

## The Rochester VHF Group

# The VHF



# Journal

Volume 61, Issue 1

Sep. 2009

The next regular meeting of the Rochester VHF Group will be Friday, September 11th, 2009

**Spencerport Wesleyan Church**  
2653 Nichols St., Spencerport

**Map and directions in back**

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Classified

### **Topics:**

Gadget Night

## The Chairman Speaks! Dave Hallidy K2DH

Welcome to what I hope will be another great year for the RVHFG! I hope you all had a good summer, and even with all the rain, managed to get some of your ham radio projects completed (or at least started!).

I'm proud to serve again as your Chairman, especially because of the great team of Officers and Directors we have on board this year. In case you weren't at the May meeting when elections took place, this year's line-up of RVHFG officers is as follows: Dave Hallidy K2DH (that's me) - Chairman; John Stevens WB2BYP- Vice Chairman; Judy Stonehill N2KXS- Secretary/Treasurer; Fred Miller WO2P- Even Year Director; John Gilly W3OAB- Odd Year Director; Dean Keyser WB2QCJ- Technical Advisor; Bill Rogers K2TER- Past Chairman; Tom Jennings KV2X- Journal Editor. This group knows how to get things done and what it takes to make our club tick, so look for good things to happen this year!

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# The Chairman Speaks! continued...

Our first meeting of the year will be on Friday, September 11<sup>th</sup> at the Spencerport Wesleyan Church on Rt 31 (see the back of the Journal for a map and directions- it's easy to get to), and the topic will be "Gadget Night"- bring your pet project along to show off and talk about or, if it's too big to carry, bring along a real good story about it. We want members to share their station improvement activities so that other members might do the same or similar things to make their VHF+ stations better.

The club Board of Directors (BoD) held its first meeting on August 13<sup>th</sup>, and many topics were discussed. A lot of progress was made toward getting next year's banquet going- we decided waiting till the last minute, as in recent years, was a bad idea and we would have much better control of where and when the event would be held if we started early (duh!). We talked about topics for the upcoming meetings- WB2BYP has some great ideas that are sure to get folks interested (or re-interested) in attending. He'll talk about that himself, so I won't steal his thunder.

Speaking of activities, who plans to operate in the ARRL September VHF Contest? It happens to be on the weekend right after our club meeting, beginning Saturday the 12<sup>th</sup> at 1800Z (2pm local) and running until 11pm Sunday night. September is the best month for tropo, so if you get on, you might be surprised by some real DX on the VHF and UHF bands!

The ARRL 10GHz and Up Cumulative Contest (2<sup>nd</sup> weekend) is the following weekend (Sept 19-20). I know there are LOTS of 10GHz rigs around, it was a club project a number of years ago and something like 20 were built and made operational. Today, only a few seem to get used- how about we all blow the dust off our rigs and make an effort to spend a little time on Saturday or Sunday to make some 10GHz contacts with other club members? It's easy, it's fun, and again- the possibility of real DX exists, even for those with low power rigs and small antennas! Let's talk this up at the club meeting and maybe we can formulate a plan- there are lots of good, close locations from which to operate that can provide long distance QSO's on 10GHz and plenty of activity in the Northeast and Canada for those DX contacts.

The ARRL EME contest is also coming up- now you may think this is out of range for a small VHF station, but that's not true anymore. A ham with a single yagi of 10-15 elements and a "brick" amplifier of 100-150W can make QSO's on 2m EME using the so-called "JT65" or digital mode. What a thrill to make your first QSO off the moon! Others in the club will use their larger stations to make CW (and JT) QSO's on 432, 1296, 2304 and above and I'm sure that (at least I know in my own case) if you wanted to hear (and see) EME in action, you would be welcome to come over and experience it.

Well, that's enough for now- I look forward to seeing you all at the meeting, and please- if you're going to come, why not bring along a friend so they can see what the RVHFG is all about! See you on the 11<sup>th</sup>!

73

Dave Hallidy K2DH

## Secretary Report

Judy Stonehill, N2KXS

### Rochester VHF Group Meeting Minutes for May 8, 2009

The general meeting, held at the Spencerport Wesleyan Church, was convened at 2010 local by the Chairman, K2TER.

Judy, N2KXS, presented the Treasurer's report. Dave, K2DH, moved that the Treasurer's report be accepted as read. Fred, WO2P, seconded the motion which was passed by the attendees.

Attendees introduced themselves with their names and calls. They also outlined their plans for the upcoming June contest. In attendance were K2DH, WO2P, N2MLH, W3OAB, K6PSP, K2OS, W2EV, KV2X, AF2K, W2UAD, K2TER, N2KXS, and Betty Jennings.

#### OLD BUSINESS

Bill thanked Fred for making the 60<sup>th</sup> anniversary banquet such a success and for working closely with Rick from RDXA to make everything run so smoothly. There were 50 attendees. He also said that the slide show was very impressive. Alan said that he and Dave Crawford, K2DPC, had taken many photos at the banquet and put them on the website.

Dave, K2DH, gave an update on the status of the beacons. The 222 and 432 transceivers have been given to Dave. 6 meters is not doing too well – the transverter was putting out only 7 milliwatts but both 6 meters and 2 meters should be up and functional within the week.

A vote was held on a proposed amendment to the RVHFG constitution related to honorary memberships, the proposal for which was published in the latest Journal. The result was unanimous in favor of granting such a membership under certain circumstances. That membership does not grant voting rights or the opportunity to serve as a club officer during that period, normally for one year. The vote was unanimous in favor of such a membership.

A sign-up sheet for coverage of the Rochester Hamfest RVHFG booth was passed around the room in order to fill in the remaining time slots.

Irv said that the word will go out to the RDXA membership regarding the approach for the W2RDX field day effort. They will be going all out with code experts to maximize the score as much as possible. RVHFG members are asked to contact the W2RDX two-meter station. Bill made a plea for RVHFG members to contact W2RDX on all VHF bands.

