generally the "tropo circle" that you can work in routine conditions. Check-ins over the past month have been some of the usual suspects as well as some interesting not-so-locals: W2UAD, Ken, KA2EKI AI, WA2ZNC Len, K2DH Dave, N2DCH John, KA2LIM Ken, KB2BLS Bill, WB2SQS Mike, W2TAU Paul, WA2ZNC Len, K2QO Mark, WB2GFZ Freddie, KC2TEP Gary, David AA2YI all have stopped by.

I have received some great feedback and suggestions recently from Mark K2QO, Ken KA2LIM and Ev, W2EV, with some ideas on topics for club meetings. Thanks all, and please keep it coming.

September VHF Contest Activity

K2QO/R

The two weeks leading up to this contest were an absolute disaster. Everything broke. Murphy was everywhere and living large. The laundry list of issues spanned charts. Broken antennas, computer logging problems, vehicle setup issues, an amp that would not key properly, and broken cables of all sorts. The number one issue though was mostly my fault and it was finally resolved by the unbelievable customer service at Elecraft. I'll get this one out of the way up front.

I could not get my newly built Elecraft XV432 to align after the initial build which was just 8 days before the contest. A flurry of emails on the Elecraft reflector brought lots of great ideas, none of which panned out. But one respondent was very helpful. The designer of the XV432 and member of the Elecraft team was on board. Forty emails with Bob had narrowed it down to a couple of options. So three days before the contest he overnighted me a SMT MMIC which did not fix the transverter. At this point, I thought that Murphy and the fat lady were warming up for victory. But not so fast! Bob then told me he was going overnight his own XV432 from CA to WNY for contest. **WOW! Now that is Elecraft-style customer service to the MAX.** I received the package on Thursday, got it integrated and my rover partner and I left for western CT on Friday as planned. Elecraft saved the day! I should mention that the XV432 was needed because of band distribution and operational redesign. 432 and 222 were slated for duty with my K2 from the uW position in the rear of the rover while the front seat commanded 6M and 2M.

September is the month that my normal rover partner takes vacation and my substitute partner steps up. Dick, K2ZR (the cZaR of CW as we call him) told me he would go, but changes were necessary. ZR wanted to operate from new locations, see different sites and make this more of an adventure. I reluctantly agreed to go along because operating from known locations is a guarantee of similar results and I did not want to risk a lower score than previous September efforts. Turns out I had nothing to worry about.

On Friday around lunch we left my Clarence QTH and headed to ZR's friend's country estate in Norfolk, CT which is next door to our first operating site, Dennis Hill. We stopped to check out a location in FN23, some overlooks on the Teconic State Parkway and arrived for dinner in CT at sunset. The deluxe accommodations were at ZR's Key West friend's country estate featuring multiple gourmet meals that were simply outstanding. Friday evening's meal was a delicious roast pork loin, with home grown mashed sweet potatoes, homegrown Swiss chard, and delicately prepared wild puffball cakes that were grilled to perfection. Add a couple bottles of red wine followed by a homemade fruit desert and vava-voom, we were happy hammies. For breakfast we had Cuban bean café con leche, fresh squeezed grapefruit/orange juice, Finnish pancakes with fresh maple syrup and bacon; wow! After a super productive afternoon of Q's on Dennis Hill we headed back to our amigo's country estate for another fine dinner. We started with an appetizer homemade crab cakes/tartar sauce, homemade Key West Pink Schrimp soup, homemade breads and another outstanding desert. Man were we ready for FN 32 or what!

Remember Murphy? One of his success stories was the destruction of the feed point on my 8-el rover beam which I discovered on Monday before the contest. A call to a ham dealer in OH bought me a new 2M7 which I assembled and installed in leisurely fashion Saturday morning. What a treat being 5 mi-

nutes from the first grid assault. After a trip to the hardware store 2 U-bolts of the correct size, the rover was ready to go.

Dennis Hill in western CT was awesome. True, it is blocked in many directions on the uW bands, but we were only carrying the lower 8 on this trip so I was not too concerned. And the results spoke for themselves. With a bit under 4 hours spent on the hill, the QO rover team set a personal best for QSOs at one rover stop. The activity was off the charts! These guys in New England really know how to show a rover from WNY a good time. Then it was on to another gourmet meal at our host's estate. By this point, I was wondering if we should simply park on Dennis Hill, change our call to /1, and enjoy gourmet dining for the balance of the weekend. But FN32 was calling so on to a Teconic Parkway overlook to make a few QSOs.

The next spot to be conquered was FN23. Our "secret" spot near Little Falls produced some good Qs but it was getting late. Our host for the evening was running the contest, and being a night owl, he really didn't care what time we showed up. The hospitality at the 1842 hamshack/farmhouse/cottage was fantastic and after a super bacon and eggs breakfast we were off to try the "secret" spot again. It was here that I realized that propagation was funky. Signals were up and down and we had trouble anyone on the microwaves. By this time, we were running super late and it was clear that would not be able to make normal length stops in the remaining 5 grids. So we hashed out a new schedule and off we went.

