

HAM RAG



Visit our website for more club and area ham information
In the Rockford area at <http://www.w9axd.org>

RARA Mission Statement

A member association with common interest of public service to the community through the use of amateur radio.

Presidents Log

Greetings All,

I want to thank everyone who came out and helped with "On The Waterfront" this year. There was talk among board members that we should cancel this year due to lack of volunteers but we did find enough to pull the event off. As this is our only fund raiser, it is very important that we keep getting members to volunteer. If we ever have to cancel due to lack of participation I do not think we would ever get our spot back and I hope the event stays a viable event in Rockford after the past few years of downturns and lower turnouts.

ELECTIONS ELECTIONS ELECTIONS

The main focus this month is the election of officers and board members for 2011. Hopefully we will have a full slate of people willing to lead us next year because I do not believe anyone from the current board is running for reelection.

That is all I have for this month, I hope to see you at the monthly meeting and think about volunteering for a position.

73,

Gordon Seaman, KC9NEX
2010 RARA President
KC9NEX@arrl.net
glseaman@hotmail.com



October 2010

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NEXT MEETING

FRIDAY

October 8, 2010

7:00 pm

Presentation:

**"How Repeaters
Work & Repeater
Etiquette"**

By:

Chuck Ingle, AB9KA

Location:

**St. Anthony
Medical Center**

**St. Joseph Room
5666 E. State Street
Rockford, IL**



Latest news and events on our web page: <http://www.w9axd.org>

From the Vice President

Our October meeting program will be “How repeaters work and repeater etiquette” presented by Chuck Ingle, AB9KA. This should be a good topic especially for the new technician class licensees among us who are new to using handheld radios. The topic for our November meeting will be a presentation on the MARS program by Tom Souler, N9VJU, and the topic for the December meeting will be a couple of videos of DXpeditions.

Three more reminders:

Election of the 2011 officers and board of directors will take place at the October meeting. Please consider offering your time and talent to help with the club business.

Your input is requested for a Ham of the Year nominee. Forms will be in the October, November and December Ham Rags. Please send me your completed form in person, by mail to the RARA PO Box or by email prior to the end of the December meeting. The form has all of my contact information.

Training classes are scheduled for Technician license Saturday October 16, 23 & 30 and General license Saturday November 6, 13 & 20. The cost is \$35 including the manual. All of the classes will be from 8 AM to 1 PM and will be held at Rock Valley College so registration is through RVC.

73,
Gene, KA9BOD
2010 RARA VP

UPCOMING RARA EVENTS

October 8 - General RARA Meeting 7:00 pm at OSF
“Repeaters, how they work & repeater etiquette” by Chuck Ingle, AB9KA

October 26 - RARA Board Meeting 7:00 pm at OSF

November 12 - General RARA Meeting 7:00 pm at OSF
“Update on the MARS Program” by Tom Souler, N9VJU

November 30 - RARA Board Meeting 7:00 pm at OSF

December 10 - General RARA Meeting 7:00 pm at OSF
“A Couple of DXpedition Videos” provided by Gene Stankiewicz, KA9BOD

December 28 - RARA Board Meeting 7:00 pm at OSF

Secretary's Report



RARA Club Meeting September 10, 2010

The meeting was called to order by President Gordon Seaman, KC9NEX, at 7:03 pm. There were 19 members and guests present.

Secretary's Report: The minutes were published in the August *Ham Rag* and Al, KD9CA, had copies for anyone who needed one. Kurt, KE9N, made a motion to accept the minutes as published and Jim, AB9SX, seconded the motion. The motion carried.

Treasurer's Report: Paul, K9RNR, read the report for the period July 25th through August 27th, 2010.

Income:	\$1280.09
Expenses:	\$00.00
Net income/loss:	\$1280.09
Ending checking balance:	\$2726.57
Repeater ending checking balance:	\$49.39
Ending savings balance:	\$3214.02
Ending total cash on hand:	\$5989.98

Jim, N9VJ, made a motion to accept the minutes as read and Chuck, K9SAN, seconded the motion. The motion carried.

Old Business:

Gordy, KC9NEX, said he has been in contact with the FCC regarding an incorrect email that John, N9OTC, brought to the club's attention last month. He said he will follow up with a letter.