A renewal note will be sent out to all people whose RVHFG memberships have expired. Those who do not renew will have their names removed from the RVHFG reflector.

Bill reminded the attendees to watch for the NY QSO Party on October 17<sup>th</sup> which will cover 160 meters and up.

It was mentioned that the 6M Sprint will be held on the day after the meeting.

## **NEW BUSINESS**

Fred, WO2P, reported that the Xerox Amateur Radio Club is holding its spring Fox Hunt tomorrow. Registration will be held at 0900 and awards will be given. Everyone is invited to take part.

Ev said that he has a temporary bidirectional multimode (PSK31 and CW) beacon on 144.288. If you hear it, send "CQ DE {your call sign}" a few times. If the beacon can decode the transmitted call, the station will look the call up on QRZ.com and post it on an internet website.

Annual elections were held. Fred nominated Dave Hallidy, K2DH, for Chairman. Dave accepted. Dave nominated John Stevens, WB2BYP for Vice-chairman. John accepted. Judy Stonehill, N2KXS, Secretary/Treasurer was nominated for Secretary/Treasurer. Judy accepted. Fred nominated John Gilly, W3OAB, for the position of Odd Year Director. John accepted. Fred will remain as Even Year Director. All four candidates were elected by acclamation.

Larry, N2MLH, moved that the Secretary's report be accepted. Fred, WO2P, seconded the motion.

Tom, KV2X, moved that the business portion of the meeting be closed. Larry, N2MLH, seconded the motion.

A thank you card from the family of Leon Ingerich (sk) for the donation sent to the family by the Rochester VHF Group was sent around the room.

John, W3OAB, talked to the group about concerns that the N2PA contest site may no longer be accessible for contesting. He covered some of the costs of maintaining the site. Russ Steenhoff's, N2KG, family purchased the current 60 acre site which now has five towers and two radio buildings with 220 power, internet, and phone lines. The contesting venue could be purchased for about \$75K. The taxes and operating expenses average \$8K per year with taxes being around \$3,500. John mentioned some possible solutions to the problem. They would need support within 3 months. Many questions were posed. John said that attendees could email him with any questions and he would relay them to the Steenhoff family.

The meeting was adjourned at 2051.

**Treasurer's Report**  
**Rochester VHF Group**  
**Treasurer's Report – August 2009 (includes June, July)**

**CHECKING ACCOUNT**

|   |                  |
|---|------------------|
| <b><u>Previous Balance</u></b> (as of 5/1/09):      | <b>\$714.17</b>  |
| Income:   |                  |
| Membership dues                                     | \$337.00         |
| Banquet 50/50 proceeds                              | 31.00            |
| Expenses:   |                  |
| Fred Miller, reimbursed for RVHFG banquet expenses  | \$246.55         |
| Dave Hallidy, reimbursed for 2M and 6M beacon parts | 92.62            |
| <b><u>Current Balance</u></b>                       | <b>\$ 743.00</b> |

**SAVINGS ACCOUNT**

|   |                   |
|---|-------------------|
| <b><u>Previous Balance</u></b> (as of 4/30/09): | <b>\$1,524.53</b> |
| Income:   |                   |
| Interest  | \$0.76            |
| Expenses:                                       | \$0.00            |
| <b><u>Current Balance</u></b>                   | <b>\$1,525.29</b> |

**TOTAL** **\$2,268.29**

*Respectfully submitted,*  
*Judy Stonehill, N2KXS, Treasurer*

**The Vice Report**

By John Stevens, WB2BYP

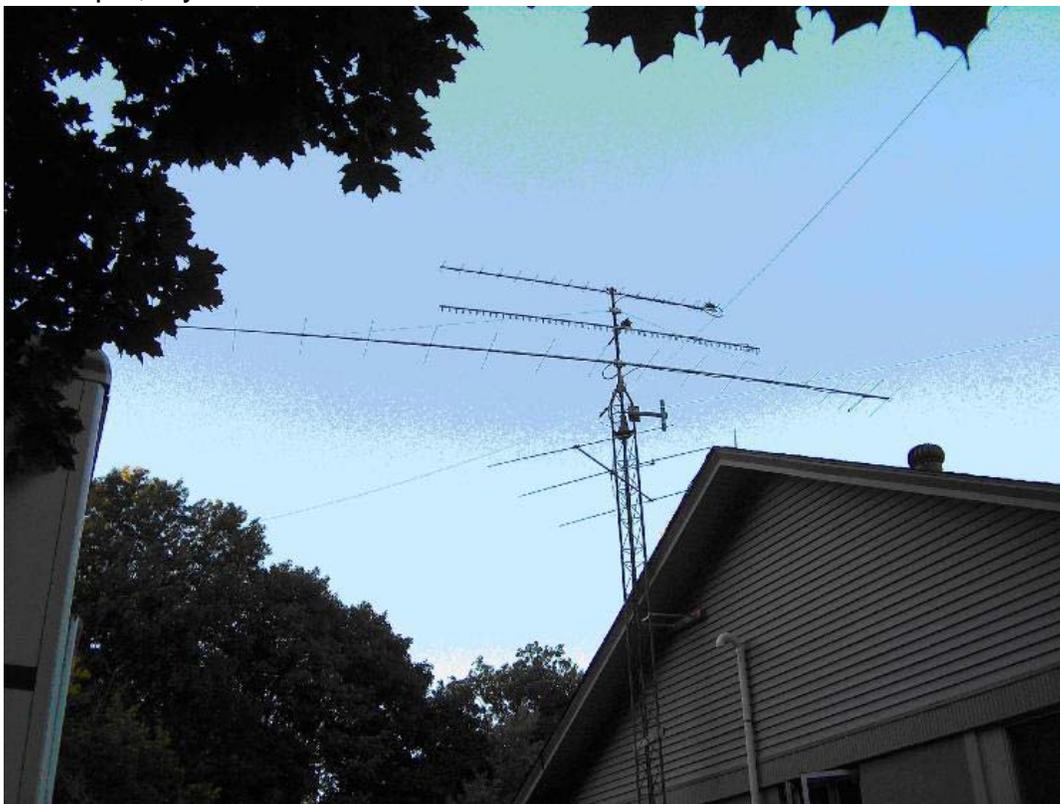
Welcome all to the Start of the 2009-1010 season for the Rochester VHF Group. As RVHFG Vice Chairman (Chair Person of Vice?) I am looking forward to an exciting year. Amongst other things, my job entails pulling together the presenters and meeting subjects, so I am hoping to facilitate some interesting topics that are both generally interest to the VHF-UHF enthusiast in all of us, as well as (I hope...)appeal the technical bone in all of our brains. To this end, I am officially welcoming one and all of you to please come forward and give me your ideas, constructive criticism and energy. Send me email at [wb2byp@arrl.net](mailto:wb2byp@arrl.net) or you can phone me up at 585-415-4973. I monitor 144.200 USB and 223.50 simplex FM often while in the shack.