FN22 is usually one of our best grids but this time out is was just OK. So, we proceed on to FN12 and the biggest blunder of the contest. The GPS wanted us to take the NYS Thruway but somehow we took the slow roads to our proposed next stop. Along the way we studied the map and discussed where not to stop to save time. While this discussion was taking place we ran across the rover team of K2LDT and K2LDU in FN12. They were parked making some Qs to the south. A quick chat and run of the bands infused us with new enthusiasm to forge ahead. After what seemed like hours we arrived at FN03 to make a few Qs and claim the grid.

There was simply no time to mount a real effort in FN12, a grid that is traditionally very good. Instead we got a pizza to go at the usual place in Leroy, NY and headed to our favorite FN02 location. As we approached the stop in FN02, we made some Qs and this snowballed into loads of stations trying to work us prior to setting up. What a fire drill trying to setup the rover, get bite of pizza and work a pileup of 10 guys deep while waiting for the computer to fire up. But it was fun and we got most everyone in the log. FN02 was also good for some very good long range contacts to the west in OH, MI, and IL on 2M and 222.

We ran right up until 11 p.m. local time, the official end of the contest. At the time, I knew that this was going to be our best September effort to date. What we did not know was that this was all done in conditions that most contest reporters have deemed to be below normal to normal.

After having a week to think about the events of the contest weekend a few items come to mind.

1. When traveling to FN32/31, take along 5 and 10GHz! It is generally not worth the effort here in the Buffalo/Rochester area, but once you get to NEWS Group territory, it would be used.
2. Build new equipment MONTHS in advance, not a week or two. The whole 432 transverter snafu could have been avoided.
3. Continue to work on inter-station QRM. Despite filters on every band, you simply cannot get away from interference when you run 150W on 2M and uW bands fed with 2M IF.
4. Build a new mast for the low band loop antennas. When the 2M omni is the same height above
5. The vehicle as the other bands, bad QRM results.



K2ZR and K2QO



222 thru 3 Gig Station



K2QO Rover Mobile

-- K2QO

KA2LIM

Preparation for this contest really started during the August UHF contest, with discussion about some antenna's to add to the station, so at the start of this contest there was a lower stack of 2

Omni's for 2 meters and 222 and a 4 stack for 432. I also added rotor's on the LVA antenna system on these three bands.

Ken and Al went to the site on Friday and got the awning for the kitchen set up and did a basic check thru on everything and all was good to go for the contest. Ken arrived on site at noon followed by Al and the rest of the crew arrived by 12:45. Operators were: W9KXI-Al, NX2W-Gregg, N2SLN-Lu, WA3CSP-Larry, N2IK-Walt, KV2X-Tom and KA2LIM-Ken. KB2YCC-Rob was on a trip and N2LID-Dave had a last minute change that kept him from operating. We ate lunch at 1pm and went over the changes and additions to the positions and were in the seats and ready for the clock to strike 2.

The contest started and immediately a problem developed on the 2 meter station. The transceiver would cut in and out, audio would be distorted and then clear up and be clean. Then the amplifier would cut back and the power output would drop off and there would be interference with the 432 station. All connections were checked with no remedy to the problem. The transverter was taken out of line and just the IF rig hooked direct to the amp and still the problem remained. So, Ken went home to retrieve another if rig and a 2 meter back-up amplifier. Meanwhile an old Kenwood TR-9130 with a solid-state amp, our microwave liaison rig, was put in line to keep us on the air. Ken monitored the 2 meter frequency while returning to the site and still heard an audio distortion on the signal. Arriving back at the site, the rig and amplifier from home was installed and guess what? The problem was still there. Murphy said: "I ain't leaving".

So next, I separated the two 50 amp power supply's that are run in parallel, that supply the 12.5vdc to the rigs and accessories on the 2M and 432 side of the station with one running the 432 position and the other for 2M. There was a slight improvement but still a problem. So, now Al and I proceeded to check the voltage on each power supply with a voltmeter. PS #1 showed 11.64 vdc and would not go up or down when the adjusting knob was turned. PS#2 would show 11.5 to 15.5vdc when the adjusting knob was turned. BINGO! We've got a bad PS. So we put a new (spare) PS in and everything was operating as it should.

Oops, now the 432 if rig is showing high VSWR from the transverter. What the heck is going on? This worked perfectly for the June contest and the UHF contest. So, I pulled the transverter out of line and just run the FT-847 and everything is working correctly. Oh yes, could not get the tube amp for 432 to work so we limped along with a 100W brick, but it worked.