Gordy thanked all those who volunteered for selling tickets at *On the Waterfront*.

Gene, KA9BOD, said that there will be a nomination form in the October, November, and December *Ham Rag* for the Ham of the Year Award. Gene said the nominee should have made exemplary service to RARA in 2010 and must be a Club member.

Members thanked Gordy, KC9NEX, for him and his wife taking all three days supervisor's position at *On the Waterfront*.

New Business:

Gene, KA9BOD, reported that there will be a Technician Class held at Rock Valley College Bell School Center beginning Saturday October 16th for three Saturdays. He said there will also be a General License training class given beginning November 6th and running for 3 Saturday's. The time will be 8 am to 1 pm.

The cost of the Technician License class is \$35.00, and the General License class is \$35.00. Each class will include the training manual

Gordy KC9NEX, reminded all present that next month will be the election of officers and all members should consider running for an office. He asked for a volunteer for a chair person for the nominating committee. There were no volunteers.

Next month's presentation will be *How Repeaters Work* and will be presented by Chuck, AB9KA.

Jack Hudson, W9MU, was then introduced by Gene, KA9BOD.

Jack, W9MU, gave an excellent and informative presentation on the features of HF radios.

John, W9JGO, won the 50-50 raffle and donated his winnings to the Club.

Submitted by,
Al, KD9CA
RARA Secretary

HAM OF THE YEAR---2010 NOMINATION

The Ham of the Year is an honor that is presented to the R.A.R.A. member who has contributed the most to the club and to amateur radio in general during the year. This year the selection will be made by a committee established to evaluate the nominations of deserving candidates from those submitted by club members.

Your nominee should be chosen using two basic criteria: The nominee must be a R.A.R.A. member and should have performed exemplary service for amateur radio during the year 2010. We encourage you to take a few minutes to fill out the form below, or a facsimile, completing all of the requested information.

Nominations may be mailed to KA9BOD at the address below or handed to me at the next club meeting. All nominations must be received by December 10, 2010. They will remain confidential.

Your participation and early response will be appreciated.

Mail nominations to:

Gene Stankiewicz, KA9BOD

3531 Cross St.

Rockford, IL 61108

ka9bod@arrl.net

Nominee _____

Call _____

I nominate the above person for the RARA Ham of the Year-2010 award for the following reasons:

Signed _____ Call _____

When VHF contesting, expect lots of weak signals. Embrace them. The weak one may very well be a station in a distant grid. Try to work everyone you can hear. Expect to be asked for repeats. Don't worry about it. Take your time. Speak clearly, use standard phonetics and get the Q in the log. If someone seems a bit impatient, explain to them that you are just getting started. After a few contests, it all makes sense anyway. Gotta start somewhere. January contest is a good one to get your start in.

Use headphones. You're going to need them to hear the weak ones. Cans make a **big** difference. You should see me crossing two sets on my head, while I listen on 144 in one ear, and 6 meters in the other. Friends have, and they just smile and walk away.

Turn your squelch down. You want to hear the light ones thru the hiss. Also, if you have your squelch too high, you may not hear light stations working each other, and then you may QRM them when you call CQ Contest. This happens anyway in a contest and hey, we all make honest mistakes. Nobody should jump down your throat over it. If it seems like maybe you made a boo-boo, don't stress over it. Just chalk it up to experience and move on.

I know it's harder than heck for a new operator to feel comfortable calling CQ Contest into a dead band. But try it out anyway. Even if you feel foolish calling 3, 5, 8 times in a row and nobody comes back to you – keep calling CQ. Sure you want to tune around and respond to the ones you hear calling CQ. (They call that Search and Pounce) But when you hit a lull, that's a good time to put YOUR call out there.

To find contacts, start on 144(SSB/CW)/146 (FM) MHz. Also call CQ on 50(SSB/CW)/52 (FM) MHz as well. And you can even squirt out a few calls on 222/223. But don't bother calling CQ on 432.100/446.000. I'll explain why.

In VHF contests, you find folks for an initial contact on the most popular bands, where everyone's hanging out. That's 2 meters and 6 meters. Once you've found a station, you then want to work them on as many bands as you have in common. This is called "running the bands". The more bands you work them on, the more contacts and points you score. Always ask a station if they have any other bands you can work them on.