Topics for meetings coming up in the next few months will include a presentation on VHF Contesting by the KA2LIM Contest Team, a visit from our Canadian Microwave buddies from the other side of the lake headed by VE3SMA, our yearly Tune-Up Noise Figure and Gain Measurement evening, a meeting with a in-depth discussion on Tips and Techniques for Relay Sequencing and Preamp Remoting, A Satellite Update, a presentation on Rovers and others still in the planning stages.

I'd like to have a section in this report each month updating any news or interesting goings-on in the area that might interest the general audience. Please pass along any bits. An Example, Ev Tupis W2EV sent out a handy email reminder about the 10 GHz and Up Contest second weekend on September 19<sup>th</sup> and 20<sup>th</sup>. I am hoping to get out for at least one of the days that weekend and make a few 10 GHz contacts. Stay tuned on that subject, I think Ev may be cooking up an article on his experiences using the Skylon Tower.

As the Newsletter goes, it is only as good as the content it gets, so please help us with ideas and articles. The easiest way to add content is to take some images of your station, your antennas your equipment desk or racks, amplifiers or latest preamp, and send it along. If you have any interesting images taken of you with your equipment, please pass it along too.

Here's an example, my modest stack of antennas on the side of the house at Area 26:



**3 el 6M, 17 el 2M, 55 el 1296, 18 el 432, Vertical Dipole 223 MHz, 160M dipole**

Those of you who came to the last meeting last year know about the presentation that was put together with many historical RVHFG hams and hamshacks from the past. I have always found it great fun and interesting education to see how others accomplish the task of getting antennas up and in the air, or organizing their amplifier rack, or handling their keylines, just organizing their equipment layout or whatnot. For many it is insight that they might not otherwise have unless they visit you in your shack, and leads to good on air dialog. I especially enjoy looking at an image of who I have been talking to all these years, so send in an image suitable for inclusion.

What do I mean by simple technical content? As an example, here's my latest revamp of the IPA driver for the 432 PA: a Mirage D1010 which takes the output from an IC-7000 up to 100W to drive the TH-347 Amplifier. It replaced my aging dinosaur pair of 4CX250B T217

Surplus Amp which I'll have to say did give me 25 years of service, and who knows how much before that in its former life.



Not that a brick amp is anything particularly special, but here is an opportunity to share an idea with others contemplating a similar application: These Mirage amps have notorious problems sensing and switching RF power, so if you can *hard key by means of a buffered keyline from the driver, and sequence the keylines*, you will probably get fault-free service. Better still, if you can follow the SSPA with a power-rated isolator on the input of the next stage it is a pretty good slam-dunk gain block to get reliable drive power. This subject is a little taste of an upcoming article for the VHF Journal. In the image, the present Sequencer is the chassis on top, followed by a keyline buffer chassis from the old transverter system, followed by the new Mirage D1010, variac, and partial view of the 432 amp etc. Not the ultimate in space efficiency, but less rack space than the old driver.

I'd like to insert an image from your shack next month...who's up next? Seriously, it is entertaining and educational to see this kind of info, so send anything

you have in jpg or bmp format. We will size it and wrap it into the Newsletter. Don't worry about being overly neat, we all know what it takes to make this stuff work. That's part of the entertainment too.

I will also be taking a crack at a re-vamp of the website this year. Stay tuned for that, we are hoping to simplify it and make it easier to update for the future. If you would like to help, it would be a great way to participate.

If you don't already know about it, the Rochester VHF Group has a Monday Evening Net on 144.260 USB at 2100 local time which has great attendance, and you may be surprised what you can hear. The Net moves to 50.200 at 2130 local, and often participants go to the higher bands to check out gear and generally blow the dust off things. Larry N2MLH has been Net Control for a while now, and he puts a commanding signal in everywhere from his location. Horizontal polarization will work best, but call in regardless and join in. You will be heard. It is a great way to stimulate activity on increasingly quiet bands between contests.

Last week on the 2 Meter Monday Evening Net, we had check-ins from KA2EKI, KC2QLJ, KB2BLS, N2MLH, KC2JKU, W2NWT, K2OS, KC2PCD and maybe some others that I could not hear but that were relayed in. On the 6 Meter Net we had check-ins from WA2GAI, N2MLH, KC2QLJ and KC2PCD. Feel free to check in and let us know what you are up to, even if just to say hi. Sometimes a technical topic is aired, other times it is just a fast round table. Sometimes DX checks in. We have had several instances of sporadic E check in's on 6 Meters. Here's a cool thing: Last week Larry N2MLH and I were quite surprised when W9ZIH hailed us from EN51 (*about 595 miles to the west!*) while we were chatting on 432 MHz SSB after the

formal net. A great lesson on the luck of tropo ducting, N4PZ was in there also banging away but we heard nothing from his 1500 watts and 4 yagis from a little further to the west of Chicago. Ron was only in for a few minutes. There's tropo propagation out there especially this time of year.

