

The VHF



Journal

Volume 64, Issue 3

November 2011

The next regular meeting of the Rochester VHF Group will be Friday, November 11th 2011 at 7:00 PM at AWA Museum, Bloomfield, NY

Map and directions in back

In this issue:

The Chairman Speaks!
Secretary Report
Treasurer's Report
September VHF Contest at K2LIM
Sun Spot Cycle 24 Progress
Next meeting
Classified Listings

Topics: Tour of AWA Museum

The Chairman Speaks! John Stevens WB2BYP

Groupers: The Rochester VHF Group is proud to announce that we will be hosting Microwave Update in 2014. It presents a real challenge, to pull together a nationally recognized event in support of UHF and Microwave experimentation, and showcase the Rochester ham community once again. Several of us, Bob Nezelek W2CNS, Dave Hallidy K2DH, Ken Kent KA2LIM and I attended the 2011 Microwave Update in October in Enfield, CT, and saw a variety of presentations. The event was hosted by the North East Weak Signal Group (N.E.W.S Group), and was combined the yearly East Coast VHF/UHF Conference. It was entertaining and educational, not only from the depth of technical presentations seen, but from the perspective of how an event like this is hosted. Some of you may remember that the RVHFG hosted this event almost 20 years ago (1992) and many of the principals are still around. We are hoping that this will be a good draw on the local/regional ham community in general as well as our Canadian VHF/UHF/ Microwave experimenter neighbors. Stay tuned in coming months for discussions and planning. We would welcome all ideas, from facility to program content.

Continued....

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

The Chairman Speaks! continued...

... One of the highlights of MUD 2011 was a visit to the MIT Haystack Observatory in Westford, MA. A couple of images are attached.... There are several impressive antennas at the facility. The most accurate antenna is 120 ft diameter with a 100 micron RMS error on the surface! The antenna is used for imaging at 95 GHz. Also at the facility, the Millstone Antenna is one of only two steerable 150 ft dishes still in



existence, the other being at Stanford University in California. Now there is an antenna! Here is a link to the site for the curious: <http://www.haystack.mit.edu/obs/haystack/index.html>



We are all looking forward to the next meeting of the RVHFG at the Antique Wireless Association, starting at **1900** local on Friday 11 November 2011. See the info and map available elsewhere in the newsletter or on the club website at www.rvhfg.org From the Monday and Thursday RVHFG 2M Net, Fred N2LXD lets us know there are several nets going in his area (Ripley NY).

- Mondays 2000 local on AM 144.45
- Wednesday 1900 local 50.400 AM
- Fridays 2000 local 144.210 USB
- Sundays 1900 local 50.190 USB

Also note the North East Weak Signal (NEWS) Group meets on Thursdays at 2030 local on 144.250 USB.

Watch the newsletter, save the RVHFG website in your favorites and check in to the Monday and Thursday night Rochester VHF Group SSB nets at 2100L on 144.260 USB for the latest info and updates.



Hope to work you on the bands.

John, wb2byp

Secretary Report

Tom Jennings, KV2X

Rochester VHF Group Meeting Minutes for October 2011

Meeting opened by Bill, K2TER, at 1945 welcoming everybody to the meeting. Bill announced that the minutes from last meeting and the treasurer's report were published in the Journal and asked if there was a motion to accept them as written. Ken W2UAD motioned to accept and Frank K2OS seconded the motion. Bill then asked everybody to introduce themselves and mention what they did vhf wise this past month.

We took a minute to remember Howard, K2AN.

Attending: WB2GFZ, WB2QCJ, W2UAD, W2EV, KV2X, K2OS, K2TER, W3OAB

Old Business:

W2UAD said that the 144 MHz mystery signal is still present and still does not know source of signal. Dean says he knows where 2 of these signals are. One is located on Atlantic Avenue near the Penfield school administration and another on Gananda Parkway. Dean said put a 2m fm rig in your car drive around and you will locate the source quick. Deans guess would be a security device.