Say you hear me calling on 144 and you respond with your callsign. I give my grid square, you give yours, we roger the info, put the time in our logs, and then I ask you if you have any other bands. You say you have 6 meters. I look at my 6 meter rig and try to find a frequency that is empty. I say to you, "OK, let's meet on 50.140 on 6 meters. If we have a problem, we'll come back right here where we are on 2, OK?"

So off we go to 50.140. If we make contact there, we exchange our calls and grids again, enter them in the log and I ask you again if you have any other bands. You say you have 222 or 432. We check 222.100 SSB/CW or 223.500 FM to see if anyone's busy there, and it's open. We make contact on 223.5, enter the info in our logs, and then agree to meet on say 432.100 or 446.00, depending on your rigs and antennas. At this point, we've run 4 bands and I thank you very much and say 73, good luck in the contest. You probably don't have 900 or 1296 MHz because those aren't beginner bands.

Then I go back to 2 meters or 6 meters and start looking for new contacts. I don't start calling for new ones on 432. It is a good idea to ask if anyone else has followed us up to 432. That happens sometimes and it's a neat coincidence when it does. You can work anyone on any band, in any order. That's fine. But...the **custom** with VHF contesting is to call CQ for initial contacts on 2 meters or 6 meters. If you spend all your time calling up on 70 cm or 223, you're going to be missing most of the action.

A few more comments. I've only been V/UHF contesting since Sept. 2003. Most have been doing it far longer so I'm not an expert. But I do *care* – more than most. I knew that after my first year or two. Somewhere on the internet, I hope there are others like me who are sharing their experience to help make contesting more popular. If you know of links to anything like this, please share them with me. It makes me feel better when I see hams talking up V/UHF. *(continued on next page)*

Here's a practical tip to stir up more activity when you've hit a dead spell in a contest. Find someone fairly local to you that you can hear, no matter which way your beams are pointed. If you have both hit a dead spell, do this: Start a very short ragchew with your buddy. Frequent pauses. Make sure to say you're both contesting and looking for callers. Do this while your yagis are turned away from each other, in varying directions.

I do this with W9GA in EN53. I've learned more about V/UHF contesting from W9GA than from any other person. If K2DRH in EN41 were close enough where I could hear him all the time, I'd learn a lot from him, too. I'd be tuning around, and hearing what Bob does and how he does it. You can learn a lot.

But back to what W9GA and I do to find new business... he may point S toward IL. I may point E toward Detroit or Cleveland. If that doesn't work, I may point N, while he points W. Main idea is that two signals going in different directions is twice as good as one. Often, within a few minutes, we find someone and then everyone's happy. W9GA and I get new contacts, and the caller gets a two-fer, since I'm EN63 and Ken's EN53. We then like to gab a bit with the caller just in case there are others in his area who are wondering what's going on. Of course, we ask if he has any other bands, too. I would not do this during a busy time in a contest. I wouldn't do it on the call frequency. But it's a good way to relieve a little boredom and get a new run going.

I don't know how anyone else feels about this, but when I snag a unusual, distant grid (unless it's a big, busy opening) I will try to say that person's grid multiple times. Why? Because I know there are plenty of guys local to me who are tuning around, wondering what I'm working. I'm the same way. They may not hear that EN56 is who I'm working, unless I broadcast it a little bit. Since it's lonely doing a V/UHF contest from EN56, I want him to get all the business he can, so he stays interested and happy. I want the guys down here to hear "EN56" and start swinging their antennas north.

You also want to do this with rovers. When we know a rover is going to be out, we're always interested in when they arrive in a new grid. When they get in a new grid, that's something I want to broadcast a little bit, too. Not too much because rovers get busy and you let them do their thing. But it never hurts to say, "Well OK, N9WU/Rover in your new grid EN54..."