So there you are...email, call, check into the Net on Mondays, call CQ on a seemingly dead band and otherwise get active. Hope to work you on the bands

## 2009 New York QSO Party

### CQ NYQP!

Mark your calendars!! **October 17th** is the day for the New York QSO Party (NYQP). It is open to the HF bands AND, VHF, 6M, 2M, and UP. Phone / CW / RTTY / Digital. That leaves it wide open for all RVHFG members to participate and have fun. The rules were specifically written to get everyone involved. Let's all show some club spirit. Let's send, and receive some VHF signals next month during this event.

Official Web page at: <http://www.nyqp.org/index.php>

You can find the rules at: <http://www.nyqp.org/rules.php>

The QSO party coordinators K2DB and W1TY have not yet selected award categories for the VHF section of the event. They need your inputs for appropriate awards.

<http://www.nyqp.org/sponsorship.php> Is there a plaque you cannot find, but would like to sponsor, they will help you to make one up! You might consider a unique operating class, a memorial, or whatever! It's your chance to help organize and be a sponsor.

Got questions? Contact either Paul K2DB or Rick W1TY for all the answers.

Thanks,

PAUL MEYERS N2OPW/8

## FALL LICENSE CLASSES

By Ev Tupis, W2EV

Your friends and children (Teens and Tweens) may be only 9-steps away from finding out just how kewl it is to be a Ham Radio operator in the 21st Century! VHF Grouper, Ev Tupis (W2EV) will be leading RARA's Technician Class licensing class this fall (see announcement below).

The focus will be on both (1) passing the test and (2) exposing class participants to fun and practical activities for Technician-class operators. Ev is actively seeking volunteers to be "Eclectic Elmers" on a variety of subjects. EE's (didn't you always want to be an EE, after all?) will be asked to provide 15-minute, hands-on demonstrations or labs on various aspects of Technician-class operation (related to the license test). In return, EE's will receive great personal satisfaction engaging in such a worthwhile endeavor...welcoming the next generation of operator to the Rochester area.

Can you give 15-minutes of your time? GREAT! Contact Ev to let him know! A list of desired Eclectic Elmer sessions will be published shortly. Watch the RVHFG\_General e-mail list for more. Even if you can't help directly...contact Ev.

A special effort will be given to create an environment of energy and excitement...perfect for the younger crowd as well as the more seasoned. If you have kids who have been "on the border", this may be the opportunity you've been looking for! Here's the official announcement:

**Rochester Amateur Radio Association, Inc.**  
**A Not-for-profit Educational Organization of Ham Radio Enthusiasts**

**FCC Amateur Radio License Classes Fall 2009**

**Courses:** For FCC the entry-level Technician Class, General Class, or Extra Class Amateur Radio License [See [www.rochesterham.org](http://www.rochesterham.org)]

**When:** Nine Thursdays, September 24th through November 19th  
License testing will be available Saturday November 21st and the third Saturday of the following months through April.

**Time:** 6:30 PM Classes lasting for about 2 hours

**Location:** RIT Campus, Building 9  
Rooms: Technician class 1129; General class 2030; Extra class 3119  
Use Parking Lot F or J  
See map at  
<http://facilities.rit.edu/campus/maps/general/general.pdf>

**Registration:** September 24th at 6:30 PM, in your assigned classroom (above).

**Tuition:**

Nonmembers:

Course for Technician Class FCC License \$36 (includes course fee, 1 year Associate Membership in RARA, and current edition of ARRL Technician Class license textbook)

Course for General or Extra Class FCC License \$43(includes course fee, 1 year Full Membership in RARA, and ARRL General Class license textbook)

**RARA Members:**

For existing RARA members, all courses are \$28 which includes the textbook (\$24) and course fee (\$4).

Payment is due at time of registration. Make check payable to **Rochester Amateur Radio Association.**

Walk-ins are welcome but it is strongly recommended that you reserve a seat to be certain there are enough course materials to go around. For more information and to reserve space in the Technician, General, or Extra course, contact:

Larry Wallnau, W2ZEY  
Education Coordinator  
585-389-1926 (home)  
585-721-2117 (cell)  
[w2zey@rochester.rr.com](mailto:w2zey@rochester.rr.com)

## **RVHFG BEACON UPDATE**

**Dave Hallidy K2DH**

As I write this, I'm listening to our club 6 and 2 meter beacons running on the bench in my shack. They are ready to go to their real home at Larry N2MLH's QTH in FN12fs. As you're aware, we put a beacon on almost a year ago on 1296. It ran all winter and this spring we decided it was time to expand to other bands. Not having much luck with hardware, and to get something on quickly for the 6m and 2m Sporadic-E and tropo season, we borrowed a Kenwood TS-690S and a Kenwood TR-751A from K2TER. I turned the power all the way down on them so they were doing about 1.5W and we put them on the air at Larry's. The antennas are a dipole for 6 and a big wheel on 2. I haven't seen any DX reports about the 2m beacon, but the 6m beacon has been heard all over the US and even as far away as Portugal! The 6m beacon transmits on 50.078 MHz and the 2m beacon on 144.298 MHz. By the way, the 1296 beacon, once it's back in place, will be on 1296.261 MHz running 2W to a halo

Anyway, the transceivers were only temporary, so this summer I built up the real 6 and 2m transmitters. They each consist of a Kanga US QRP oscillator board running a few milliwatts, crystal-controlled on our desired frequencies. Each is driving a TRW linear amplifier module that was designed for CATV service and produces about 1.5W on each band. With appropriate filtering of the output of each (the modules are VERY wideband and amplify the harmonics just beautifully), the outputs are extremely clean and the CW note out of each is very nice. They are both keyed by the ID'er contained within the 1296 beacon (that's the reason that box isn't on the air right now). I've been watching the stability of the transmitters on 6 and 2, and they are both very good- the 6m beacon drifts about 10Hz and the 2m beacon about 100Hz. The plan is to move the new boxes up to Larry's very soon- within the next two weeks. Future plans include 222 and 432 beacons- we have the antennas in hand, and we have radios which can be used as transmitters, but I'm having a bit of difficulty getting information on programming them to our desired frequencies (they're surplus and are synthesized). More to follow as we go forward with this, we expect to have beacons on all bands through 10GHz as soon as possible.