At the next meet at the Church, we plan to run the cable.

New Business:

MUD hosting: John, WB2BYP, and Dave, K2DH, are at MUD today.

Tom asked for material for journal.

Dean, WB2QCJ, thought the antenna article by AB2YI published last month was great and was QST quality.

Bill asked if there was motion to close the business portion of the meeting. Dean made the motion and Frank seconded.

Meeting adjourned at 2040.

Program John, W3OAB, showed pictures of the raising of W2FU's 40m beam.

Ev gave a very interesting talk on PropNet.

Rochester VHF Group Treasurer's Report

CHECKING ACCOUNT

<u>Previous Balance</u> (as of 10/06/2011):	\$2,002.09
Income:	
Dues \$10.00	\$ 10.00
Expenses:	
Post Office Box \$46	\$ 46.00
 <u>Current Balance</u>	 \$1966.09

*Respectfully submitted,
Tom Jennings, KV2X, Treasurer*

September 2011 VHF contest at K2LIM

Preparation for the September VHF contest started about two weeks prior with a work party day that consisted of mowing around the site and brush trimming along the access road and putting up the newly built 4x4 6 meter beams.

Saturday of the contest, Ken arrived on site just before noon followed by Al and by 1245 the rest of the team was on site. Equipment was turned on and checked and ole' Murphy stopped by. There was no direction on the indicator meter of the rotor control of the new 6M 4x4 stack. All the wire connections were check and still nothing. Oh well, we could and did look out the window to check on the direction it was pointed and after about an hour into the contest, the meter started working.

The next thing that ole' Murph touched was the 2M station. VSWR indicated a dead short on the stacked beams and was high on the LVA and upper omni stack. Ken climbed the tower and pried the plug from the bottom of the power divider on the LVA and water poured out. Then up to the beams and by standing on top of the tower he could just reach the power divider for the beams. He pried the plug from the bottom of that power divider and water poured out. The top omni's power divider could not be reached. Then re checking the VSWR on the two antenna systems showed the LVA to be back to flat and working A-OK but the beams was still showing a high VSWR. Removal of the power divider the day after the contest showed that water had caused a short from the center conductor to shield on one connector of the power divider causing the problem. A fix has been made so this problem will not occur again. Next the stacked omni's for 6M showed a higher than usual VSWR so am sure water is the problem here also. This will be corrected on another day to the site. After all we had over 8 inches of rain and high wind from the hurricane and tropical storm that had got us in a two week time period.

Everyone got the food set up in "The Hornby Room", enjoyed a sub for lunch and was ready for the start of the contest.

About 45 minutes into the contest, the logging program crashed and all the data was lost on the server. Everyone had been hand writing on a note pad at each position and there was current data on each laptop at each position so nothing was lost. Ken got a "stand alone program running on each computer and logging continued, just no network to send messages and see who had been worked on what band. After about 4 hours of working on the server, Ken got the network running on all but the 2M computer. Late at night all the log data from 6, 222 and 432 had been merged to the server, manually and those four computers were talking to each other. The 2M computer continued to operate as stand alone which was only an inconvenience that did not let us see the total score until that data was inputted, again manually, the day after the contest.

Ken took the computers home to work on the problem. After about an hour of checking it was discovered that a necessary file within the program was missing. A quick un-install and re-install of the program on the server, correcting the path on all the other computers and everything was back operating just fine. Needless to say, there are now back-up folders with the complete files that will provide a quick fix should this ever happen again.

Band conditions for this contest were flat, flat, and flat from this location. We got none of the morning scatter on 6M that some experienced in other parts of the country on Sunday morning, and got none of the aurora that many others worked. All of us noticed that the signals received on the bottom four bands seems to be at a very low angle on both receive and transmit at this location which was indicated by the antenna system that we had to use. I might say at this point that the newly added 4x4 stack on 6M proved to be the work-horse antenna system for that band. We heard and worked stations that could not be heard on the 7x7 stack and or omni's. The new 4x4 stack is one wave length above ground which no doubt was the contributing factor with the low angle of signals coming into this location.