If you want to work more grids in a contest, you need to point those yagis in unusual, unpopulated directions. You may feel you're not making much of a rate, looking toward N WI or the UP of MI. Yes, it's logical that you'll spend more time working toward populated areas. That happens naturally. But really – do make a point of calling CQ in different directions frequently. And when you find those ops in distant grids, if they're not busy, maybe take a little time to say hello. They don't hear signals very often and it can get really discouraging. If I could do one single thing to improve VHF/UHF at any time, I'd mandate two good stations and operator in every grid square, and then I'd make sure they had enough activity to stay interested. It would do SO much for VHF/UHF. I am a dreamer...

Some of you may be wondering when the best times to operate are. Well since I'm an obsessive, I'll joke and say, "All hours of the contest, obviously!" But even I sleep 4-6 hours in most contests. I can think of only 2 all-nighters in 6 seasons, off the top of my head.

The start of the contest is busy. Real busy, usually. It can die down after several hours; no hard and fast rule. It seems like evenings (after dinner) have a rise in activity for several hours. Most "normal" guys/gals are pulling the switch by about 10-11pm local time. But I usually hear some folks until midnight-1am. There can be nice surprises in there.

You're missing out, if you pull the plug before 10-11pm in the warmer months. The prop usually improves as night wears on — this effect seems to be enhanced near the Great Lakes. So you waste a lot of good propagation by going to sleep too early. I would encourage everyone to do a short afternoon nap and find a way to operate until midnight-2am in the warmer months. It'll never happen, but if it did, scores would be higher all around.

The K7RA Solar Update



The autumnal equinox occurred early yesterday, at 0309 UTC on September 23. Conditions were good this week, with sunspots visible every day -- and very little geomagnetic activity. The average daily sunspot numbers rose more than 24 points to 40 and the average daily solar flux was up nearly 5 points to 82.9. Solar flux was expected to rise to 88 for September 23-27, but instead it was 84.3 on September 23, and now the solar flux forecast for September 24-28 is 3 points lower, 85. For September 29-October 5, the solar flux forecast is 84, 82, 82, 82, 80, 78 and 76. Sunspot numbers for September 16-22 were 46, 41, 42, 50, 38, 37 and 26, with a mean of 40. The 10.7 cm flux was 82.5, 82.2, 82.1, 81.2, 82.6, 84.6 and 84.8, with a mean of 82.9. The estimated planetary A indices were 6, 8, 4, 4, 4, 6 and 2, with a mean of 3.7. The estimated mid-latitude A indices were 5, 7, 2, 2, 3, 5 and 1, with a mean of 2.9.

The planetary A index for September 24-30 is predicted to be 10, 7, 5, 5, 7, 8 and 5. Geophysical Institute Prague predicts quiet to unsettled conditions on September 24, quiet conditions September 25-27, quiet to unsettled September 28 and quiet again on September 29-30.

Bill Magruder, KD7KST, sent in an [interesting link showing live aurora from Yellowknife](#) in Canada's Northwest Territories, which is at 62.433 degrees north latitude. Check it out and have a look -- after dark, of course. This weekend, the Sun sets in Yellowknife around 0125 and sunrise is at 1334.

Alfio Bonanno, IT9EJW, in Italy operates [a 10-meter beacon on 28.226 MHz](#). He reports that for the first time since the beacon was put on the air in 2008, it was heard outside Europe. LW3EX in Buenos Aires, Argentina copied it at 1647 on September 15.

WorldRadio online has a [new monthly propagation column](#) from Carl Luetzelschwab, K9LA, featuring his observations about the rise time for solar cycles compared to the current Solar Cycle 24.

Dave Ripton, K6SIX, of Morris Plains, New Jersey, commented about a recent question concerning TVI on 6 meters. Dave wrote: "In this week's bulletin, you mentioned the improvement in 6 meter TVI. We have to thank the cable, satellite and fiber optics companies for the reduction in 6 meter TVI. In my Northern New Jersey area, roof top TV antennas are rare and the ones that are there are rusted-out, so I expect they are no longer used. With Channel 2 gone, even indoor 'rabbit ears' are no longer a problem. Also, telephone RFI has dropped, thanks to the new wireless phone bands. With all the new rigs that included 6meters, it is a great band for newcomers, as well as 6 meter nuts like myself. Now all we need is some F2 to really bring 6 meters back to life."