The 2M station was intermittent or off the air for just over 3 hours and was still the work horse band for this contest with the highest Q's and grids of our 4 bands. 6M and 222 just plugged along with no issues.

Saturday evening, Keith, the guy who owns the land and lets us have our contest station located where it is, showed up and ate some food, drank some homebrew and got a tour and rundown on how things work and was impressed and had a good time. We got to keep our host happy.

Now it's time to cover the food department because we get together to eat, drink homebrew and contest in that order. There were subs for lunch on Saturday. Chips and Doritos. Tom brought some great homemade salsa that was hot - WOW, it burned on the way in on the way down and on the way out but it sure was good. There were burgers and dogs - gone. Chocolate chip and sugar cookies - almost gone. Shrimp - gone. Mini candy bars for shacking - gone. For breakfast on Sunday morning there was blueberry pancakes with real maple syrup and scrambled eggs, sausage patties, ham slices and home fries with diced onions and red pep-

pers - gone, and a couple of pots of coffee - gone. Walt did a bang-up job preparing breakfast. Thank you, Walt.

Larry showed up with more cookies and Al plugged in the crock-pot of chili to get ready for a late dinner and you guessed it, - gone. Ken brought a 5 gallon keg of just taped AS stout and a 1/3 keg of Cowsnot stout and the last mug was drawn at 9pm Sunday night with the keg blowing just air. What a thirsty bunch.....

Now let's talk about the contest a bit. Needless to say there were no band openings at this location. It was flat, flat, flat and to top it off the activity was way down from past years. We really struggled to make contacts. We sat with the all the voice keyers calling CQ and not putting a contact in the log for an hour. This was not a one time occurrence but happened several times during the contest. A lot of call signs missing from the log this time that have always been there in other contests. If not for the ROVERS, there would have been even less contacts.

A special thanks to the following rovers who were consistently there as they moved from grid to grid; K2LDT/R, AB2IY/R, VE3SMA/R, VE3OIL/R, VE3CRU/R, WA3PTV/R, K2QO/R, NN3Q/R, W1RT/R, KE2ME/R, N3XUD/R, W1AUV/R, KC2PLJ/R, KB3STA/R and W2TAU/R.

Without you guys and other rovers who I missed listing here, this would have been a real bust.

As long as I'm on the soapbox here, let me say that the clubs did a mighty fine job with their members, of NOT getting on the air to support activity for the contest. Not just the local clubs but some of the better known VHF clubs in a 300 mile radius. Off the soapbox.

Our total score was way down, especially for 4 bands when we turned in a score of 105K for the CQWW contest with just 2 bands. So here is the breakdown by band and the score.

KA2LIM Sept VHF Contest Summary		
Band	Qs	Grids
50	176	37
144	224	44
222	66	27
432	77	32

Total score - 96040

Another VHF contest season is over and as usual we achieved our goal of Having Fun first and contesting second. Don't forget the fall sprints.

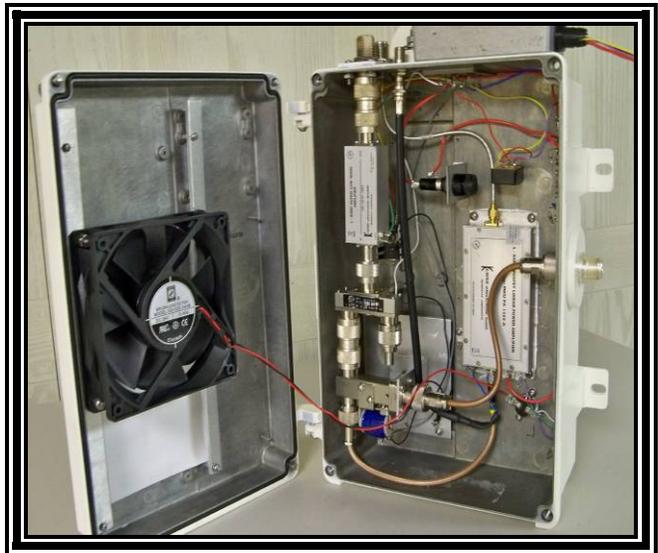
Look for you in the January 2011 VHF contest.



KA2LIM Contest Site

Ken, KA2LIM

W2CNS's Remote PA and LNA for 1296 MHz



Bob brought in his Remote PA and LNA for 1296 MHz for show and tell at the September meeting Above is a closed up view of the box containing a HEMT LNA with a 0.4 db noise figure and 50 w PA. On the right, is an opened up view where you can see how nicely the PA, LNA and associated relays are laid out. Power and sequencing signals are input via the shielded box on the side with the coax connectors to the right are to the transverter. Antenna connector is on the left. Photos by W2CNS

Classified Listings

For Sale By K2DH:

ICOM IC-271A All-Mode 2m transceiver, 25W, with internal GaAsFET preamp, mike, DC power cable. Case has scratches, but unit works just fine. \$300 OBO.