With the network being down we were guessing at our numbers as compared to last year and were thinking we would be close or maybe just above, more on the results later on.

The food department was GREAT again. Subs for lunch on Saturday, There was macaroni salad, potato salad, two kinds of salsa for the corn and potato chips. Fresh watermelon and cantaloupe, all-beef kosher dogs from the grill, baked beans and of course home-made stout and red ale plus an assortment of other specialty beers and soda and gator-aid and water to was this down with. On Sunday morning Walt and Tom did up a pancake, scrambled egg and sausage breakfast along with orange juice and coffee to top it off. For Sunday afternoon and evening eating we had pulled-pork barbecue sandwiches plus the salads and beans and of course more beer.

Sunday afternoon we could hear the static crashes on 6m which indicated a storm coming. About a half hour later we saw it coning from the SW moving toward the NE. When it got due south of us it stalled, about 10 miles away, with lots of BIG lighting. Suddenly it started coming due north straight at us. We quickly decided that we would turn things off, ground the antenna's and wait it out. The storm moved in and then stalled right over top of us with lots of that BIG lighting. No lighting hit on us or near by, thank GOD, but waiting for the storm to move on was the safe thing to do. Radio contest is not that important. After an hour we were able to get back up and running.

Having the capability to work FM on 2, 223 and 440 with out stand-alone FM radios and antenna's proved to be an asset which resulted with more FM contacts this contest, mostly coming from south and east of us, than all the contests combined. I might note here that we consistently worked VE3CRU/R on 223 FM out to around the 200 mile range who was running 25 watts. We also worked a station in Ohio and another station in FM29 with no problem. It should be noted here that activity was down from the area affected by flooding from the hurricane and tropical storm. Understandable and we pray for the folks.

The crew this time consisted of KA2LIM-Ken, KB2YCC-Rob, W9KXI-Al, WA3CSP Larry, N2IK-Walt and KV2X-Tom. Even though Murphy showed up and caused some annoyances, we worked thru them and had a good time. Our score was a bit higher than last year with the following breakdown:

Band	Q's	Grids
50	167	41
144	217	49
222	67	34
432	81	32
Total score:		106080

Best of all, we had FUN and that's the bottom line.