John Ragle, W1ZI of Hadley, Massachusetts, wrote: "I run 350 W (peak) output on 50 MHz to a 5 element beam about 30 feet up, and about 50 or 60 feet from our house and a neighbor's house. The TV and Internet cable come in on underground fiber optic, and across the street, underground as double-shielded coax. The run from the sill junction box on the house to the interior of the house is with ordinary single-shield coax. I also run about 350 W (peak) on 2 meters and 90 W on 70 cm, as well as 100 W on HF. There is not the slightest hint of TVI in either location, although my wife's sound system (her computer sound card is hooked to an FM radio's audio in) picks up some crackle from the modulation peaks in the 2 meter band."

All times, unless otherwise noted, are UTC.

Amateur solar observer Tad Cook, K7RA, of Seattle, Washington, provides this weekly report on solar conditions and propagation. This report also is available via WIAW every Friday, and an abbreviated version appears each Thursday in [The ARRL Letter](#).

How Tall is My Tower?

Provided by Jim Elkins, N9VJ

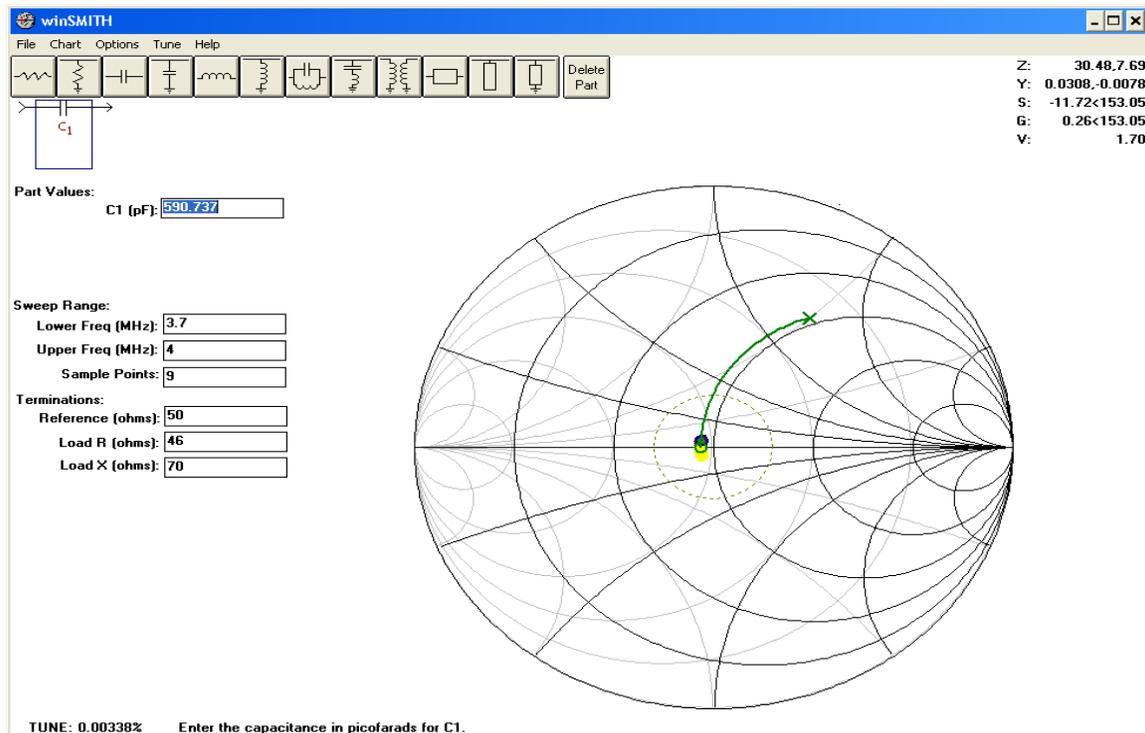
One can measure tower height by dropping a tape from the top of the tower to ground. You have measured the physical length, but what is the resonant length (in degrees) of the tower? Doug DeMaw, W1FB (SK), is known as the inventor of the method described below. Attach a metal cross piece at the top of the tower and run it out 3 feet from the tower. Drop a wire from the end of this cross piece, coil two turns in the wire near the ground end, and attach the bottom of the wire to ground. You now have a folded dipole vertical with a sample loop. Be sure you have good connections. Measure the resonant frequency of the tower/wire at the sample loop with an antenna analyzer equipped with a grid-dip probe, or with a grid-dip meter. The lowest dip found is the resonant frequency of the tower, F_{resonant} .