Heath HM-102 HF Wattmeter. Good conditon- case has a small dent in one side, but not bad. Works perfectly. \$45 OBO.

AM-6154 (FAA) Amplifier for 2m. Modified by me, works very well, puts out a solid 400+W (500 saturated), with about 8W drive. Include T/R relays. \$350 OBO.

Hewlett-Packard 8970B Noise Figure Meter and AIL 7618E Noise Source (good to18GHz). I bought this figuring I'd need it all the time- I've used it about twice. It works perfectly, is in EXCELLENT condition. Includes manual on CD. I paid \$1800 for it in January of this year, will sell for \$1400.

Hewlett-Packard 141T Spectrum Analyzer Storage Mainframe, 8553B Low Frequency (to 110MHz) RF section, 8555A High Frequency (to 43GHz) RF section, 8552B IF section, all manuals. Unit works perfectly, storage function on display still works fine, trace is bright and strong. \$600.

Contact me on any of this gear if you're interested but don't like the prices.

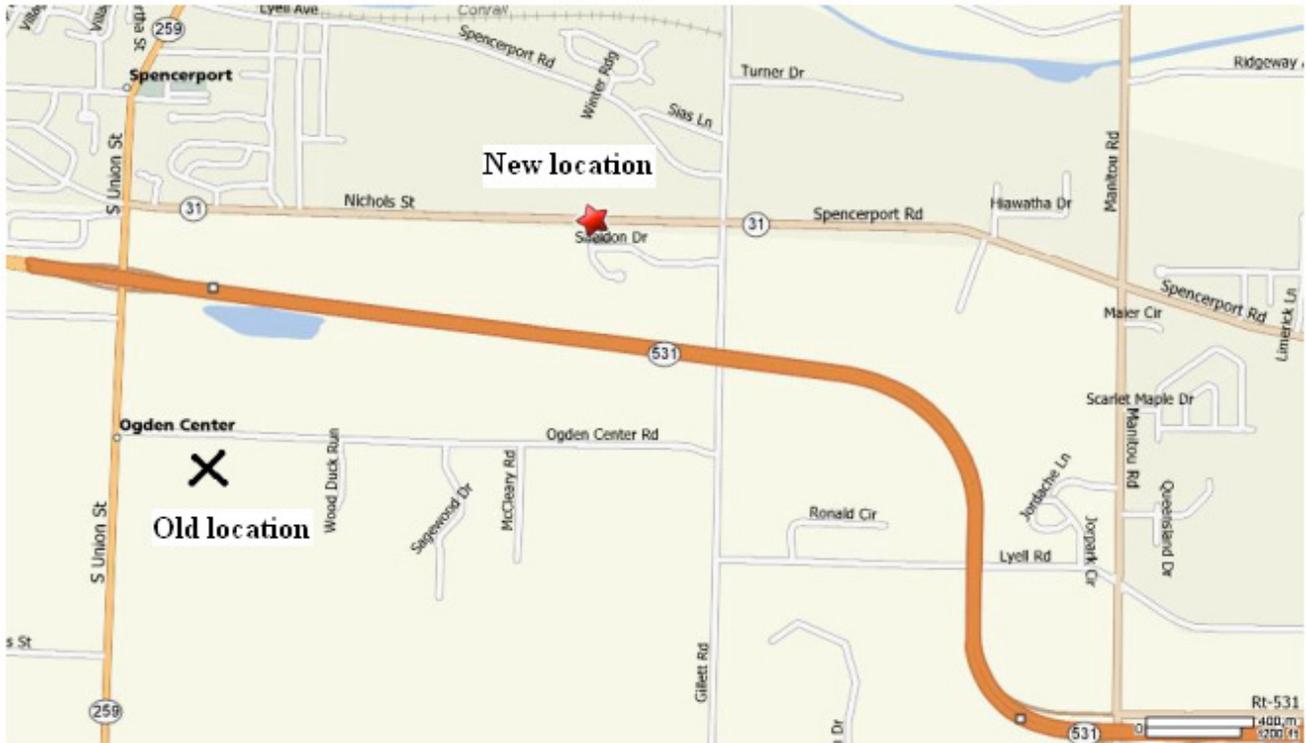
Email me if interested: k2dh at frontiernet dot net.

Thanks for looking!

73

Dave K2DH

Meeting Location and Directions



Spencerport Wesleyan Church on 2653 Nichols St. (actually Hwy. 31).

Directions from Rochester:

531W exit RT. to 259N

259N turn Rt. on 31E (first Rt. at traffic light)

Look for Spencerport Schools Bus Garage on left

Take first Rt. on Sheldon at A-framed church, park in rear lot.

Enter gray metal door under fire escape.