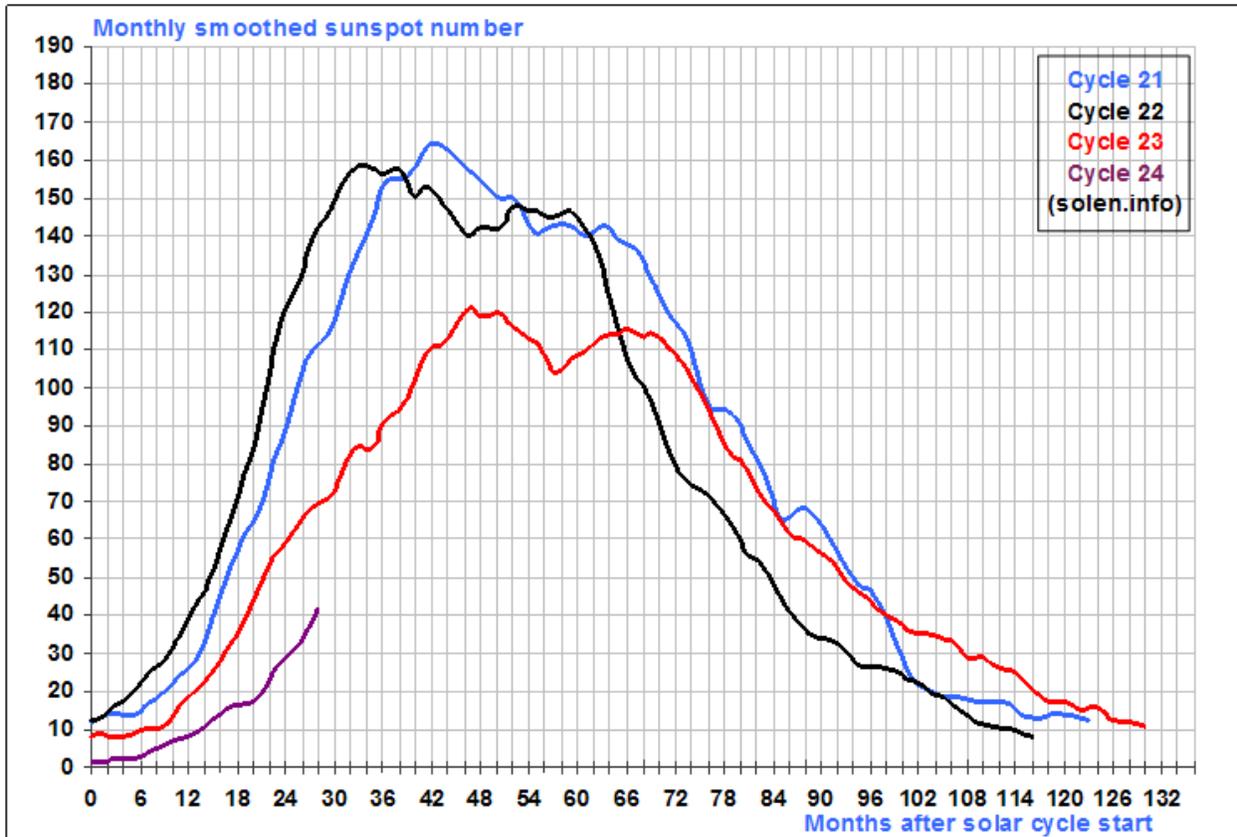
Ken
KA2LIM

How is Sun Spot Cycle 24 Progressing?

By Tom Jennings, KV2X

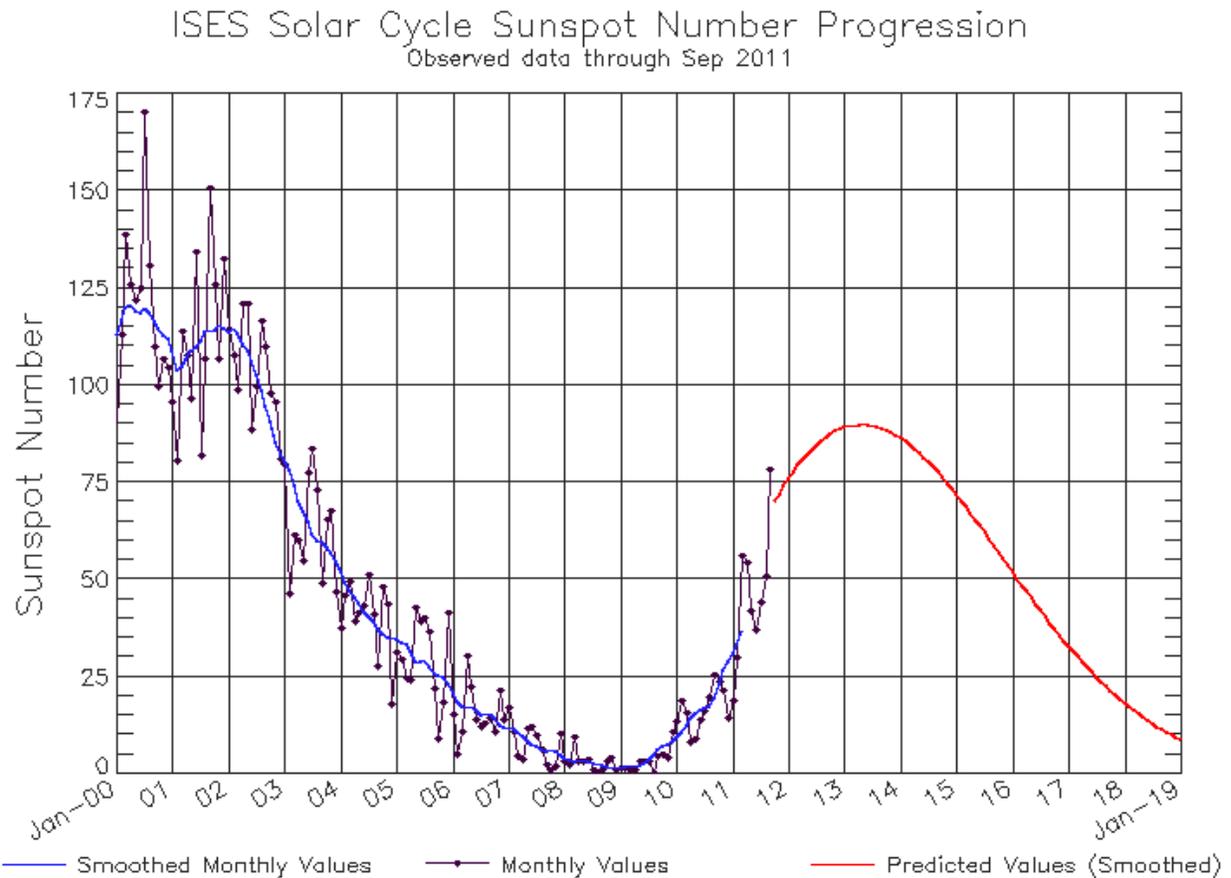
I have been asking myself that question for a while now. There has been much discussion regarding how Cycle 24 is getting off to a slow start and probably won't peak as high as previous cycles. You may have noticed that 10 meter activity has been picking up lately. In fact I was pleasantly surprised when on my way to work the other day, I called CQ from my truck on 28.035 and a KP4 came back with a 559 and he gave me a 579. Wow! Usually I don't hear anything.