The electrical length at the desired frequency (F_{desired}) is found by:

$$L \text{ (in degrees)} = 90^\circ \times F_{\text{desired}} / F_{\text{resonant}}$$

For example, if you measure 3.5 MHz as F_{resonant} , and your F_{desired} is 3.9 MHz, then your tower height L is 100° , or 0.279λ . As you cannot easily shorten your tower, you should use a matching network at the base. The R will be close to 50Ω , and the $+jX$ can be tuned out with a variable serial capacitor set to approximately 600 pF.

If you want more precision, then measure the $Z = R + jX$, and use an L-Network to make it exact. You should expect to find a reading for Z approximating $46 + j 70 \Omega$, depending on the length/diameter ratio of the tower. In this hypothetical, the VSWR would be about 1.1:1, with adequate bandwidth for the 'phone section of 80 meters. Have a look!



AMATEUR RADIO EXAM NOTICE

September 18th there was 1 applicant resulting in 1 upgrade

Upgrade

Wayne Snell, KC9RMK, General

Northern Illinois Volunteer Examiners will be holding the next Amateur Radio exam session in Rockford, IL on Saturday, October 16, 2010.

Location:

St. Anthony Hospital

5666 E. State Street

Rockford, IL

Exams will be held in the St Francis Room (just right of the front entrance after you enter).

Check-in is from 9:00 AM til 10:30 AM.

What You Need To Bring To A W5YI-VEC Session

1. Your original Amateur License (unexpired or within the 2 year grace period) and a copy to attach to the paperwork.
2. Any valid CSCE that you are using for credit. Again the VE's have to see the original and have a copy to attach to the paperwork.
3. Two forms of Identification with your signature on them. One must be a picture ID (drivers license, passport, school ID, library card, credit card, etc.)
4. Test Fee \$14.00 cash or check. (please make checks payable to W5YI-VEC)

Contact Information

Randy Scott, W9HL

W9HL@arrl.net

815-877-4328

\$\$\$\$ ITEMS FOR SALE \$\$\$\$

Murch high power tuner, \$150

Heathkit amp 220 \$550

Collins station round label, Amp Wing, Gen. Coverage Receiver: \$5,400

MFJ/Bencher keyer, \$80

AEA Contester programmable keyer, \$80

Bencher 2 lever paddle key, \$70

Drake WS7 high power SWR/PWR meter, \$90

Astatic 10-DA Desk mike, chrome, very rare, \$400

Hustler 4BTV vertical antenna, \$120

For more information contact Dave Bond, W9MG, 815-877-3751

Hamandpie@comcast.net

Editors Note

If you would like to have something published , please call me or email me at ke9n@arrl.net.

Cut-off for the November 2010 Hamrag will be Friday, October 29, 2010

Kurt - KE9N, Editor



P.O. Box 8465, Rockford, IL 61126

Website: www.w9axd.org

E-mail: ke9n@arrl.net

Nets

Monday 8 PM	RARA Info.	146.610 - 114.8
Thursday 7 PM	ARES	147.195 + 114.8
Thursday 8 PM	SATERN	146.610 - 114.8

place address label here

October 2010

ROCKFORD AMATEUR RADIO ASSOCIATION MEMBERSHIP APPLICATION

Single Adult: \$25.00 Adult w/Family: \$30.00
 Single Senior: \$15.00 Senior w/Family: \$20
 Student: \$15.00

Above rate includes the RARA monthly newsletter, Ham Rag, via email.

Ham Rag Via U.S. Postal Service: \$12.00 extra

Name _____ Call Sign _____

Address _____

City _____ State _____ Zip _____

Home Phone _____

Work Phone _____

Email _____

Renewal _____ New _____ Retired _____

Radio Interests _____

Other Interests _____

Suggestions: _____

RETURN COMPLETED FORM TO:

ROCKFORD AMATEUR RADIO ASSOCIATION
 P.O. BOX 8465
 ROCKFORD, ILLINOIS 61126