73

Dave K2DH

## **CW BEACON AND ICE CREAM**

**Dean Keyser, WB2QCJ**

**28 Aug 2009**

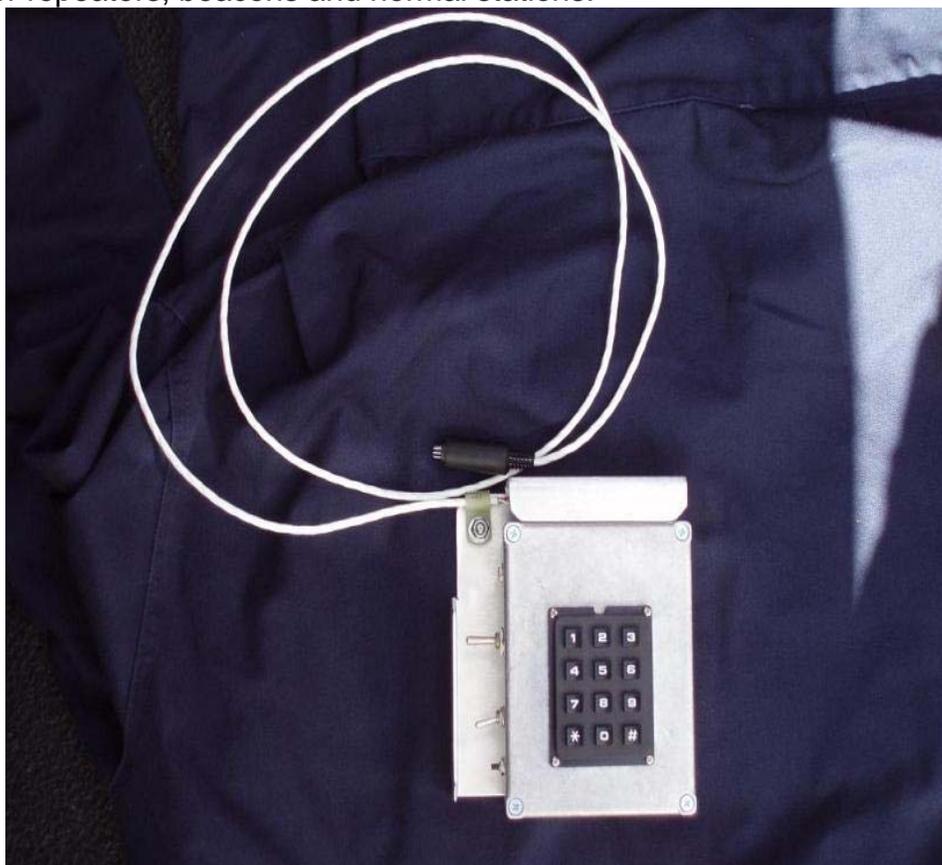
Announcements were made on the Monday night net to gather the RVHFG membership on the second Friday, the usual meeting time, of the summer months for an eyeball QSO and ice cream by specifying a Grid Square Locator (FN13cd) and operating a talk-in station (146.52 MHz). The location was selected by being pretty close to the geographic center of Monroe County and recommendation of an excellent ice cream stand, all very scientific. The challenge was to work the Grid location backward to a coordinate that could be plotted on a chart, then drive to that vicinity and follow a talk-in. Obviously by monitoring the first couple of problem-solvers others would easily learn the location. The ARRL web site has the original article ex-

plaining the forward conversion of Lat-Long to Grid Locator, and by understanding that plan the boundary of the rectangle is defined. The article is a good review or introduction to the Maidenhead Grid Locator System. W2CNS found an application on the WINLINK site that performs the calculation. Or use a GPS receiver to navigate into the approximate 2.5 by 5 mile grid. All followed by talk-in. The ice cream was tasty and plentiful, but no one accepted the challenge. The following month a beacon was operated, in addition to talk-in, to enable fox-hunt enthusiasts and would-be hunters to triangulate the location. Increased attendance was realized. This report is about the implementation of the CW beacon.

The Communications Specialist web site ([www.com-spec.com](http://www.com-spec.com)) describes the model ID-8 Automatic Station Morse Identifier, provides the instruction sheet and a link to a very good 73 article by K4CHE. The article speaks more to the theory of design and application of the ID-8. The ID-8 (keyer) is nicely featured, fully described in the supplied instruction sheet, and includes operating features for repeaters, beacons and normal stations.