Today, I checked the K7RA Solar Update on the ARRL web site and Tad mentioned an interesting chart. The chart compares Cycles 21, 22, 23, and 24. See chart below.



As you can see, Cycle 24 is starting off with a lot less activity than other cycles and is likely to peak between 50 and 70 sometime in 2013 but other models indicate the peak could happen in 2012. The X axis in the chart is the number of months since the cycle started, while the Y axis is the monthly smoothed sunspot number.

There is another interesting chart which shows the solar cycle sunspot number progression from January, 2000 until September, 2011.



Updated 2011 Oct 4

NOAA/SWPC Boulder, CO USA

This chart is updated each month and the update for November should be available by November 9th.

Sources:

<http://www.solen.info/solar/cyclcomp.html>

<http://www.arrl.org/news/the-k7ra-solar-update-189>

<http://www.swpc.noaa.gov/SolarCycle/index.html>

November Meeting at Antique Wireless Association Museum

Our next meeting will be at the Antique Wireless Association Museum at **7 PM** sharp. We will initially meet at the new AWA Campus located on RTs 5&20. There will be a brief business meeting followed by a tour of the museum. As part of the tour, the 1KW Spark Gap Transmitter will be fired up! There are some Harris RF radios on display also. Directions to the museum can be found at: <http://www.antiquewireless.org/museum/musmap.htm>

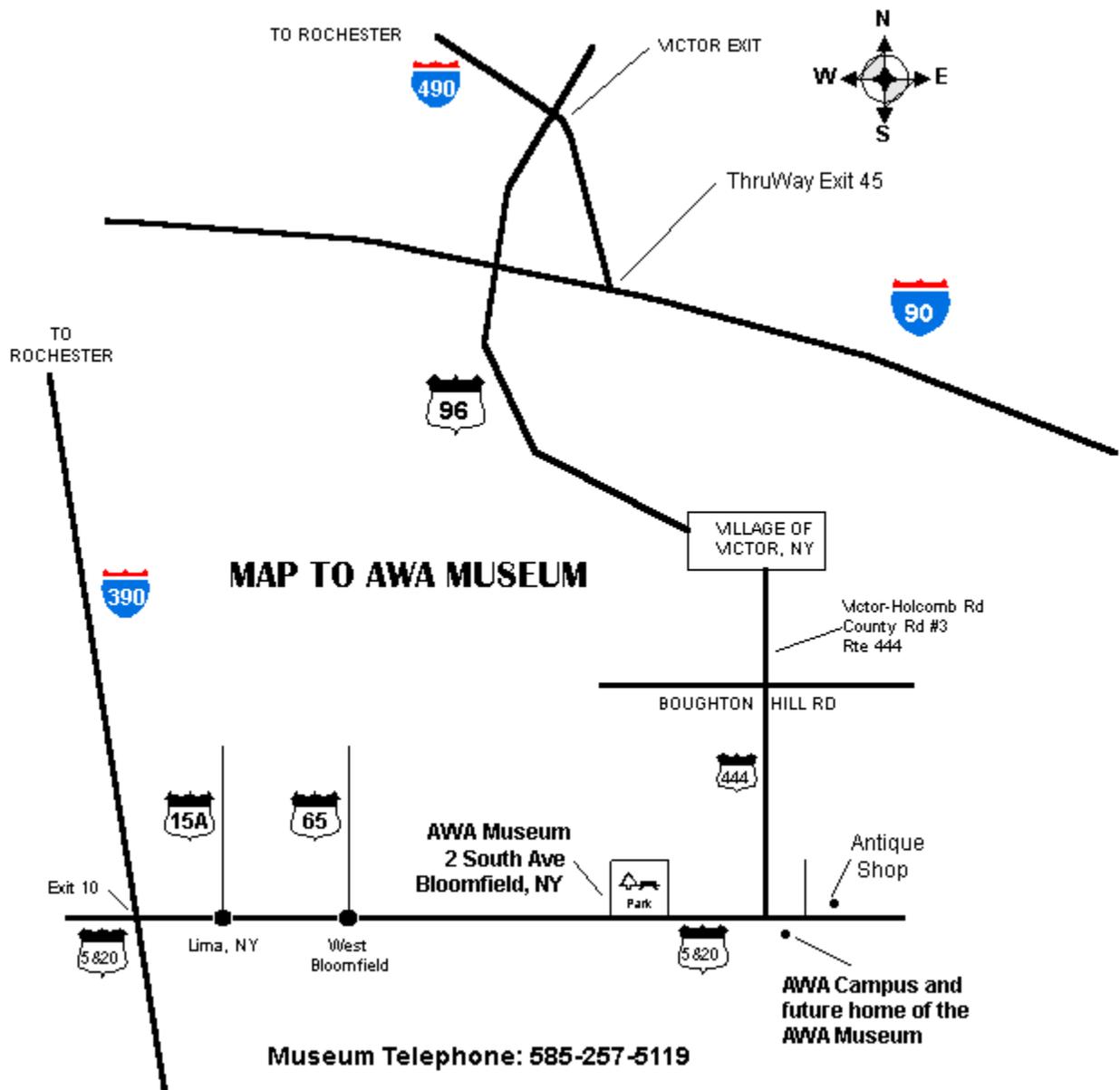
Classified Listings

For Sale: A galvanized tubular 40 foot crank-over, crank-up heavy duty antenna tower. The 2 cranks (boat trailer cranks) may need replacing. Asking \$200 or best offer. Also for free are the remains of a 3 element 20 meter, home-brew beam (no balun).

Contact David L Jones, **dordavi at frontier dot net**

Meeting Location and Directions

LOCATION: 2 South Ave., (On Route 5 and 20), Bloomfield, NY
OPEN: May through September - Saturdays 2 - 4PM; Sundays 2 - 5PM,
Closed Memorial Day, July 4th. and Labor Day weekends.



For more detailed map see:

<http://www.mapquest.com/maps?address=2+South+Ave&city=Bloomfield&state=NY&zipcode=14469>