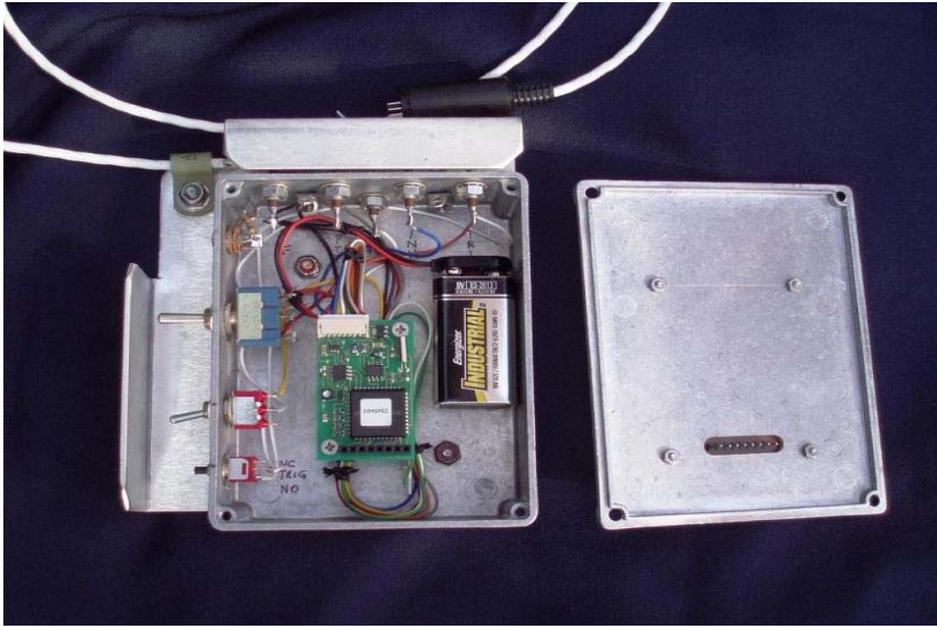
The keyer is operated and programmed on the 12-digit keypad and user-supplied switches for power, memory selection and start. The output permits audio modulation of a radio, plus PTT, or open-collector closure to a CW-mode equipped radio. So CW and MCW emission modes are possible for multi-mode and FM-only radios.

The PWA is pretty small and the instructions are very clear about carefully attaching the keypad for programming, then removing it for operation. This instruction was interpreted as important to the reliability of the surface-



mount PWA, and consideration of the minimal RFI decoupling components. A BUD model CU-473 aluminum enclosure was selected and layout sketches evolved. The high-level plan was to offset the PWA so that the keypad-fitted cover could be rotated after programming to satisfy the disconnect recommendation. Careful measurement of the mounting holes and connector components of both the PWA and keypad was necessary, as was the dimensions of the enclosure, to create an accurate layout drawing for enclosure modification. To avoid inverted control switch labels after cover rotation the switches were located on the side of the enclosure, and feed-thru capacitors on the adjacent side. Sheet metal was formed to protect the switches, fragile feed-thru capacitors and the attachment of the radio cable. An earphone jack permits post-program checking, and the 9-volt battery (6 mA current draw specified) fit nicely inside the enclosure. The keypad was mounted outside the cover with a small slot for PWA connection out of concern for RFI due to a larger opening, because the keyer unit is intended for operation at VHF and UHF wavelengths. Views outside and inside are in the attached images. The mating 8-contact plug supplied with the ID-8 has generous lengths of 24 AWG wire

attached, and the instruction sheet schematic is very complete for design and wiring. Message



programming requires careful reading and understanding of the instructions because the written information is accurate. The programming difficulties encountered were due to the author's haste. The radio cable was fitted with a mini-DIN plug, from Goldcrest Electronics (corner of S. Goodman and S. Clinton), and plugged into the IC-207H data receptacle. Modulation was set with the supplied tool on the potentiometer of the PWA, the only adjustment. And it all

worked. With the instruction sheet on hand the ID-8 Automatic Station Morse Identifier can be field programmed; each character / symbol / command / etc is represented with a two-digit code.

Brad, KB2CHY, has a MCW announcement heard from time to time on the local repeater, which I interpret as him being in the shack and monitoring. I've thought this is a good practice, and now WB2QCJ has a unit for similar tasks.

## **Contesting from Skylon Tower: 775 feet Above Average Terrain**

**By Ev Tupis, W2EV**

As you approach Niagara Falls of Ontario Canada, it is difficult to miss the skyline. It is punctuated with lots of new development including tourist attractions, casinos and of course Skylon Tower. At 775 feet it is by far the tallest structure in the region. Read all about it at [www.Skylon.com](http://www.Skylon.com).

At its' base, it is home to an indoor shopping mall complete with all of the wares that a tourist would love. At the top, it houses a rotating restaurant as well as an indoor and outdoor observation deck. Getting from the base to the "saucer section" is as easy as buying a tram ticket and waiting in line – at least for people with cameras in tow.

Since the fateful events of 9.11.2001 however, taking anything more than a walkie-talkie raises eyebrows. Bringing a 2' dish and microwave equipment? It can be done easily, but I've decided that it is best done with tower management in full agreement.

I will arrive, unpack the car and head in...straight to the ticket counter where I ask for the tower manager. I step aside as they are called on the radio. A few minutes pass and out they come. With a smile, a handshake (they recognize me from years gone by) and a little polite conversation about what I'm bringing and my willingness to cease operation if I interfere with any of the leased radio services that occupy the top of the tower, they give me their approval.

Some years, they connect me with a maintenance fellow who gives me a free ride to the top in a utility elevator. Other years I pay to ride the same tram as the rest of the visitors. In what seems to be only a few seconds, I'm in the observation deck (just below the restaurant) looking through tinted windows at the horizon that stretches so far away.

I setup the tripod and dish, getting my bearings visually. A magnetic compass is useless with all of the steel around, so BEFORE arriving, I get a map out and determine the bearing to several visible landmarks around (including Niagara Falls, itself). It makes pointing a dish significantly easier.



Logistically, there are challenges. The outside deck is encased in wire mesh, 4" x 4" squares allow the uwave RF to get through as if it wasn't there. As good as this is for uwave, it is a tough location for 2-meter liaison. Bringing a car battery, 80-watt 2-meter amplifier and a 3, 4 or 5 element beam is a real space problem. Additionally, at 700+ feet, there can be significant winds deal with on the outside deck. Is it all worth while? YOU BET IT IS! It is like a "field day" for the VHF+ crowd. I go with brochures for the tourists who often times want to have their picture taken with me and the equipment in operation. I've met ham radio operators from all over the world there. In fact, I have qualified for an eye-ball Worked All Continents "award" in the years that I've made the trip (including Antarctica, by the way). Skylon Tower is LOS to more grids than it takes to earn VUCC in a day. I often work 8's on 10-GHz randomly (when they're active).

When it's all over (and if the wind hasn't "beat me up" by then) I can drive to the next highest point in the region: Font Hill, to the west. Operation from there is a lot less "exciting" but significantly easier as it is a plateau'd hill (that you can see Skylon from, btw) that bisects two Grid-6's. You'll have to decide which one you're going to operate from because once you start, you have to move your station 16km (10 miles) before you can make more contacts (and Font Hill isn't that big). So there's some strategy in play, for sure.

Will you be active for the ARRL 10 GHz and Above Contest? Consider going to Skylon Tower (and bring the family along).

## June 2009 VHF QSO Party Report

By Ken Kent, KA2LIM

This year we acquired a new contest location in WNY about 10 road miles from my home. The new site being in FN12mg. Rob and I moved two of the tower-trailer's to the site on Friday before the contest. On Sunday, Dave, Rob and I went to the site and put up an electric fence to keep the beef cattle off of the site and away from the equipment. Monday, Al and I moved the third tower- trailer to the site and on Tuesday, we moved the Limo in and started the setup. By Thursday all was setup and ready to go. Friday we setup the kitchen area and did a walk thru making sure that all was ready.

We were excited about this contest because we were going to use the new antenna's (LVA's) on 2, 222 and 432 that I built over the winter. On 2 meters we have four- 5 element beams

stacked vertically along the side of the tower. On 222 there are six - 5 element beams stacked vertically along the side of the tower and on 432 there are six - 8 element beams, vertically stacked. Each stack is mounted on their own mast that can be aimed and locked on to a given direction. Now we can select between from the LVA or stacked Beams or an Onmi. Six meters stayed the same, stacked beams and an Omni at that position.

On Saturday, I arrived to the site shortly after 10am to get the computers up and running. Good thing I started early because the server computer would not work, Period! We pulled out the spare, swapped the hard drives, plugged it in and we're up and running. Next to arrive on site was Tom-KV2X. Tom usually roves with Bill-K2TER, but they did not go out this June so Tom came down from Rochester to contest with us. Everyone else trickled in slowly, food was put in place in the kitchen, all got to meet Tom and then I did a quick run-down on the new antenna's, some new equipment that was added at each operating position, refresher on logging and we were ready to start the contest.

Lunch was provided by AI-W9KXI, in the form of ham or turkey subs. Tom brought a variety of snacks with some great salsa and there were five kinds of home brewed beer provided by Ken and Rob, our resident beer makers. I shall attempt to list all the food here but if I missed something please forgive me. My wife Jean sent a crock pot of her famous "zucchini beef bake", which, as usual, totally disappeared. there were three kinds of potato chips, spicy Doritos with hot salsa, potato and macaroni salads, coleslaw, two kinds of hot dogs, salt potatoes with melted butter (real butter) prepared by Dave-N2LID (alias: Big Dave or Big LID). There were candy bars for snacking and some peanut butter filled pretzels. Tom brought some cake with chocolate chips, which I never got to sample because it disappeared. AI brought a tub full of his famous "snicker doodle" cookies which disappeared also but I got to help make these disappear. For beverages we had lots of water, Gatorade, soda and home brewed BEER. The beer line-up consisted of a dark-dark stout and a pale ale that Ken brought. There was an IPA and another stout and another kind that I forgot that Rob brought. Needless to say, there was none left, only the empty kegs to bring home. This brings us to the Sunday morning breakfast. Tom and I had been at the 6 and 2 positions since six o'clock making contacts and around 8am Big Dave became "Dave the Chef" donning his chef's apron he proceeded to turn out a breakfast for us that would put a fancy restaurant to shame. The menu consisted of: pancakes and French toast with real maple syrup, scrambled eggs, bacon and/or sausage topped off with fresh brewed coffee. WOW!!!! What a meal. Thank you Dave! Sunday noon meal was what-ever was left and a GREAT pot of BBQ-pork that AI made. Some put it in bread, some on buns and some ate it straight from a bowl. Needless to say, the cooker went home empty.

At contest start on Saturday, six meters was open with E-skip and stayed open on and off until 9pm that night. Needless to say, the other bands suffered for contacts because everyone was on six meters. As the contests progressed, everyone got a turn at all four operating positions and by 12:30am we had surpassed the 100K point mark. Ken got up from his nap and checked the digital signals on 6 and 2 but was only copying stations that we had already worked. Keeping a digital sked request on Sunday morning into NC produced a 6M contact but could not make the 2M as a very strong station moved within 2kc of the sked freq and ended that.

The newly installed "LVA's" preformed superbly, everyone was impressed by the way they worked. If you were having trouble hearing or working a station on the beams or omni, a switch to the LVA would result in a strong signal received and completing the contact. And the ability to be able to "turn" the LVA in a different direction when desired was an added bonus.

On Sunday afternoon there was a sound that appeared on 432 that made everyone on New York State and Canada think that the frontend of their radios had gone bad. The signal

strength at our location was 30+ at times. We checked in all directions and had a beam heading of 300-320 degrees which put it in the Rochester, NY area. Our resident expert, Larry-WA3CSP, an old anchor-clanker who worked with this stuff in the NAVY, says: it was definitely revolving radar. After about 2 1/2 hours of the continuous noise it stopped as abruptly as it started. Obviously someone was told to "turn it off"

Conditions really petered out near the end of the contest but over-all this was our highest points contest. We wound up with the following break-down:

|                          |               |
|--------------------------|---------------|
| <b>TOTAL CONTACTS</b>    | <b>901</b>    |
| <b>TOTAL QSO POINTS</b>  | <b>1033</b>   |
| <b>TOTAL MULTIPLIERS</b> | <b>225</b>    |
| <b>TOTAL SCORE</b>       | <b>232425</b> |

| <b>BAND</b> | <b>Q's</b> | <b>GRIDS</b> |
|-------------|------------|--------------|
| <b>50</b>   | <b>542</b> | <b>126</b>   |
| <b>144</b>  | <b>227</b> | <b>43</b>    |
| <b>222</b>  | <b>67</b>  | <b>30</b>    |
| <b>432</b>  | <b>65</b>  | <b>26</b>    |

222 was the surprise with more Q's and Grids than 432. I am sure that moving to the transverter and the addition of the LVA's helped considerably. But I also believe that there is an increase in activity on this band.

We added 2, 223, and 440 FM this year with the FM rig at each respective operating position and the rotor control for the FM antenna's at the 222 operating position as the FM antennas were on their own tower. We did make several contacts which encouraged us enough to cement the decision that the FM will stay. We will be adding solid-state amps with preamps and going to the old tower-trailer to mount the antenna's for a little more height.

The operators for this contest were: Ken-KA2LIM, Rob-KB2YCC, Dave-N2LID, Gregg-NX2W, Lu-N2LNS, Al-W9KXI and Tom-KV2X. Larry - WA3CSP was not able to be with us this year because of personal reasons. We missed you Larry and our thoughts and prayers go out to you. Hope you can make it for the CQWW VHF contest in July.

The contest ended at 11pm Sunday night and we held our usual chat session and awards ceremony (3rd) that Al started. First award, a YAESU hat, went to Tom - KV2X. This was Tom's first time contesting with us. He plugged away diligently putting some amazing contacts in the log. The next award, another YAESU hat went to Dave - N2LID, for the outstanding breakfast that he prepared on Sunday morning and for keeping his promise not to yell at people on the air and give 'em HELL on and open mike for not following instructions. Dave did well, except there was, as usual, three other open mikes. Then Al presented a third award. This one went to Ken - KA2LIM for brewing and bring, what all the others maintain, was the best stout ever. This award was a cap from the Big Sky Brewing co., Missoula, MT. with the Moose Drool brown Ale logo on the front. Thank you very much you guys, as I wear it proudly.

This contest goes down in the log as another great get-together where we stuck to our goal of "Having fun first", eating GREAT food and drinking some GOOD homebrew.

All for now, Ken

## Net Check-Ins for July and August

| Date      | 6 m     | 2 m          | 70 cm  |
|-----------|---------|--------------|--------|
| 6-Jul-09  | wa2gai  | k2dh         |        |
|           | k2mpe   | kc2qzr       |        |
|           | kc2qlj  | kc2qlj       |        |
|           | k2dh    | kb2bls       |        |
|           | k2ou    | w2nwt        |        |
|           | nj4l sc | kc2tep       |        |
|           |         | va3grc fn04  |        |
| 13-Jul-09 | k2anc   | ka2eki       |        |
|           | kc2qlj  | kb2bls       |        |
|           | k2dh    | kc2qlj       |        |
|           | wa2znc  | kv2x         |        |
|           | kc2qzr  | k2anc \$100  |        |
|           | kc2pcd  | kc2urc       |        |
|           | kc2urc  | kc2qzr       |        |
|           | kc2tep  | k2dh         |        |
|           | ka2lim  | kc2pcd       |        |
|           | wa2znc  |              |        |
| 20-Jul-09 | wb2byp  | kb2bls       | wb2byp |
|           | n2tkr   | kc2urc steve | k2dh   |
|           | k2dh    | k2dh         |        |
|           | kc2urc  | n2tkr tom    |        |
|           | wb2sqs  | ka2eki al    |        |
|           |         | w2uad        |        |
|           |         | wb2sqs       |        |
|           | wb2byp  |              |        |
| 27-Jul-09 | wa2znc  | kb2bls       | wb2byp |
|           | wa2gai  | wa2znc       | kb2bls |
|           | k2os    | kc2qlj       |        |
|           | kc2pcd  | kc2hzm       |        |
|           | w2xg    | w2uad        |        |
|           | kc2qzr  | wb2byp       |        |
|           | wb2byp  | w2xg         |        |
|           | wb2sqs  | kc2pcd       |        |
| 3-Aug-09  | kc2pcd  | kb2bls       |        |
|           | wb2byp  | kc2qlj       |        |
|           | kc2qlj  | ka2eki       |        |

| <b>Net Check-Ins for July and August</b> |            |                             |              |
|--|------------|-----------------------------|--------------|
| <b>Date</b>                              | <b>6 m</b> | <b>2 m</b>                  | <b>70 cm</b> |
|  |            | k2dh                        |              |
|  |            | k2os                        |              |
|  |            | wb2byp                      |              |
|  |            | kc2qzr                      |              |
|  |            | kc2pcd                      |              |
|  |            |                             |              |
| 10-Aug-09                                | kc2pcd     | k2dh                        |              |
|  | wa2znc     | kb2bls                      |              |
|  | k2dh       | wb2sqs                      |              |
|  | wb2sqs     | wa2znc                      |              |
|  | wa2gai     | kc2pcd                      |              |
|  |            | va3st stan fenwoicvk fn03ha |              |
|  |            |                             |              |
| 17-Aug-09                                | wb2byp     | kb2bls                      | kb2bls       |
|  | w2tr       | wb2byp                      | wb2byp       |
|  |            | kc2pcd                      | kc2qlj       |
|  |            | kc2qlj                      |              |

Submitted by Larry Carter, N2MLH

### **Classified Listings**

No ads this month. Please contact me if you have anything you want to sell or trade.  
Tom, kv2x

# 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.**